Literature Review

School Principals as Literacy Leaders for Indigenous Children

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School Principals as Literacy Leaders for Indigenous Children

1.0 Introduction

1.1 What is the Issue?

There is an urgent need for improved educational programs and policies to reduce achievement gaps among students in Canada – particularly for racialized, low-income, and Indigenous children (e.g. Campbell, 2021). This is especially important for First Nations, Métis and Inuit children, who continue to face educational inequities stemming from historical and structural factors associated with Canada's legacy of colonialism and discrimination, including the intergenerational impacts of residential schools. One key area of focus to help reduce the impact of these inequities is through the promotion of early literacy learning among First Nations, Métis and Inuit students.

Early literacy experiences lay the foundation for children's future learning and educational outcomes, yet the window of time for establishing literacy skills is quite narrow (Vagi et al., 2017; Hare, 2012; Scull, 2016). Specifically, the third grade is recognized as a critical milestone for achieving reading proficiency, and interventions beyond this point in a child's academic trajectory are less likely to be effective (Hernandez, 2011). Therefore, programs and practices that aim to build and improve reading, writing, and language abilities in the early childhood years are essential for ensuring that children have the best chance to succeed in school and beyond. For example, both literacy and school success have been linked to a wide range of other outcomes, including social, economic, and health and well-being outcomes. More specifically, supporting First Nations, Métis and Inuit children to achieve critical early literacy skills will not only enhance their likelihood of academic success but also lead to greater opportunities throughout life, including further educational, training, and employment opportunities and attainment (Robinson et al., 2009).

One factor that affects student learning and literacy at a broad structural and organizational level is the role of school leadership. School leaders play a key role in promoting literacy in the school context. This includes school principals, who are primarily responsible for providing the necessary guidance and support to teachers and fostering a positive school learning environment to ensure that all students have an equal opportunity for success.

There has been increasing research focusing on the influence of school leadership on student achievement, but there is still not a lot of direct evidence showing the impact of principals on literacy outcomes specifically (Ozdemir et al., 2022; Trimmer et al., 2021; Thompson, 2021). One challenge in evaluating the role of educational leaders in promoting student literacy outcomes relates to the wide variation in literacy programs, practices, and unique school contexts and communities in which principals must learn to apply their knowledge (Lovett & Fluckiger). On the other hand, it is important for educational leaders to recognize the complex ways in which social and environmental contexts influence literacy and learning, and to develop programs and strategies that account for these interrelated factors (Vagi et al., 2017). By working collaboratively with families, the community, and other districts, school principals may be able to enhance the effectiveness of literacy programs.

Given the importance of literacy to culture, language, socio-emotional development, and overall health and well-being in children, promoting strong literacy skills among students is an essential goal for school leaders. Moreover, principals should be equipped with culturally responsive

leadership strategies to meet the needs of diverse students, which can help to reduce reading achievement gaps and promote more equitable outcomes for all students (Thompson, 2021). This may include designing and implementing strategies to incorporate Indigenous language, history and culture into school programs to strengthen the acquisition of English reading and writing skills.

1.2 Why is the Issue Important?

The role of school leadership in early literacy is important for several reasons. First, as noted above, there are known educational inequities between Indigenous and non-Indigenous children and youth, including fewer resources for schools with Indigenous students, lower access to educational resources and lower attainment overall among Indigenous students. Furthermore, the population of people who identify as First Nations, Métis and Inuit in Canada is growing, and the average age of the Indigenous population is younger than the non-Indigenous population (Statistics Canada, 2022). For these two reasons, there is a pressing need for more equitable educational programs and policies that better respond to the diverse learning needs of First Nations, Métis and Inuit children in culturally meaningful and relevant ways (Cherubini, 2019; Riley & Webster, 2016; Ball, 2010). Researchers have cautioned that without effective strategies that specifically address the early literacy needs of First Nations, Métis and Inuit children, the learning gap will continue to grow (Riley & Webster, 2016). This is especially important in the post-pandemic period. Evidence has shown that the COVID-19 pandemic exacerbated existing academic inequalities even further (e.g. Whitley et al., 2021); therefore, teachers and parents may need even more support to help students recover from the effects of the pandemic and any associated learning losses.

Next, school principals play a critical role in student learning and achievement, yet the number and range of responsibilities that principals are tasked with has expanded in recent years to include not only day-to-day managerial duties, but also instructional leadership, with closer involvement in both teaching and learning activities (see pg. 10 for further discussion) (Dempster et al., 2012; Trimmer et al., 2021). The increasing demands and complexity of principals' roles and responsibilities can inhibit their ability to focus on enhancing student learning and literacy outcomes. As a result, there is a need to identify effective leadership strategies that allow school principals to balance these often-competing priorities in order to have the maximum impact on literacy learning.

Finally, schools often rely on existing approaches to literacy learning which may include curricula, materials and other resources that are either: a) not evidence-based; or b) developed based on research with non-Indigenous students and families and may not be relevant or appropriate for Indigenous students (Hinchman, 2009; Hare, 2012). Among the varied literacy programs available, there is a lack of consensus among educators over which approaches are best and should be followed, leading to confusion for school leaders when they don't have adequate knowledge of best practices in literacy learning themselves (Dempster et al., 2012; Lear, 2017). Researchers such as Lear have emphasized the crucial need for principals to be well aware of the differences between each of these approaches to teaching literacy and how to apply the most appropriate strategy to reach desired literacy outcomes for their school or district.

Overall, these issues point to the need for more research to better understand what works, how, and in what contexts in order to inform school-based literacy strategies. Greater awareness of how school principals can best support literacy learning among Indigenous children in a school context

would have important practical implications for the development of effective and equitable literacy programs for students as well as literacy training programs for leaders.

1.3 Overview of this Report

This report provides a summary of the available literature on the importance of school leadership for literacy learning and achievement among Indigenous children, with a focus on the role of principals as literacy leaders. To understand best practices in promoting early literacy skills in schools with Indigenous students, it is important to first review the context in which this learning takes place by examining the meaning of early literacy for Indigenous peoples and considerations for Indigenous education and evaluation. Following this background context, the next section will describe relevant examples of existing literacy programs and models from Canada and other jurisdictions and explore any evidence of their impact on literacy outcomes for Indigenous students. After reviewing the evidence, a summary of elements that can promote literacy success as well as remaining challenges and barriers is provided. Implications for educational policy and practice are also discussed.

At a broad level, the findings will be used to support the professional development of school leaders and principals in schools with Indigenous students and to strengthen efforts to get school principals more involved and aware of their role in promoting literacy. At a more concrete level, the aim is to use the findings to inform the development of future literacy plans or initiatives that could be applied in schools with Indigenous students in Canada which would align with best practices based on the available evidence.

1.4 Objectives

The main objectives of this literature review are:

- To identify needs, existing supports as well as barriers and challenges for school leadership working to implement literacy programs in schools with Indigenous students
- To examine the literature on best practices for promoting literacy among young Indigenous students and the role of school leadership at a structural level in achieving desired literacy outcomes
- To understand the core components or principles of a successful literacy plan or program for elementary school students based on any available evidence from evaluations of existing programs
- To develop insights that could ultimately be used to inform the development of a comprehensive training program for Indigenous school leaders and other similar initiatives

1.5 Research Questions

The primary research question guiding this literature review is understanding of the role of school leadership in supporting literacy skills among Indigenous children in the primary school context. Specifically:

- How can principals working in schools with Indigenous students help to improve literacy outcomes for First Nations, Métis and Inuit students?
 - What insights can be gained from other organizations, groups and jurisdictions across Canada and internationally that have developed and implemented literacy skill building programs with Indigenous children?

- Are there specific elements or approaches that have been shown to enhance the success of these efforts that can be identified and adapted for use in other contexts?
- What are the remaining barriers and challenges to consider when planning and implementing literacy strategies and interventions?

This main question leads to several additional research questions to further explore the issue, including the following:

- How can researchers and school leaders define and measure the success of a literacy program in terms of relevant outcomes? Moreover, how can this be done in a culturally meaningful and appropriate way?
- How important are relationships between school leadership and other individuals or groups that play a role in student literacy skills? How might literacy-focused interventions account for these interrelated factors? For example:
 - O What is the role of parents?
 - o What is the role of outside organizations and institutions such as universities?
 - o What is the role of the community and community-based partnerships or programs?
- How has the COVID-19 pandemic and its associated public health measures, including school closures, affected literacy learning progress and outcomes among Indigenous students?

2.0 Research Methods

A scan of the literature was conducted in April-May 2023 to identify, collect, and synthesize information relevant to the issue of the role of school principals in promoting literacy among Indigenous students. Various search engines, research portals, and institution-specific websites were utilized for the identification and collection of relevant data, with a focus on any evidence regarding the effectiveness of various literacy programs. Two main categories of data sources were selected: 1) peer-reviewed journals found in electronic databases; and 2) internet-based grey literature, including published reports; websites of relevant organizations or groups; dissertations and theses; white papers and working papers; government publications and legislation; and webinars or presentations.

Search strategies were developed and refined after the results were reviewed. Sources were included in the literature scan if they were found to contain variables of interest and keywords relevant to the research objectives. A hand search of reference lists from relevant studies was also used to supplement searches. Data sources were limited to those published in English. In addition, in order to gather the most relevant and current information, the search was focused mainly on recent data sources published in the last ten years, or no earlier than the year 2000.

The population of interest for this review was young Indigenous children in the early years of school (approximately Kindergarten to Grade 3). However, some evidence from older school grades was considered (e.g. with respect to long-term impacts of interventions). In addition, research based on non-Indigenous student learning and literacy outcomes was also included where appropriate as this evidence could have relevant implications for literacy learning among Indigenous children as well. Finally, given the limited research published in Canada on the topic, we included evidence from other countries with significant Indigenous populations, such as the United States (US) and Australia.

A list of keywords and search terms used in the literature scan are provided below. Throughout the search process, keywords were added, deleted, or modified as different terms were discovered to enhance the search strategy.

Keywords: school, Indigenous, First Nations, principal, literacy, literacy leaders, literacy outcomes, school leadership, education, children, students, reading, Canada

3.0 Background

3.1 Importance of Early Literacy

Research on literacy learning typically focuses on the first years of life, as a child's early learning experiences have been shown to provide the foundation for their future learning and school success (Vagi et al., 2017; Scull, 2016). While it is recognized that a great deal of literacy learning occurs before children even reach school age, school-based literacy instruction has the greatest impact on their subsequent academic achievement outcomes (Vagi et al., 2017). This is largely because early language and literacy learning is a critical foundational skill that contributes to learning in all other domains (Lear, 2017; Ball, 2010).

What is Early Literacy?

Early literacy (also called *emergent* literacy) has been defined in various ways, but generally refers to the behaviours, knowledge and skills of young children that "precede and develop into conventional literacy" (Ball, 2010, p.11). In other words, the process of learning, understanding and engaging with language and text that encompasses early literacy creates the foundation for more advanced reading, writing, and oral skills as children progress through school and life (Thompson, 2010; Ball, 2010).

While it is beyond the scope of this report to provide a complete overview of the history and evolution of research on literacy, current understandings of literacy recognize that it involves a number of different skills and elements that must all come together both accurately and quickly (Dempster et al., 2012). This includes phonological awareness (the ability to understand the sound structure of spoken language); graphophonic or written language awareness, including knowledge of letter combinations and the relation between letters and sounds; and even digital literacy skills (Dempster et al., 2012; Ball, 2010).

The importance of establishing literacy proficiency in these early years has been shown in research from the United States examining the link between reading skills in third grade and high school graduation rates (Hernandez). According to the study authors, third grade is a critical time point at which children transition from "learning to read" to "reading to learn"; therefore, literacy interventions are most effective for students in grades 3 or younger.

- Findings from this longitudinal study involving almost 4,000 students showed that 1 in 6 children who were not reading proficiently by third grade did not graduate from high school on time a rate four times higher than proficient readers (Hernandez, 2011).
- Outcomes were even worse for those students who were not able to master even the basic reading skills by third grade 23% of whom did not finish high school on time.

 Graduation rates were also lower for children from low-income families, and for Black and Hispanic students – demonstrating the additional inequities facing children from disadvantaged backgrounds who are learning to read.

3.2 Understanding Early Literacy Among Indigenous Children

3.2.1 Overview of Indigenous language and literacy

In Indigenous communities and schools, the concepts of literacy and language encompass more than just reading and writing skills; rather, they can have many different forms and meanings which must be considered when researching and developing strategies to promote literacy among Indigenous children. This is consistent with the concept of *multiliteracies*, which recognizes the multiple and diverse forms of text, discourse and communication that have evolved over the past few decades and suggests that meaning is made through these intersecting modes (i.e. linguistic, visual, audio, gestural, and special) (Lavoie et al., 2012; Cazden et al., 1996).

Findings from a qualitative study among First Nations families and educators living on reserves in Western Canada¹ support this view of literacy taking multiple forms in connection with traditional Indigenous knowledge systems (Hare, 2012). Data from interviews and focus group discussions revealed that families engaged in a much broader range of activities and practices that formed part of their literacy learning than what is typically considered as literacy by schools and other early learning settings. For example, literacy was defined by families as learning to communicate, interact, play, eat, and touch; and literacy learning drew on oral traditions, land-based experiences, and ceremonial practices.

As described by researchers such as Rennie (2006) and Riley and Webster (2016), applying a sociocultural approach to understanding literacy involves viewing literacy as a form of social practice that is embedded within broader social and cultural norms, rather than as a set of specific skills to master. A socio-cultural perspective of Indigenous literacy recognizes the diversity of literary practices across schools with Indigenous students, families, and communities and the ways in which these practices connect individuals to their community, land, and histories (Rennie, 2006; Riley & Webster, 2016; Hare, 2012). According to Ball (2010) and Hare (2012), the development of literacies among Indigenous children is founded in traditional Indigenous culture and languages; therefore, the forms of literacy that children practice are a representation of their cultural knowledge (i.e. how they understand and make sense of the world around them).

One example of cultural literacy is the use of *storytelling*. Oral tradition is the primary way in which Indigenous knowledge, language, culture, tradition, and history is passed on and preserved through the generations – often using stories and narratives that provide meaning to children's' experiences and environment (Ball, 2010; Hare, 2012; McKeough et al., 2008). Storytelling remains an important tool for teaching today as it serves as a precursor to reading and writing (Hare, 2012; McKeough et al., 2008). For instance, oral storytelling can promote oral language development, enhance listening and comprehension skills, and increase children's exposure to narratives and sentence structures (Hare, 2012). The role of storytelling may be even greater in more remote or isolated communities, where children have lower access to books through sources such as libraries and bookstores (Ball, 2010). As a result, many scholars call for school-based literacy instruction to

¹ The sample was drawn from five First Nations reserve communities whose children participated in the national Aboriginal Heat Star On Reserve (AHSOR) program.

not only recognize and acknowledge the diverse forms of literacy among young Indigenous children, but to incorporate traditional practices such as oral storytelling into their classroom activities to engage children in more culturally relevant and meaningful ways (e.g. McKeough et al., 2008; Lavoie et al., 2012).

Indigenous Language Preservation

Data from Statistics Canada shows that there are over 70 distinct languages spoken by First Nations, Métis and Inuit peoples across Canada; however, most of these languages are considered by UNESCO to be at risk of disappearing, with three-quarters of languages considered "endangered" (Statistics Canada, 2023; Canadian Heritage, 2022). Indeed, the number of Indigenous peoples speaking Indigenous languages in Canada has declined in recent years. For instance, the number who reported speaking an Indigenous language well enough to conduct a conversation declined by 4.3% from 2016 to 2021; and the number who reported learning an Indigenous language first at home declined by 7.1%, according to Census data (Statistics Canada, 2023).

Despite the cultural and historical significance of the many Indigenous languages, most Indigenous children in Canada (including those on reserves) continue to be taught in English and French (Deer, 2022). As a result, there have been calls from Indigenous communities and organizations as well as researchers to revitalize and maintain Indigenous languages – especially in schools (e.g. Deer, 2022; Canadian Heritage, 2022). This is also consistent with the Truth and Reconciliation Commission of Canada's (TRC) Calls to Action (TRC, 2015), which recognize that Indigenous languages are "a fundamental and valued element of Canadian culture and society, and there is an urgency to preserve them" (TRC Call to Action #14).

Furthermore, according to Ball (2010), supporting children to learn literacy skills in their primary language is a basic principle of language and literacy development; and when children's language and literacy experiences at home are inconsistent with literacy practices at school, they have lower chances of success (Hare, 2012).

3.2.2 Inequities in literacy outcomes for Indigenous children

As noted by Cherubini (2019, p.3), "literacies evolve and respond to socio-cultural and socio-historical change", and the nature of this process can vary depending on the specific context or school. For Indigenous peoples, historical and structural factors have played a significant role in the evolution of Indigenous literacy learning, as described below.

It is important to acknowledge that the disparities in literacy skills for Indigenous children are not a reflection of limited knowledge or learning ability but are the result of a multitude of historical and structural factors that increase the risk of negative health and social consequences for Indigenous peoples in Canada and have led to perpetuating cycles of underachievement for Indigenous students (Scull, 2016). This includes the lasting effects of historical trauma stemming from colonialism and residential school experiences, and experiences of racism and discrimination within public services and policies that have continued into the present. These conditions are also associated with other risk factors for negative health, social, and educational outcomes that arise before children even enter school, such as poverty and lack of access to adequate nutrition and

health services – which can lead to speech and language delays, among other outcomes (Ball, 2010). Literacy learning for Indigenous students is further limited by lack of access to high quality early childhood education and lower attendance rates at school, especially for those living in remote areas (Ehrich et al., 2010; Klieve & Flückiger, 2015). At the same time, researchers have criticized school systems for failing to acknowledge and encourage the strengths of Indigenous children and communities (Guiberson & Vining, 2023). Finally, the lower school participation among Indigenous children and families may also be related to feelings of fear and mistrust among parents towards the educational system due to past experiences of colonialist policies and practices that have sought to remove Indigenous children from their families and Indigenous communities from their lands and cultures in order to assimilate them into Western society (Hare, 2012).

As the result of these factors, there are still significant disparities between Indigenous and non-Indigenous children's educational experiences around the world, and this includes gaps in literacy outcomes (e.g. Guiberson & Vining, 2023). For example:

- In Canada: According to data from the 2016 national Census, educational outcomes for Indigenous peoples have improved, but the gap between Indigenous and non-Indigenous populations remains. For example, the rate of high school completion among Indigenous youth (aged 20-24) increased from 57% in 2006 to 70% in 2016, but this rate was still lower compared to non-Indigenous youth (91% completed high school in 2016). High school completion rates were even lower for First Nations youth living on reserve (45.5%). The overall percentage of Indigenous youth (aged 15-24) who were attending school (including elementary or secondary school, university, trade school, or community college) in 2016 was also lower than non-Indigenous youth of the same age group (56% vs. 71%). (Anderson, 2021).
 - Graduation rates differ across the provinces. For example, British Columbia has shown marked improvements in high school completion rates, with 72% of Indigenous students completing high school in 2020-21, compared to 66% in 2016-17 and 61% in 2013-14 (Government of British Columbia, 2019; 2022). However, in Manitoba, only 51% of Indigenous students graduated high school on time (within four years) in 2022, compared to 91% of non-Indigenous students (Government of Manitoba, 2023).
- In Australia: Indigenous children are less likely to participate in preschool; have higher absenteeism rates in primary school; and have lower scores on statewide English literacy and numeracy assessments compared to their non-Indigenous peers (Frigo et al., 2003). Rates of literacy achievement are even lower in more remote areas of Australia (Klieve & Flückiger, 2015). For example, only 20% of Indigenous students in very remote areas and 40% of all Indigenous students in the Northern Territory achieved the minimum reading benchmark in 2005-06, compared to 85% of non-Indigenous students in the Territory (Ehrich et al., 2010; Northern Territory Government, 2007).

These inequities have persisted despite recent policy initiatives in Canada and Australia that have specifically focused on improving educational outcomes for Indigenous students. For example:

• In Ontario, the Ontario Ministry of Education has published several policy documents aimed towards improving Indigenous students' experiences and achievement levels (Cherubini, 2019). In 2007, the Ontario First Nations, Métis and Inuit Educational Policy Framework was released which aimed to close the achievement gap by the year 2016 and identified

actions and strategies to be implemented by the government and school boards (Government of Ontario, 2007). Progress reports published by the Ministry every three years following the framework showed that significant gains were made in improving achievement and well-being levels among First Nations, Métis and Inuit students as well as increasing awareness and knowledge of First Nations, Métis and Inuit histories, languages, cultures and perspectives among educators and students. However, while there were increases in reading, writing, and mathematics test scores and graduation rates among First Nations, Métis and Inuit students in the ten years following the release of the framework, achievement and graduation rates were still lower compared to the provincial rates for all students in 2018, indicating that the achievement gap has narrowed but still remains (Government of Ontario, 2018).

• In Australia, the national, sub-national and local governments committed to work together to close the gap in Indigenous disadvantage and published a framework outlining various targets to reduce inequality across several domains, including education and literacy achievement. This initiative led to significant funding and strategic policy action as well as research to monitor and evaluate outcomes (Trimmer et al., 2021). However, while some improvement was observed, reports from 2017 and 2018 found that the progress was not sufficient to meet the targets that had been set and the literacy gap (among other areas) remained (Commonwealth of Australia, 2017). For example, in 2018, one in five Indigenous children in Year 3 and one in four children in years 5, 7, and 9 were still below the national minimum standard in reading (Commonwealth of Australia, 2020). In 2020, a new Closing the Gap agreement was released, setting new targets and strategies for the next ten years, in partnership with Indigenous peoples.

3.3 The Role of School Leadership in Relation to Literacy

Research consistently shows that school leadership plays a key role in student learning and influences achievement outcomes – including literacy learning and outcomes. A landmark review published in 2004 in the US determined that school leadership was the second most important factor that influences student success, after teaching (Leithwood et al., 2004). This finding held up in a more recent update, which concluded that the importance of school principals may have even been understated in previous work (Grissom et al., 2021). In this review, researchers attempted to quantify the magnitude of the impact of effective principals on student achievement based on data from six relevant studies and found that a one standard deviation increase in principal effectiveness led to a 0.09 standard deviation increase in the average student's reading achievement (Grissom et al., 2021). In other words, replacing a below-average principal with an above-average one would equate to a gain of about 2.7 months in reading for an average fifth grader. The impact of principals was almost as strong as the impact of having an effective teacher; however, the overall impact of the principal was greater when considering the school as a whole. These findings led the authors to conclude that it would be "difficult to envision an investment in K-12 education with a higher ceiling on its potential return than improving school leadership" (Grissom et al., 2021, p.xiv).

The impact of quality leadership may be even greater in struggling or underperforming schools in which effective leadership is needed the most (Leithwood et al., 2004; Johnson et al., 2014). According to Dempster et al. (2012, p.4), "there is ample evidence to show that the trajectory of student achievement in schools that are struggling is not turned around without high-quality

committed leadership". Principals can also play an important role in reducing inequities between students, including students from low-income families and ethnic minorities (Grissom et al., 2021).

3.3.1 How do principals impact student learning and literacy?

Research suggests that principals have both a direct and indirect impact on student learning and achievement outcomes – for example, through leadership actions and strategies to enhance learning as well as through supporting teachers and promoting a positive school environment (Dempster et al., 2012; Grissom et al., 2021). In order to have a strong impact on literacy outcomes, however, principals must possess certain skills and knowledge. This includes understanding the components of literacy learning, as well as knowledge of evidence-based strategies and practices to promote literacy skills (Williams, 2018; Lear, 2017; Overstreet, 2022). It also includes having strong knowledge of the unique school context the principal works in – including the teachers, the students, the organizational structures, existing teaching methods and achievement levels (Dempster et al., 2012). Other important roles the principal plays that can impact literacy learning include leading the development of community partnerships, hiring and managing teaching staff, identifying and obtaining appropriate teaching materials and resources, and selecting and implementing literacy programs (Riley & Webster, 2016; Robinson & Hohepa, 2009; Williams). The process of finding appropriate resources that align with community goals and values can be especially challenging in schools with Indigenous students (Robinson et al., 2021).

As shown in Figure 1, the OECD (2017) identified common elements found in schools where Indigenous students are flourishing academically, starting with an effective and committed principal who inspires and encourages teachers, families and students to engage in learning.

Figure 1: Elements of successful Indigenous schools (OECD, 2017)



3.3.2 Leadership types and approaches

The many roles and responsibilities of principals as leaders also reflects the changing views of principals from managers to instructional leaders (Thompson & Brezicha, 2022). While this movement has been documented in the literature, researchers such as Lear (2017) note that the process has been slow as it requires forming a new "mental model" of the role of principals as well as an organizational shift at the school systems level. According to Jenkins (2009), this view of

principals as instructional leader emerged in the 1980s following new research showing the importance of strong leadership in effective schools, yet the implementation of instructional leadership models is still limited.

In essence, an *instructional leader* is one that goes beyond managerial duties for the school and focuses efforts on promoting student learning and quality teaching. To achieve these goals, the instructional leader must set clear goals and priorities for the school, develop an action plan, and follow through on those actions (Williams, 2018; Taylor, 2004). The instructional leader also becomes much more closely involved in classroom activities (i.e. instruction and curriculum coordination) and monitoring student learning progress, working with teachers to foster growth and achievement (Hallinger, 2005).

When instructional leadership is applied to literacy goals and instruction, the result is *literacy leadership*. This coupling of leadership skills with a focus on literacy can be described as a type of *blended* framework. For example, researchers from the Principals as Literacy Leaders (PALL) project in Australia (described in Section 4.2.3) emphasize the need for leadership programs that tie generic leadership capabilities to particular learning needs or aims, such as building foundational literacy skills and knowledge (Dempster et al., 2012).

While there is no common or agreed upon definition of literacy leadership, there are certain behaviours and practices that have been identified in the literature as characteristics of literacy leaders (Thompson, 2021). Similar to the necessary practices of an instructional leader, a literacy leader should possess knowledge of literacy instruction; supervise and empower teaching staff; establish and work towards literacy goals; and believe in the literacy potential of all students (Thompson, 2021; Taylor, 2004).

Thompson & Brezicha (2022) take the definition of literacy leadership further to include culturally responsive leadership as well. These researchers identified three main areas in which principals act as literacy leaders: 1) applying content knowledge to reduce literacy achievement gaps; 2) promoting an inclusive literacy culture and learning environment; and 3) fostering a collaborative culture that involves educators, community members and other stakeholders to support literacy learning among all students. The inclusion of community engagement is also consistent with the view of Taylor (2004), who noted that literacy leaders must work with their school community to support a balanced approach to literacy learning that ensures all students reach their potential. According to Taylor (2004), literacy leadership that involves commitment to priorities along with dedicated time and resources is essential for large scale change and improvement over time.

3.3.3 Shared leadership models

While research has established the importance of the school principal's role in promoting student success, this does not diminish the importance of other members of the school leadership as a whole. Indeed, the concept of *shared leadership* or *distributed leadership* has been shown in the literature to be an essential element of a school's approach to enhance literacy outcomes. As summarized by Vagi et al. (2017), a number of studies have found that a distributed approach in which instructional leadership responsibilities are shared between multiple staff members (including administrators, teachers, coaches, and others) can promote early childhood literacy as it leads to better quality instruction and higher student achievement. Another benefit of a shared leadership approach is that it avoids relying on only one individual or one role to achieve the

desired literacy goals; as a result, schools with high turnover rates among leaders would be less vulnerable to the impact of losing their instructional leader (Riley & Webster, 2016).

The idea of shared leadership can also extend beyond school staff to include members of the community as well as parents. This approach has been identified as being especially valuable for schools with Indigenous students and their communities as research on literacy outcomes for Indigenous students has shown that the involvement of community leaders is critical (Riley & Webster, 2016).

Similarly, researchers have also pointed to the need for a "both ways" leadership approach in schools with Indigenous students in which both Indigenous and non-Indigenous (ie. Western or mainstream) knowledge and cultural values and accepted and incorporated into education and teaching practices (Johnson et al., 2014; Lovett & Fluckiger, 2014). An example of both ways leadership is the creation of partnerships between school principals and Indigenous community leaders to develop literacy programs together and share responsibility for reaching literacy learning goals (Lovett & Fluckiger, 2014; Riley & Webster, 2016). According to the OECD (2017), schools that achieve sustained improvements in Indigenous student outcomes are those that recognize the important role of Indigenous parents, leaders, and other community members and work to build mutually respectful relationships with them. Both ways leadership can have benefits for not only students, but for school leadership, parents and the school community as a whole, as summarized in Table 1 (Johnson et al., 2014; Lovett & Fluckiger, 2014; Riley & Webster, 2016; Ball, 2010).

Table 1: Benefits of a both ways leadership model

Group	Benefits
Principals and school staff	Improved communication and connection to the
	community; gain more respect
Indigenous leaders/community	Provided with an opportunity to contribute to student
members	learning in an equally valued and shared leadership role;
	Sense of ownership and control over school programs and
	learning is strengthened
Parents	Greater access to school leadership (through the
	community partner);
	More involved in their child(ren)'s learning and more
	likely to participate in school initiatives that reflect their
	own culture and values
Students	Improved reading achievement
Overall school community	More aligned with the needs and priorities of the local
	community and families

3.4 Other Considerations for Promoting and Evaluating Learning and Literacy in Schools with Indigenous Students

3.4.1 Considerations for Indigenous early learning approaches

In addition to shared leadership and community involvement, research has highlighted other cultural considerations for educators and researchers that should be taken into account when planning literacy programs and goals – discussed below.

First, there is consensus in the literature that a *holistic* approach to learning is needed to support Indigenous children's literacy. A holistic framework acknowledges the many different influences in a child's life and environment (i.e. family, community, nature) and how they are all connected, and aims to support the development of the whole individual – including their spiritual, emotional, physical, and intellectual aspects (Best Start Resource Centre, 2010; OECD, 2017). As an example, a holistic approach to literacy for young Indigenous children might address their overall health, safety, and nutritional needs (including any hearing and dental issues) that might affect their listening and oral abilities, in addition to or as part of their school-based learning activities (Ball, 2010).

Indigenous early learning should also be culture-based, meaning that culture forms the foundation of learning experiences. For example, literacy programs and resources should be culturally relevant and include Indigenous content and activities (Best Start Resource Centre, 2010; Ball, 2010). However, despite the growing awareness that school pedagogy should incorporate Indigenous knowledge and worldviews, there is still a need for more books and other print materials in Canada that accurately and positively portray Indigenous peoples and that reflect their own experiences and languages (Cherubini, 2019; Ball, 2010).

Furthermore, it is important to note that Indigenous peoples in Canada are not a homogenous group but a diverse population with many distinct languages, histories, and cultural practices and beliefs. Accordingly, effective educators and school leaders must be able to acknowledge and accommodate the diverse literacy needs and practices of Indigenous children from different backgrounds and communities (Best Start Resource Centre, 2010; Hare, 2012).

Other learning strategies that may be more effective with Indigenous children include cooperative approaches to literacy learning (i.e., shared literacy experiences, working in groups) rather than competitive approaches; and incorporating outdoor activities and land-based experiences (Ball; Best Start Resource Centre). Additional strategies to support early learning among First Nations children in Ontario have been reviewed and summarized by the Best Start Resource Centre in Ontario and are listed in Appendix A.

In summary, literacy programs and policies have historically neglected the linguistic, cultural, social, and historical contexts that shape young Indigenous children's learning (Gutierrez et al., 2021). New approaches to support literacy learning among Indigenous children are needed that better address and reflect their unique experiences and cultural values (Ball, 2010).

3.4.2 Challenges with data collection

In order to improve literacy outcomes for Indigenous children in Canada, educators and policymakers need to first understand students' strengths and needs as well as existing achievement gaps and inequities between Indigenous students and non-Indigenous students. This requires data and evidence on Indigenous student learning and literacy outcomes to be available and accessible; however, there are often gaps and inconsistencies in existing data sources, which makes it challenging to develop and implement evidence-based solutions.

An earlier report on key policy issues in Indigenous Education published by the Council of Minister of Education, Canada (CMEC) identified important data gaps in several areas. These included: challenges with collecting data that identifies Indigenous students; limited availability of results from jurisdiction-wide assessments for Indigenous students; small sample sizes; a lack of data on

barriers to Indigenous student success, such as attendance rates; and inconsistent administration of early childhood assessment tools (Friesen & Krauth, 2012).

While efforts to improve data collection processes involving Indigenous communities have expanded in recent years, many of these data gaps still persist. For example, First Nations educators in Atlantic provinces in Canada have reported that reading skills appear to be declining among young students in their schools, but they are unable to assess and compare literacy rates among Indigenous students and other students in the region due to inconsistent data tracking (Baker, 2022).

At the national level, while Indigenous Services Canada does systematically track some educational outcomes, such as information on school progression and graduation rates, data specific to literacy rates is not consistently collected (Baker, 2022; ISC, 2020). The limited data that is available on literacy levels for Indigenous students across Canada shows significant variation between regions and years; moreover, it does not differentiate between schools on and off reserves (ISC, 2020).

3.4.3 Considerations for assessment tools and methods

When data on Indigenous learning outcomes *is* collected, there are additional concerns around the standards that are typically used to evaluate student success. These concerns are important for two key reasons: first, given the considerations discussed in Section 3.2, Indigenous student learning abilities (and literacy skills in particular) are not always easy to measure using existing or standard assessment tools; second, assessment methods that are based on Western knowledge can be subject to cultural bias (Best Start Resource Centre, 2010; Friesen & Krauth, 2012). These issues can produce inaccurate results about Indigenous student achievement, leading to the common conclusion that Indigenous students perform at a lower level than their non-Indigenous peers and are failing to meet academic standards. Furthermore, this view can then encourage a self-fulfilling prophecy whereby teachers have lower expectations of Indigenous students, which can directly impact their actual academic success (Ball, 2010; Best Start Resource Centre, 2010).

Concerns around assessment methods for Indigenous students have been raised in both Canada and Australia. For example, in Australia, researchers have critiqued the national literacy and numeracy testing program (NAPLAN) for promoting a narrow definition of literacy that focuses on structural and mechanical skills that don't necessarily correspond to many students' actual literacy experiences and that excludes Indigenous languages and cultural values (Gutierrez et al., 2021; Trimmer et al., 2021). In Canada, the CMEC report on Indigenous education policy issues identified several limitations of standardized tests for assessing Indigenous students' academic skills. In addition to the limitations noted above (i.e. cultural bias and inaccuracies), the authors noted that these tests may not be based on an accurate sample as they do not include results from students who were absent or dropped out of the system – which may be more common for Indigenous students. The report also cautioned against using standardized tests for the purpose of reaching certain educational or political goals. For instance, when test results are tied to incentives or funding, this can lead educators and school districts to focus their efforts and resources only on certain students in order to raise their achievement levels, often leaving students who appear to be lower-achieving behind.

In both countries, a common discourse around standardized assessments is that they encourage a *deficit* model when examining literacy learning among Indigenous students. A deficit approach means that educators focus on weaknesses or where students are failing or falling behind, often

leading to assumptions that lower performance is due to a lack of ability; rather than focusing on the challenges and barriers these students face and how the system is failing to meet their needs (Friesen & Krauth, 2012; Guiberson & Vining, 2023). Instead of a deficit model, some researchers propose that a strengths-based approach to literacy education (also called an 'abundance model') is needed in schools with Indigenous students, whereby teachers identify the child's strengths, skills and interests and then modify their own practice in a way that affirms and builds on these assets to promote positive development (Cherubini, 2019; Guiberson & Vining, 2023).

In summary, there is a clear need to develop culturally valid and meaningful indicators of success for literacy outcomes among Indigenous students (Best Start Resource Centre, 2010). As an example, some Indigenous organizations in Canada support the use of more holistic outcomes as part of a regular data collection approach. Holistic measures capture a more complete view of a student's learning progress and needs by including measure of their social, physical, and spiritual well-being (Friesen & Krauth, 2012).

4.0 Research Findings

4.1 Overview of Results

As described in Section 2.0, published literature was scanned to examine evidence related to the role of school principals as literacy leaders for young Indigenous students. Results from the literature are described in the following section, beginning with descriptions of relevant models and programs; followed by studies examining the impact or effectiveness of various literacy strategies and programs. Results are organized by theme, including findings from general review studies, as well as studies focusing on the role of various factors that can affect the success of Indigenous student literacy learning – such as the role of parents and caregivers, the role of community partnerships, and the importance of culture.

4.2 Examples of Literacy Models or Programs for Indigenous Students

4.2.1 Overview

Educators have increasingly recognized the importance of early literacy and the need to provide all students with the necessary foundational literacy skills for future school success and other opportunities in life. This has resulted in the development of a number of different reading and literacy programs for children across Canada and other countries, which have evolved to align with research on best practices in teaching literacy.

Many of these programs have been developed in response to observations of low literacy rates among certain sub-groups of children – including Indigenous children, children with English as a second language, and other children with special needs. In addition to the need to understand and address literacy skills and challenges for these children, there is also a need to enhance the involvement of First Nations, Métis and Inuit families, communities, schools, and leaders in their children's education and literacy learning.

While some programs have attempted to address both of these critical needs through culturally relevant and Indigenous-led literacy programs, researchers such as Gutierrez et al. (2021) have identified some remaining gaps in existing literacy programs for Indigenous students. For example, after reviewing literacy programs in Australia, the authors found that most programs focus on mechanical or structural aspects of literacy learning (i.e. codebreaking and phonemic awareness)

and there is a lack of balanced approaches to literacy learning that acknowledge the importance of context and that incorporate more recent theories and concepts around literacy such as multiliteracies (Gutierrez et al., 2021).

This section describes some prominent examples from the literature of programs that aim to improve literacy outcomes for Indigenous students, noting key aspects of their approach as well as any available evidence of their impact. Some of the common elements across programs include: capacity building of school leaders (i.e. professional development); leadership teams that include Indigenous community members; collaboration between school leadership, the community, and families; and monitoring of progress. Evaluations of these programs show some evidence of success in terms of the impact on student achievement as well as positive evaluations from school leaders and participants. However, not all programs reviewed have focused specifically on the role of the school principal as literacy leader.

4.2.2 Canadian examples

a) First Nation School Board (FNSM) Literacy Plan - Yukon Territory

The FNSB was formed in 2022 and now includes 11 schools in the Yukon territory. The FNSB was established to allow Yukon First Nations to have a shared role in the delivery of public school education and to promote a community-based approach to school programs that reflects First Nations worldviews (FNSB, n.d.). In February 2023, the FNSB announced a new literacy plan that aims to improve low literacy rates among Yukon students through programs that are both culturally inclusive and science-based. The program represents a new direction for literacy learning in the Yukon, which had previously been based on "balanced literacy" approaches such as Reading Recovery programs or the Fountas and Pinnell system (FNSB, 2023a). The key components of the literacy plan are summarized in Table 2.

Table 2: FNSB Literacy Plan Elements (FNSB, 2023b)

Component	Description
Assessment	Need for assessments and data collection to inform a tailored approach to each classroom and to track progress over time
Scientific standards*	Moving away from Balanced Literacy by replacing all Reading Recovery programs with those that meet the most up-to-date science of reading* standards
Literacy Teachers	Literacy Teachers (previously called Reading Recovery teachers) provide one-to-one support to students, tailored to their individual needs
Literacy Coaches	A team of Literacy Coaches directly support classroom teachers and train Literacy Teachers in the science of reading

^{*}Note: According to the FNSB, the "science of reading" refers to research from a variety of fields (i.e. education, linguistics, psychology, and neuroscience) that has formed the basis of what experts know about how we learn to read and effective reading instruction "that is explicit, systematic, and offer[s] many opportunities to respond" (Source: University of Florida Literacy Institute)

b) Meadow Lake Tribal Council (MLTC) - Saskatchewan

In 2016, MLTC implemented an Early Years Initiative called *Talk2Learn* in collaboration with the nine First Nations that comprise the council. The program was developed in response to the literacy difficulties that had been observed among kindergarten and pre-kindergarten students in the

community and the need for holistic early literacy interventions that meet the needs of Indigenous children and families (Lessard & Eckel, 2018). This includes acknowledging the importance of land, language, relationships and culture before addressing cognitive and language skills. The main goal of the program was to improve literacy skills among students – specifically, by increasing the proportion of students with grade-level literacy skills from Kindergarten to Grade 3. Secondary aims were to enhance parent engagement and promote community partnerships. The key aspects of the program are summarized in Table 3.

Observational data from the first three years of the program (2016-2018) showed that it was successful in achieving its goals. For instance, the number of students experiencing significant difficulty in literacy (according to the Early Years Evaluation test scores) decreased and the proportion of students with grade-appropriate literacy test scores increased (Lessard & Eckel, 2018). Other indicators of the program's early success included an increase in the number of schools and teachers participating in the program.

Table 3: Aspects of the Meadow Lake Early Literacy Plan (Lessard & Eckel, 2018)

Element	Description
Designated Early Literacy	Each First Nation school employs a community-based ELI who
Interventionists (ELI)	works with teachers and directly with children identified as having difficulty with literacy learning
Parent engagement	Support meaningful parent engagement in children's education and enhance home-school relationships. Examples of approaches include home visits and literacy-focused parent/caregiver events
Collaborative teamwork	ELIs are part of a team of educators, each of whom plays a role in early learning that is clearly defined – including administrators, teachers, other leaders, specialists, and coordinators
Capacity building	Support for ELIs to enhance their ability to succeed in their role – including materials and professional development opportunities

c) Model Schools Literacy Project (MSLP) - Canada

The MSLP is a partnership between the Martin Family Initiative (MFI) and First Nations schools and communities across Canada that focuses on improving early literacy outcomes (i.e. reading and writing achievement) by the end of Grade 3. The project began as a pilot study from 2010-2014 and has expanded since 2016 to include over 18 First Nations schools and over 100 classroom teachers each year. Some of the elements of the program are described in Table 4.

Results from an evaluation of the program over three years (2017-2019) showed improvement in children's achievement test scores as they progressed from Grade 1 to Grade 3, with a greater proportion of children achieving higher reading scores by participating in the program (O'Sullivan, 2021). The program was found to be even more effective for students who attended school regularly and for those who started the program with well-developed early literacy skills.

Table 4: Elements of MFI's Model Schools Literacy Project (O'Sullivan, 2021)

Element	Description
Indigenous	The MSLP values both English and Indigenous languages in schools
languages	equally and teachers are encouraged to incorporate Indigenous language and culture into their teaching activities
Professional learning network	Partner schools form a network that involves a forum where schools (including teachers and principals) can come together to share practices, learn from and support each other in their shared goal of promoting success for First Nations children. Professional learning takes place through sharing circles conducted both online and in person
Literacy improvement plan	The MFI team works with schools to implement an evidence-based literacy improvement plan for Kindergarten to Grade 3 classrooms. The plan is based on individual schools' needs and resources are provided to support implementation of the plan.
Accountability	The MFI team works with school leadership to establish clear accountability mechanisms and measures to track progress longitudinally, in accordance with First Nations principles of ownership, control, access and possession (OCAP)

4.2.3 International examples

a) Learning Connections - Hawaii

Early literacy programs have also been developed to improve literacy outcomes among children in Hawaii - where about 20% of the population is considered Indigenous (Native Hawaiian) (Ball, 2010). For example, the Learning Connections program was designed to be used in preschools serving low-income Asian and Pacific Islander families who were shown to be at greater risk of language and learning difficulties in school (DeBaryshe & Gorecki, 2005). The program is described as a research-based curriculum that aims to enhance emergent literacy and math skills among children aged three to four years old through individualized and developmentally appropriate instruction. Some of the key elements of the Learning Connections curriculum are summarized in Table 5:

Table 5: Key elements of Learning Connections curriculum (DeBaryshe & Gorecki, 2005)

Element	Description
Small group, individualized instruction	Literacy activities conducted in small groups of one to four children; teachers are provided with instructions for individualizing each lesson to match children's skill levels
Cultural sensitivity	Curriculum content uses many examples from the local culture that are not represented in commercially available materials, including pidgin versions of rhyming books; pictures and vocabulary cards; and home activities unique to the family's culture
Teacher mentoring	Ongoing teacher mentoring, curriculum training, and technical assistance were provided as part of effective professional development
Family involvement	Inclusion of a family curriculum (weekly home activities) to increase parental involvement and parent-child learning interactions

A quasi-experimental evaluation of the program conducted in 2002-2003 among nine preschool centers compared sites that implemented the Learning Connections curriculum to a control group of centers with a standard curriculum (DeBaryshe & Gorecki, 2005). Results showed significant effects of the program for three of the six literacy outcomes (emergent reading, phonemic awareness, and letter-sound correspondence), with children in the Learning Connections program showing greater gains from pre-program to post-program assessments. Literacy gains were highest for children with higher attendance rates, English language learners, and children with higher levels of home stimulation. Support for the program was also found to be high among both teachers and parents.

b) Principals as Literacy Leaders with Indigenous Communities (PALLIC) - Australia

The PALLIC project began as a two-year action research project called Principals as Literacy Leaders (PALL), which was implemented in 2009-2010 with a group of 60 school principals across Australia². The foundation of the project was a focus on supporting principals in their role as leaders, with the ultimate aim of improving literacy achievement among children.

- In the initial pilot project, principals participated in a series of professional development modules followed by practical tasks carried out at their own schools. A key aspect of the program was the inclusion of mentoring support for principals from an experienced school leader appointed as a "literacy achievement advisor". A number of positive outcomes were reported from the pilot project, including: principals found the leadership and literacy frameworks of the program to be highly relevant and useful; principals took a more active leadership role with teachers; moderate improvements in students' attitudes towards learning; and general improvement in the schools' results in national literacy assessment testing (Dempster report).
- Following the pilot project, PALL was adapted and expanded into other formats, including PALLIC which was developed specifically for Indigenous community schools (or schools with significant proportions of Indigenous children) to raise literacy rates for Indigenous students (Johnson et al., 2014; Riley & Webster). This phase of the project was implemented across 48 schools over an 18-month period in 2011-2012.

Some of the key elements of the project are summarized in Table 6 and Figure 2, and further results from evaluation studies of the PALLIC framework are described in Section 4.3.

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² Participating schools included Government, Catholic, and independent low SES schools in South Australia, Northern Territory, Queensland and Western Australia.

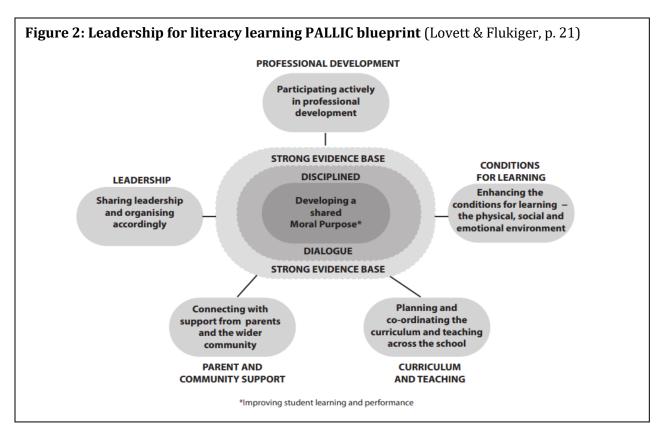


Table 6: Key aspects of the PALLIC framework (Dempster et al., 2012; Johnson et al., 2013; Riley & Webster, 2016; Lovett & Fluckiger, 2014)

Aspect	Description
Evidence-based Literacy framework	Focus on the "Big Six" literacy skills – a research-based synthesis of the critical elements for reading development: oral language experience, phonological awareness, phonemic awareness, vocabulary, fluency and comprehension. According to Riley & Webster (2016), the Big Six has also been established as an effective approach to reading instruction for Indigenous students given the focus on oral language
Shared, "both ways" leadership	Deliberate inclusion of Indigenous community members as integral partners in the school leadership team (known as Indigenous Leadership Partners or ILPs); ILPs also help to promote links between home, school and community
Mentorship	Use of other experienced mid-career principals with knowledge of literacy learning and leadership who acted in support roles as literacy leadership mentors for the school leadership team
Professional development	Focus on enhancing leadership capacity of principals and ILPs through professional development workshops

4.3 Evidence on the Impact of Literacy Models or Programs for Indigenous Students

4.3.1 Evidence on literacy strategies or programs in general

Findings from various published reviews of the literature on literacy programs for Indigenous students are summarized below.

- A 2010 review of strategies to promote young Indigenous children's emergent literacy in Canada examined literature describing various literacy programs in Canada and other countries. The review identified the following key elements of a comprehensive strategy to improve early literacy among Indigenous children, based on the reviewed literature (Ball, 2010):
 - ✓ **Early learning programs** increase access to quality early learning programs (including home-based, centre-based, and community-based) for young Indigenous children
 - ✓ **Specialist services** increase services for early identification and prevention of health issues that can undermine language and literacy development
 - ✓ Professional development provide professional development opportunities for specialists and health practitioners to enhance cultural competence and ensure cultural safety for young Indigenous children and families
 - ✓ **Individualized literacy supports** improve the ability of educators to assess literacy practices and design early literacy programs or components for children needing extra support
 - ✓ **Culturally relevant materials** create more books and other print materials as well as oral materials that represent Indigenous children and their surroundings in a positive way and that reflect the home and community experiences of specific populations of First Nations, Métis and Inuit children
 - ✓ **School transitions and readiness** schools and early childhood services should work together to ensure both children and schools are ready for the transition from home to school
 - ✓ Research and evaluation develop a collaborative research program to assess early literacy practices and improve outcomes
- Scull (2016) reviewed three programs implemented in remote communities in Australia to determine key practices that contributed to successful outcomes for young Indigenous students. The programs (described in Appendix B) were selected as examples because while they each varied in their approaches, they all received strong community support as well as financial support. After reviewing the programs, Scull identified effective teaching practices from the programs that can strengthen early literacy learning among Indigenous students and developed a set of six principles to inform evidence-based practice, listed in Table 7.

Table 7: Principles to inform effective literacy teaching practices (Scull, 2016)

	Theme	Principle	Background/Basis
1	Language learning	Maintain children's Indigenous languages and ensure opportunities to become proficient speakers of English to build dual language competence as a strong foundation to successful literacy learning outcomes	 Many Indigenous children are raised in complex language environments, highlighting the importance of acknowledging and supporting multiliteracies The maintenance and development of children's home language is considered essential for promoting language and cognition as well as their own identity Literacy programs have been shown to be more effective when skills are supported in the home (in the first language)
2	Community connections	Value and respect Indigenous practices and connect the curriculum to community knowledge and experiences to allow students to see the relevance of literacy learning	 Connections between schools, homes, and community are critical for achieving literacy success for vulnerable students Community engagement and involvement in the design and delivery of the curriculum is also needed
3	Levels of early intervention/prevention	Provide multiple levels of teaching support, of increasing intensity, to ensure the best designs for meeting Indigenous students' literacy learning needs are available	 Rather than a "one size fits all" approach, teaching should be responsive to individual needs so the most appropriate intervention is provided to enhance literacy outcomes May include small group teaching and one-on-one support
4	Literary processing theories	Recognise the complexity of literacy acquisition processes and assure all Indigenous students gain access to skills and strategies that allow them to engage in critical, constructive literacy practices	 Literacy is understood to be a complex progress involving a range of factors and skills that work together Research on Indigenous student learning shows that complexity is more effective than simplicity
5	Expert teaching	Acknowledge the importance of expert teaching and provide ongoing teacher professional development to ensure quality literacy teaching and learning for Indigenous students	 The quality of teachers is a key determinant of student experiences and outcomes Providing teachers with more extensive training opportunities will lead to more effective teaching methods and better outcomes for students
6	Strong research base	Invest in programs with a record of success and engage in research to monitor and improve the effectiveness of teaching and programs that meet Indigenous students' learning needs	 Rather than short-term, temporary solutions or interventions, it is better to direct resources towards programs that have shown a positive impact on literacy This evidence will then help ensure continued investment in literacy programs

- A scoping review of research on language and literacy interventions for Indigenous children
 conducted by researchers in the US (Guiberson & Vining, 2023) sought to identify strategies
 that could be applied to meet the needs of Indigenous children and to categorize strategies
 according to their strength.
 - A total of 40 sources³ were included in the review, from which an evidence map of 43 potential language strategies and 49 literacy strategies or approaches was created. Of the potential strategies that were identified, 28 were found to have compelling strength, several of which are already part of many mainstream literacy programs. Some examples of compelling language and literacy strategies consistent with previous research were: modeling language, encouraging children to ask questions and make comments, targeted vocabulary instruction, several reading comprehension strategies (i.e. group reading, reading aloud, and repeated readings), print knowledge, and a focus on phonemic awareness.
 - The remaining strategies were found to have promising strength (n=19) or lacked strength (n=45). The researchers determined that many of these promising strategies could be useful for Indigenous students if cultural modifications were made; however, further research would be needed before they could be widely applied. For example, many narrative-based strategies (i.e. storytelling, singing songs) were shown to have cultural aspects that could be effective in supporting Indigenous cultural identity, while also supporting the necessary skills for academic success.
- A systematic review of published evidence on literacy programs in Australia sought to identify
 which programs led to improvements for Indigenous (Aboriginal and Torres Strait Islander)
 children as well as conditions for success (Gutierrez et al., 2021). The main finding from the
 review was the dominant focus on teaching mechanical and structural aspects of language and
 literacy in most programs, such as explicit teaching of phonemic awareness and codebreaking
 skills. The authors also identified a number of common conditions across the programs which
 contributed to their success, including:
 - a) all programs required structural and/or pedagogical changes within the school or classroom in order to run the program;
 - b) professional development for principals and teachers and ongoing support from experts;
 - c) developing strong partnerships with Indigenous community members, parents and caregivers; and
 - d) strong support at the administrative level for incorporating Indigenous values and perspectives into the literacy curriculum.
- A longitudinal study by the Australia Council for Educational Research (ACER) followed progress in literacy achievement among a group of Indigenous students across 13 schools⁴ through their first three years of school, starting in the year 2000. Quantitative and qualitative

³ Sources included 28 from the United States and 12 from Canada. Sources described strategies for either preschool age children (13 sources), school-aged children (26 sources), or both (1 source). The majority of sources were non-database sources (i.e. describing clinical tutorials, program approaches, and conference proceedings).

⁴ Schools that participated in the study were from urban, rural and remote areas of Australia. All schools had significant numbers of Indigenous students and were selected based on existing initiatives and programs to support Indigenous students at each school. Up to 10 Indigenous students at each school formed the student sample.

data were collected throughout the study based on annual literacy assessments as well as interviews with members of the school community (i.e. principals, educators, and parents). Findings from the study were examined to identify which contexts or program aspects contributed to student achievement growth, particularly for Indigenous children (Frigo et al., 2003). Some of the school and student-level factors that were found to be significantly associated with achievement in the longitudinal quantitative analyses are summarized in Table 8. Other factors that were not associated with achievement included gender, age, preschool attendance, and school mobility (number of schools attended).

Table 8: Factors associated with literacy achievement (based on a sample of 111 students) (Frigo et al., 2003)

Level	Factor	Result
School and Classroom	School	About one-third of the variance in literacy achievement was explained by the specific school that students attended
Classiooni	Geographic region	Students who attended schools in metropolitan areas had higher literacy achievement than those in remote regions
	Initial achievement	Initial achievement at the start of the study predicted achievement at the end of the study, showing the importance of the pre-school years as a foundation for subsequent learning
Student	Language background	Students who spoke standard Australian English at home had higher literacy achievement in each year than those who spoke Aboriginal English or and Indigenous language
	Attendance	Inconsistent or lower attendance in the early years of school was associated with lower achievement in subsequent years
	Attentiveness	Higher attentiveness or engagement in classroom learning in the early years was associated with higher achievement in subsequent years

- In addition to these key factors, the researchers identified a number of other important findings from the qualitative interviews and case study reports, including the following themes that contributed to literacy achievement for Indigenous students (Frigo et al., 2003):
 - ✓ School learning context that recognizes and celebrates Indigenous culture e.g. inclusion of Indigenous studies in the curriculum; connection to local Indigenous cultures in a dynamic way (vs. one-dimensional approach); availability of Indigenous resources and texts in schools and classrooms; displays of Indigenous artwork and flags
 - ✓ **Inclusion of Indigenous perspectives** in the curriculum and as education workers the extent to which Indigenous educators were involved in classroom activities and their relationships with teachers had a significant impact on teachers' awareness and inclusion of Indigenous perspectives in their teaching. Having an Indigenous presence in the school was also important to parents
 - ✓ **Support for linguistic diversity** acknowledging that students come from diverse linguistic backgrounds and viewing this as a strength rather than a barrier to learning
 - ✓ **Prioritizing programs and professional development** to improve literacy achievement

- ✓ **Developing school-community partnerships** i.e., involving parents and other community members in school-based initiatives, activities and decision-making
- ✓ Pedagogical practices examples of beneficial practices and teaching strategies observed or reported by teachers included literacy teaching strategies that reflect current 'good practice' (i.e. consistent with early childhood education philosophy); providing contextually relevant learning situations; acknowledging different learning styles among students; hands-on learning
- ✓ **Using a range of literacy teaching strategies** including opportunities for oral activities and hands-on learning, one-on-one sessions, regular revision and repetition, relevant and interesting activities, using literacy and numeracy blocks, and positive reinforcement of student achievement. Using a range of strategies to support each student's learning needs was shown to be more effective than any particular literacy program.
- ✓ **Home-classroom links** the extent to which teachers were aware of children's home lives and to which parents and caregivers were involved in their child's literacy learning affected teachers' ability to provide relevant and engaging activities to meet student's needs
- ✓ Other programs and initiatives to respond to Indigenous students' needs examples included allocating space for a 'health room' that included a local Indigenous doctor; having a homework centre; offering a tutoring system with Indigenous community members trained as tutors

4.3.2 Evidence on the role of principals and school leadership

Several publications on general strategies to improve literacy learning and outcomes for Indigenous students have identified the role of the school principal or leader as a key factor for enhancing success. For instance:

- In the longitudinal study led by ACER described in Section 4.3.1 (Frigo et al., 2003), the researchers reflected on the findings and their own experiences to identify what they saw as important underlying factors for enabling success, and one factor was school leadership. According to the researchers, leadership styles can vary greatly across schools, but schools are more effective in supporting Indigenous student achievement when they have strong leadership that is inclusive and that proactively engages Indigenous leaders and community members.
- In Canada, research on promising practices to support Indigenous students by the OECD also found that principals and school leaders play a very important role in supporting Indigenous student success. According to their research, "In schools where Indigenous students are achieving well, there is generally a highly effective and committed principal who has done 'whatever it takes' to ensure Indigenous students are at school, engaged in learning and making sound progress." (OECD, 2017, p. 4).

In addition to these publications, other studies and guidance documents have specifically focused on the role of school leaders and the types of leadership strategies that can support Indigenous student literacy learning. Some examples of guides for school principals include:

An initiative in Australia called the "What Works" project aims to provide practical
resources and guidance to schools to support Indigenous students and improve their
educational outcomes. As part of this project, a series of 'core issues' materials were

developed which included a guide for principals as leaders in literacy (Munro, 2012). The guide provides a framework for school leadership teams to improve their literacy teaching and outcomes. In developing the framework, the author reviewed recent research to identify factors that have been shown to contribute to improvements in literacy outcomes for Indigenous students in Australia. Some of the common factors that were noted revolved around the role of leadership and ways to enhance leadership. For instance:

- A key strategy for improving outcomes was to enhance the capacity of school leadership by supporting professional learning for teachers. Underlying this strategy is the premise that when teachers have greater knowledge and skills, this leads to improved teaching that is more likely to enhance student outcomes; however, this process must start with school leaders, who are responsible for planning and guiding professional learning opportunities. The school leader or leadership team must also have a strategy in place to put any new literacy knowledge and skills learned into action in a sustained way.
- Another strategy that was identified as being successful in many schools was a
 gradual introduction to new teaching modifications using a middle leadership
 approach. The middle leadership role essentially includes a group of teachers who
 are trained to lead or 'drive' literacy improvement by learning the strategies first
 and then guiding the rest of the teaching staff to gradually adopt the methods.
- Hinchman (2009) published a ten-step plan for how school principals can foster effective literacy instruction based on their research and experience as an educator in the US and reading specialist. Underlying this ten-step approach is the need for principals to understand that literacy outcomes are not based on the work of one leader or educator alone; rather, literacy learning must be supported through collaboration among the entire school community. While the specific steps (listed in Appendix C) were not developed solely for principals in schools with Indigenous students, they involve many of the same strategies that have been identified in other research focusing on schools with Indigenous students.
 - In summary, the plan involves forming a literacy team that is led by a literacy leader and guided by a community advisory board, with opportunities for professional development. The team should develop a long-term plan for a literacy program that is research-based and responsive to student needs, implemented gradually and with regular monitoring and evaluation (se Appendix C for more details).

Similar to the approach recommended by Hinchman for collaborative leadership, other research also supports the use of a **distributed or shared leadership approach** to literacy learning for Indigenous students, as described in Section 3.3. For example:

• A case study in the US explored principals' perceptions of their role as literacy leaders in high-need elementary schools⁵ (Lear, 2017). After analyzing interview data with the principals in the study, one of the key findings that emerged was the impact of leadership structures, which affected the ability of principals to build capacity in literacy teaching. Most participants viewed a distributed leadership model as a positive model which allowed for

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⁵ Based on qualification for Title I funds as a schoolwide program based on the Elementary and Secondary Education Act in the United States. High-need schools are often characterized by challenges such as lower academic performance or achievement test results.

- collaborative change, as it helped facilitate a system to share knowledge, feedback, and support within the team.
- In a systematic review of how school leadership can contribute to positive learning outcomes for Indigenous students in Australia, Trimmer et al. (2021) noted that when it came to different models or styles of leadership, no single approach could be identified as the 'best' model; however, evidence showed that distributed leadership and collective leadership styles (i.e. involving community members) lead to positive results.
- Shared leadership is also a key element of the PALLIC framework in Australia and was shown to be an effective strategy in a case study of one participating school's⁶ experience with improving literacy outcomes for Indigenous students (Riley & Webster, 2016). Findings from focus group interviews with the principal and other members of the leadership team (including teachers and Indigenous Leadership Partners (ILPs)) revealed the shared leadership approach to be one of the key factors associated with improved reading outcomes. For example, teachers reported that the shared leadership model enabled the whole school community, including students, to work together towards a shared moral purpose. Benefits were also noted for the Indigenous community leaders, who acknowledged the importance of the PALLIC framework for supporting their own leadership skills and confidence as emerging leaders in the school and community.
- Similar outcomes were reported in another evaluation of the PALLIC framework (Johnson et al., 2014). Findings from interviews with participating principals, teachers, and ILPs confirmed that a collaborative "both ways" approach to leadership was effective not only for children's' literacy learning, but also for enhancing personal and professional partnerships. For instance, ILPs were found to be highly respected by the principals, teachers, and community; and ILPs appreciated the opportunities that the role provided to them as well. In addition, both principals and ILPs reported positive signs of improved leadership capability after participating in the PALLIC program.

4.3.3 Evidence on the role of parents and caregivers

Approaches to supporting learning and literacy among Indigenous children should also consider the differences between mainstream Western views and Indigenous approaches to understanding the nature of family and parenting. For example, a Eurocentric view of family structure is typically centered around a nuclear unit consisting of parent(s) and child(ren). In contrast, First Nations, Métis and Inuit populations⁷ usually include extended family and the broader community in the definition of family and view parenting as a shared collective responsibility, with multiple people filling various caregiving roles (including raising children, providing care, education, and disciplining) (Riggs, 2012; Lindstrom et al., 2016; Sistovaris et al., 2021). Families in this sense may be related by blood, but can also be tied by clan or other social structures.

The importance of family and community in the development and education of Indigenous children is further demonstrated in the literature on literacy learning, which has consistently pointed to the need to involve parents/caregivers, family and community members in the planning and

 $^{^6}$ The school selected was a primary school in rural Queensland where about 31% of students identified as Indigenous.

⁷ it is important to also note that family settings vary considerably within and across Indigenous populations, with children living in family settings that reflect their distinct cultures, languages and diverse communities

implementation of literacy programs in order to enhance both school leadership efforts and outcomes for children (e.g. Best Start Resource Centre, 2010; OECD, 2017; Ball, 2010; Riley & Webster, 2016). For example, short-term benefits of parent involvement in literacy learning can include greater engagement with their children and promoting children's interest in reading; while longer-term benefits include increased parent skills and confidence as well as higher literacy achievement at school for children (Klieve & Flückiger., 2015; Riley & Webster, 2016). Additional benefits of involving community members are discussed in the following section (Section 4.3.4).

Some of the review studies described in Section 4.3.1 also identified the role of parents and caregivers as a critical factor in supporting Indigenous students' literacy learning. For example:

- Ball (2010) found in their review of the literature that young Indigenous children's primary
 caregivers are the main resource for promoting children's language and literacy
 development in the early years, noting that children's literacy skills develop more readily
 when parents are involved in early literacy programs and when they model positive literacy
 values at home.
 - The report by Ball (2010) further specified a number of strategies for early childhood practitioners to involve family members, such as sharing information about program events; including family and community members in the design and delivery of programs; involving older family members as educators; facilitating connections to community-based programs for family members; and using the family's home language as much as possible.
- Similarly, the review of by Frigo et al. (2003) also identified home-classroom links as a key theme in their study of factors associated with literacy achievement for young Indigenous students specifically: "the extent to which parents and caregivers were actively involved in their child's education as well as the extent to which the teacher demonstrated a knowledge and understanding of the children's home lives and was able to use this knowledge to provide contextually relevant and engaging learning contexts to best meet students' learning needs." (Frigo et al., 2003, p.55).
 - The researchers noted that parent or family involvement could take either an active, direct form (e.g. parents working directly with their children on literacy learning activities in the home) or a more passive, indirect form (e.g. parents participating in school-based activities).

Another example of home-classroom links through active parent or family involvement in children's literacy learning and is the practice of **shared book reading**, which has been identified as "the single most important activity in preparing children for success in literacy at school" according to some researchers – especially for children at risk of literacy difficulties or delays (Freeman & Bochner, 2008). Explicitly encouraging more literacy-related activities at home such as interactive book reading not only increases children's exposure to books but also enhances parents' knowledge and can improve their relationships with teachers (Freeman & Bochner, 2008). Encouraging home reading activities can be an important aspect of the principal's role as leader according to researchers such as Lear (2017), although other school staff can also provide valuable assistance in facilitating home-classroom literacy connections. For example, the school librarian can help to involve parents and families in literacy activities held in the library (Lear, 2017).

Other studies that have specifically examined the role of Indigenous parents or caregivers in their children's literacy learning are described below:

- Klieve & Flückiger (2015) examined the role of parent engagement in Indigenous children's literacy learning in a pilot study of a community-based literacy program implemented in a remote Indigenous community in Australia (& Flückiger, 2015). The study sought to develop instruments to assess the impact of the Parents and Learning (PaL) program, which has been used in several remote Indigenous areas across Australia to build capacity in Indigenous families to improve literacy learning. Further information about the program is available in Klieve & Flückiger (2015); however, a key focus is on enhancing home-school partnerships. The program recognizes parents as children's "first and most influential teacher" and a valuable source of information about the child's behaviour and learning progress and aims to help parents engage their children in literacy through shared book reading activities.
 - Results from the pilot study⁸ showed consistently higher scores on various measures of literacy achievement among children in the PaL program compared to children not in the program. Other findings included higher attendance among PaL children and a higher level of reported engagement among parents in their child's learning for those in the program.
 - While the small sample limits the generalizability of results, the study highlights the importance of building home-school connections to promote parent engagement in their children's literacy learning, especially in more remote communities (Klieve & Flückiger, 2015).
- Another study in Australia evaluated the "Bridging the Gap" project, which encourages
 Indigenous families to help kindergarten children become more engaged in the reading
 process through a home book-reading program (Freeman & Bochner, 2008). Through the
 shared reading program, the project essentially aims to 'bridge the gap' between children's
 home literacy experiences and the school-based curriculum.
 - In this small evaluation study, quantitative and qualitative analyses were conducted among a group of 19 Indigenous children and their families who participated in the program over a 20-week period, compared to a non-equivalent⁹ group of 15 other children.
 - Results from the quantitative assessment tests showed increases in listening comprehension and phonemic awareness skills among children in the program, and a reduction in the gap between children's mean chronological age and their mean reading age (i.e. their age-equivalent scores on the standardised reading test) from pre to post intervention.
 - However, there was also significant variation in test scores for individual children across the sample, with many children remaining below their expected age equivalent on language skills. Interestingly, children who reported having lots of books at home achieved higher scores in listening comprehension at pre-test, while

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⁸ A survey of 20 parents; 12 of whom had children in the program and 8 of whom were not in the program ⁹ The design was intended to include a matched non-participating control group of kindergarten students in the same region; however, there were not enough local Indigenous students available, so a contrast group of children in their second year of school was formed instead.

those children with fewer books at home achieved the greatest gains in listening comprehension after the intervention, suggesting that participation in a home reading program is a valuable opportunity for at-risk children to "catch up" in their literacy skills in the early years (Freeman & Bochner, 2008).

4.3.4 Evidence on the role of community partnerships

Besides parents, caregivers, and extended family members, research has also shown the importance of engagement and partnerships with the broader community as another crucial factor that can enhance the effectiveness of strategies to promote literacy for Indigenous students, as mentioned in many of the studies described thus far. For example:

- Frigo et al. (2003) (described in Section 4.3.1) found that the extent to which schools had developed partnerships with the local communities was a key factor in Indigenous student literacy success,
- noting that it was usually the school principal who took the leading role in developing relationships with community members.
- Similarly, the systematic review by Trimmer et al. (2021) on leadership strategies to improve Indigenous student outcomes found that successful leadership in schools with Indigenous students requires a collective effort that extends "beyond the school gate" to include community as active partners, and many of the reviewed studies involved principals and community co-leading initiatives.
- Developing strong school-community partnerships was also identified as one of the most common conditions for success in the systematic review of literacy programs for Indigenous students by Gutierrez et al. (2021). The type of partnership or community involvement varied across the studies in this review, from co-creation of literacy texts and resources, to including Indigenous staff in the development of literacy programs (Gutierrez et al., 2021).
- In addition, the ten-step plan for school principals to foster effective literacy instruction by Hinchman (2009) (described in Section 4.3.2) centres around the role of community, noting that principals must ground literacy instruction in community interests and values and facilitate community collaboration in all aspects of literacy program development, implementation, and evaluation in order to be successful.

These findings support the concept of 'both ways leadership' described in Section 3.3.3 – a shared leadership approach for schools which incorporates both Indigenous and non-Indigenous members and their perspectives. According to Trimmer et al. (2021), it is only through this type of leadership approach that principals can understand and account for the cultural context and can tailor the curriculum to meet the needs and expectations of the community – which is especially important in more remote or rural schools with Indigenous students.

The value of school leadership reaching outside of the school community to engage with the local community has also been identified in Canadian research by Hare (2012). Findings from this qualitative study of First Nations children's early literacy learning (also described on page 6) found that relationship building and dialogue with Indigenous communities was the most effective way for educators to develop the necessary awareness and appreciation for Indigenous knowledge, which then allows them to better support Indigenous students. According to the researcher, this may require special outreach efforts on the part of school staff and leadership, such as meeting

families outside of the school setting within their own home or community spaces or attending community events to become more familiar with their students' social and cultural contexts.

A published case study of the literacy leadership practices of one elementary school principal in the US with a high percentage of students of color¹⁰ provides an example of how a dedicated principal can form partnerships within the community to support literacy initiatives (Thompson & Brezicha, 2022). In this study, the principal was able to use their knowledge and understanding of the community to strengthen the school-community connection through activities such as community celebrations, literacy events, cultural festivals, and parent workshops. Findings showed that including community in literacy instruction for these students helped to foster trust between the school and its stakeholders and build a sense of collective responsibility for all students' literacy achievement (Thompson & Brezicha, 2022).

Research in Hawaii has noted additional benefits of an outward-looking approach to culturally responsive literacy instruction in which leaders and teachers see their school as part of a larger effort to uplift the entire community (referring to either the cultural community or the immediate geographic area) (Keehne et al., 2018). One example of this approach is through collaborations with non-profits or other local organizations to enhance place-based learning. For example, collaborations might focus on music, art, community college coursework, or other place-based and project-based learning opportunities. According to Keehne et al. (2018), these strategies not only offer additional opportunities for literacy learning, but they also help to teach students about their broader responsibility to contribute to the well-being of the community as a whole.

In addition to partnerships with community members and agencies, schools may also partner with research-based organizations, including universities, to promote student literacy learning. One means by which support from universities might enhance student literacy outcomes is through funding for professional development opportunities (Gutierrez et al., 2021). However, there is little evidence available on the effectiveness of school-university partnerships for Indigenous student literacy learning. For instance, one of the findings from the systematic review of literacy programs by Gutierrez et al. (2021) was that the role of support provided to schools through funded research projects was not identified by any of the studies as a condition for the success of literacy programs. In addition, some researchers caution that collaborative partnerships with research-based institutions may evoke feelings of fear and mistrust within Indigenous communities as a result of negative experiences with unethical research practices in the past. Therefore, it is critical that Indigenous school-university partnerships are built with certain conditions in place, such as trust, reciprocity, and a clear articulation of shared goals of the partnership from the outset to ensure they are mutually beneficial (Riley & Webster).

4.3.5 Evidence on the importance of culture

As discussed throughout this report (e.g., see Section 3.4.1), approaches to literacy learning and instruction for young Indigenous students must be culturally appropriate, culturally relevant and culturally responsive in order to best meet the needs and experiences of Indigenous children. Culturally respectful school environments that help to promote a positive cultural identity among Indigenous students and increases their potential for learning and achievement (Trimmer et al., 2021). Culturally responsive literacy instruction has also been recognized as an effective approach

 $^{^{10}}$ All students in the school were economically disadvantaged; and the majority of students were African American (94%), with 3% Hispanic/Latino, 0.25% American Indian/Alaskan Native, and 2% multiracial.

to help reduce inequities in literacy learning opportunities and outcomes for students of diverse cultural and linguistic backgrounds (Keehne et al., 2018; Thompson & Brezicha, 2022).

Strategies to incorporate culture into literacy learning may take different approaches, including culture-based strategies (i.e. developing a program specifically for Indigenous students through engagement with Indigenous leaders and community members) or culturally-adapted strategies (i.e., modifying an existing evidence-based approach or program for literacy to reflect the views and learning needs of Indigenous children and families). In the scoping review of language and literacy interventions for Indigenous children by Guiberson & Vining (2023) (discussed in Section 4.3.1), the researchers identified a number of compelling literacy strategies that could be applied and adapted to meet the needs of Indigenous children. According to the study authors, cultural modifications to mainstream interventions and programs have been shown to be effective with other culturally and linguistically diverse groups (e.g. children of Latino backgrounds or dual language learners); however, more research is needed to demonstrate the effectiveness of cultural adaptations of literacy strategies for Indigenous children (Guiberson & Vining, 2023).

One example of applying culture-based strategies to literacy learning comes from a case study of a school in a remote Australian community where the PALLIC program was implemented. The study analyzed interview data to describe the impact of "combining mainstream and Indigenous cultural knowledge and experiences as the foundation for meaningful literacy learning programmes for Indigenous children" (Lovett & Fluckiger, 2014, p. 18). Findings from the interviews with the principal teachers, and community showed the importance of prioritizing traditional ways of learning and incorporating cultural traditions and practices into school programming. This included modelling of cultural practices by adults in the community; offering activities planned in collaboration with community members (e.g. dance competition, painting, cooking); and incorporating the children's first language into reading materials and tools (e.g. teachers creating personalized reading material or a program using the pidgin sound system).

Another case study of principal literacy leadership practices in a school in the US shows how the school principal can model culturally responsive school leadership to support a diverse¹¹ student body (Thompson & Brezicha, 2022). Some example of strategies the principal applied included: including culturally sensitive books and resources for the classroom libraries and media center to ensure students could see themselves reflected in the materials as well as exposing them to other cultures; providing teaching staff with professional development on cultural responsiveness to enhance the cultural competence of the school leadership; and fostering an inclusive school culture that celebrates students diversity (e.g. through cultural festivals). These strategies formed part of the principals' overall effort to support students' literacy growth, which was successful in improving the reading proficiency level of third grade students on statewide assessments over a period of two years (from 2017 to 2019).

Finally, in Hawaii, research on culturally responsive instruction to support literacy learning of Native Hawaiian students has exhibited a shift from a strategy of "least change" (i.e., applying cultural features that involve minimal changes from the standard or conventional approaches to literacy instruction or curriculum content) to more progressive approaches to improve literacy learning for students of diverse backgrounds which take into account their cultural and linguistic

¹¹ All students at the school were economically disadvantaged and the school had a high (over 95%) percentage of students of color.

differences (Keehne et al., 2018). Keehne et al. (2018) built on previous work on culturally responsive instruction to develop an Indigenous framework for improving literacy learning, consisting of five elements, described in Table 9. Each of these elements was supported by evidence from various sources, including observational study, interviews, and student assessments.

Table 9: Indigenous framework for culturally responsive instruction to improve literacy learning of Native Hawaiian students (Keehne et al., 2018)

Element	Description of strategy and impact
Role of	Literacy learning of Native Hawaiian students will improve as educators
Indigenous	recognize the importance of the Indigenous language and view literacy in both
language	Indigenous and dominant languages as an attainable and desirable outcome
Connections	Literacy learning of Native Hawaiian students will improve when educational
to	leaders have deep knowledge of both Hawaiian culture and the community
community	surrounding the school, and see the school as strengthening the community
Goal of	Literacy learning of Native Hawaiian students will improve as educators build
instruction	students' ownership and literacy proficiency as means for making contributions
	to family and community (i.e. literacy is viewed as a means to an end, rather than
	an end in itself)
Authentic	Literacy learning of Native Hawaiian students will improve as educators engage
assessment	students in culturally responsive forms of assessment that foster valuing of
	Hawaiian language and culture, ownership, higher level thinking, and service to
	community. For example, instead of standardized large-scale assessment tests,
	schools rely on <i>hōʻike</i> – Hawaiian culture-based performance assessments which
	better demonstrate what a student has learned
Instructional	Literacy learning of Native Hawaiian students will be improved as educators
content and	provide instruction grounded in cultural values and oriented toward higher level
context	thinking and advocacy

4.3.6 Evidence on the importance of attendance

Evidence suggests that attendance in the early years plays a crucial role in setting students on a successful path towards literacy learning. Since many literacy-specific skills are taught only in the school context, children need to attend school in order to acquire early literacy skills, and then must continue to attend on a regular basis in order for their literacy learning to progress and improve (Ehrich et al., 2010). Poor attendance can not only impact a child's learning outcomes, but also affect their teacher and the classroom as a whole, such as when lessons are disrupted or instruction plans need to be adjusted (O'Sullivan, 2021).

Furthermore, the consequences of missing school are not just observed among older students, but begin as early as the preschool years, with research from the US suggesting that children with lower attendance rates in preschool are not only more likely to continue to be chronically absent in the second grade, but they also have significantly lower learning and reading outcomes in second grade (Ehrlich et al., 2014). Similarly, research from the Model Schools Literacy Project (MSLP) across First Nations schools in Canada showed that chronic absenteeism is not random, with some children showing the same pattern of poor attendance every year, beginning as early as Grade 1 (O'Sullivan, 2021). The effects of inconsistent attendance patterns can be cumulative, with some children it the MSLP losing up to one full year of literacy instruction by the end of Grade 3 – during the critical years for building early literacy skills (O'Sullivan, 2021).

Among Indigenous children, data from the longitudinal study conducted by the Australia Council for Educational Research (described in Section 4.3.1) found attendance to be one of the factors that was associated with student literacy achievement in the first three years of school (Frigo et al., 2003). Specifically, students with higher attendance rates had higher subsequent literacy achievement levels, and attendance patterns were fairly consistent over time. According to the study authors, this finding that the effects of absenteeism begin in kindergarten indicates that schools and educators should focus on addressing attendance in the early years in order to improve literacy outcomes. Furthermore, attendance was lower among students from more remote schools and those who did not speak standard English at home, suggesting that language and region are other important factors to consider for interventions targeting absenteeism.

Evidence also suggests that the impact of attendance on literacy learning may be greater during specific stages of their linguistic and literacy development. For example, a small exploratory study in Australia examined the relationship between the development of early literacy skills and attendance among young Indigenous children in grades 1 to 3^{12} (Ehrich et al., 2010). Findings showed that school attendance was strongly and positively associated with gains in literacy skills, but only for those children who were assessed at the middle level of the reading evaluation instrument (level K, which measures key early literacy skills such as knowledge of printed letters and words, word recognition, and decoding skills). There was no association between attendance and literacy skills for students at the lower (more basic skills) and higher (more complex skills) assessment levels.

• Further analyses comparing Indigenous and non-Indigenous children showed that Indigenous children attended class less often and showed fewer gains in literacy achievement at level K (particularly phonological awareness skills) than non-Indigenous children. These findings suggest that the lower performance among Indigenous children may be a direct result of their lower attendance; however, attendance is likely not the only factor contributing to literacy outcomes for Indigenous students (Ehrich et al., 2010).

Other evidence on the importance of attendance for early literacy development among children in general mostly comes from the U.S. For example, educational and health data from over 750 schools and 120 primary care area in the state of Arizona¹³ from 2010-2014 was analyzed to identify factors that influence third-grade literacy rates (Vagi et al., 2017). Results showed that attendance was a significant predictor of literacy achievement. Specifically, a 1% increase in the third-grade attendance rate was associated with a 1.5% increase in the percentage of third-grade students passing the state standardized reading assessment, and a 1% increase in chronic absenteeism was associated with a 0.3% decrease in students passing the reading assessment. Although the percentage of students in poverty was associated with both attendance and absenteeism, the effect of attendance on reading scores remained even after controlling for poverty. According to the study authors, these findings suggest that policies focusing on increasing attendance rates may be an effective strategy for improving childhood literacy rates.

 $^{^{12}}$ A total of 97 students from 6 classrooms in 3 schools participated in the study, and 64% of the students were Indigenous.

¹³ Arizona was identified as a state with a large population of traditionally lower-performing demographic groups, with over half of Arizona children from low-income families; but also one of the leading states in terms of efforts tot improve childhood literacy programs and outcomes.

While the previous study demonstrated the strong effect of attendance on literacy outcomes beyond the effects of poverty, other studies suggest that the impact of attendance on literacy learning may still be greater for some students, such as those from lower income families, single-parent families, children of certain ethnic or racial backgrounds, and those living in remote areas (e.g. Ehrlich et al., 2014). For example, data from the Early Childhood Longitudinal Study, Kindergarten Cohort in the US showed that children who are chronically absent gain fewer literacy skills in the kindergarten year compared to children with average attendance rates. Moreover, the effects of school absences on literacy skills differed according to children's socioeconomic backgrounds, whereby the negative effects of increased absenteeism were stronger for lower SES children (Ready, 2010). These factors may also intersect to impact literacy and learning outcomes, as children from lower SES families and those in remote areas may be more likely to experience unstable housing and greater mobility, health problems and access to medical care, and transportation challenges – all of which can impact attendance rates (e.g. Ready, 2010).

Finally, some evidence on the impact of strategies to improve attendance among Indigenous students comes from case studies of schools in the PALLIC project, which have shown the value of engaging with both parents and Indigenous community members to support literacy outcomes as well as attendance rates among students. For example:

- One case study of a school in Northern Queensland, Australia that implemented the PALLIC framework showed the positive influence of a collaborative leadership approach that involves Indigenous community members on student attendance (Riley & Webster, 2016). Findings from focus group interviews with parents, teachers, and other school leadership team members showed that the development of strong school-community relationships was an essential contributing factor for reducing student absenteeism as this helped to establish attendance as a shared responsibility among parents, schools, and the community.
 - Some of the actions taken to improve attendance included: providing clear reasons why attendance is important; sharing statistics on the link between attendance and academic outcomes; home visits and text messages to parents and caregivers to check on student attendance; and greeting students and their families and the start and end of school each day.
 - However, despite these efforts to improve attendance, school staff and leaders reported that attendance continued to be a barrier to improving literacy outcomes (Riley & Webster, 2016).
- Findings from another case study of a PALLIC school in a remote Indigenous community showed the effectiveness of the school principal's actions to improve school attendance as part of the overall commitment to improve student literacy outcomes (Lovett & Fluckiger, 2014). Poor attendance had been an ongoing issue in the case study school, which led the principal and teacher to focus efforts on improving student attendance in order to achieve greater learning gains. Importantly, the school worked to involve parents in addressing the issue to create a larger community commitment to improving attendance.
 - Some examples of specific strategies that were used to encourage attendance were: breaking the school day up into sections and offering incentives for attendance (i.e. earning points towards time in the pool or sports area after school); playing music over a new sound system to signal the start of the school day; sending an attendance and well-being coordinator into the community each morning to encourage children

to go to school; following up absences with home visits; and providing breakfast to children in need (Lovett & Fluckiger, 2014).

5.0 Summary and Conclusions

5.1 Summary of Findings on Elements for Success

Based on the available literature describing various models, programs, and approaches to support literacy learning for Indigenous students reviewed in Section 4, a number of common elements can be identified which appear to enhance the likelihood of success, summarized below:

- Leadership teams Several studies have reported that a shared or distributed approach to leadership that includes the principal, teachers, and Indigenous community members can strengthen the skills and capacity of school leadership and improve literacy outcomes as a result. The involvement of Indigenous leaders is especially critical for providing a link between the community and the school and bringing strong knowledge and awareness of the community's needs and interests to the rest of the leadership team. Some programs have reported success from assigning a dedicated position to an Indigenous literacy leader or mentor whose role is to provide guidance and support to the rest of the leadership team and teaching staff.
- Both ways learning Research has demonstrated that literacy programs should be evidence-based and focus on teaching key skills; however, literacy programs for Indigenous students are more successful when they also incorporate Indigenous perspectives and experiences. Therefore, school leadership teams should consider Indigenous ways of knowing and learning and build on the perspectives that Indigenous students can bring to the literacy learning process. This may require using a wider range of literacy teaching strategies to support different students' learning needs and preferences.
- Cultural responsiveness and respect similar to the concept of both ways learning, studies have also found that schools can further promote literacy for Indigenous students by acknowledging and accepting Indigenous cultural backgrounds, activities, and languages through an inclusive school culture, and viewing the diversity of First Nations, Métis and Inuit students as a strength rather than through a deficit lens.
- School-home-community partnerships Literacy learning does not take place solely at school; therefore, it is critical for schools to collaborate with parents, families, and community members or organizations to enhance the focus on literacy at home and outside of school. By building respectful partnerships based on a common focus and goal, literacy achievement becomes the shared responsibility of the entire community. The involvement of family members in particular is also crucial for promoting interest in and engagement with literacy learning among both parents/caregivers and their children.
- **Professional development** many studies reported that ongoing professional development for teachers, staff, and principals is a necessary step in developing effective literacy programs for Indigenous students. For example, professional development and training can improve teachers' knowledge and awareness of Indigenous languages and literacies and how this affects their students' needs; improve teaching methods; and

enhance the leadership capacity of principals. The importance of professional development is discussed further in the Implications section (Section 5.5.1).

5.2 Summary of Barriers and Challenges

Despite the progress and potential for success seen in the literature on literacy programs for Indigenous students, many of the reviewed studies also described remaining challenges and barriers that continue to limit the ability of school leadership to enhance literacy outcomes. Some of these challenges are summarized in this section.

- Complexity of the principal's role as mentioned in Section 1.2, the increasing number of responsibilities that school principals have been expected to manage on a daily basis can limit their ability to plan and implement effective strategies to enhance student literacy outcomes (Dempster et al., 2012; Trimmer et al., 2021). This challenge may be partially overcome by using distributed or shared leadership teams, which could help ease some of the demands on a principal while strengthening the overall capacity of a school's leadership as a whole.
- **Diversity of Indigenous student population** some researchers have highlighted the diversity of Indigenous children, families and communities as both a strength and a challenge for educators. While no single literacy approach or program will be able to meet the needs of all students equally (Hinchman, 2009), the diverse language and literacy experiences of First Nations, Métis and Inuit students requires additional consideration, and principals and teachers must be prepared to adapt and modify literacy plans based on the cultural context and individual students (Ball, 2010; Gutierrez et al., 2021).
- Lack of culturally relevant resources Some researchers and program participants have noted the lack of appropriate reading materials and teaching resources that include content relevant to the experiences of First Nations, Métis and Inuit students. Many of the existing literacy programs have been developed based on non-Indigenous students and have not been adapted or fully tested among Indigenous children. As mentioned in Section 3.4.1, there is a need for more books and other print materials in Canada that reflect the lives of young Indigenous children and their families, as well as more resources that support the literacy development of students with diverse language backgrounds (Ball, 2010).
- Engagement and attendance research from the PALLIC program in Australia has found that despite the benefits of the program, teachers and school leaders still face challenges with both student and parent engagement with school-based programs and activities. These challenges need to be addressed in order for programs to have the greatest impact. For example, some parents and caregivers are hesitant or uncomfortable with participating in school activities. Additionally, family and health issues continue to create challenges with student attendance (Riley & Webster, 2016). And beyond the challenge of getting parents and caregivers engaged in school-based activities, principals reported that engaging parents to support literacy at home was an even greater challenge (Johnson et al., 2014).
 - Schools also reported difficulties around the transience of many of the families, which limited their long-term involvement (Dempster et al., 2012). This may be relevant in Canada, where First Nations peoples generally have higher residential mobility compared to non-Indigenous families (Turner & Thompson, 2015). However, while residential mobility can potentially have negative effects on

educational outcomes for children, these negative effects are more likely for those who move due to academic or social issues (i.e. repeating a grade, expulsion, problematic social interactions with teachers or students); whereas most First Nations students in grades 1-6 living off-reserve in Canada move for other reasons, such as a regular progression through school or a residential move (FNIGC, 2020; Turner & Thompson, 2015).

- Challenges creating meaningful community partnerships while research has established the importance of community partnerships and involvement in supporting literacy programs for Indigenous children, in practice, there are challenges with building these partnerships in a culturally meaningful and appropriate way. As discussed by Riley & Webster (2016), establishing school-community partnerships takes time and effort to build a strong sense of trust and understanding, and ensuring they are sustainable requires further time and patience as well as funding in some cases.
- Assessment as discussed in Section 3.4.3, there is still concern around the assessment methods and tools that are used to evaluate and monitor literacy progress and achievement among schools with Indigenous students. For example, researchers such as Andrews et al. (2023) assert that there is a lack of reliable metrics to assess academic outcomes for Indigenous students (especially for First Nations students in Canada), and success is currently defined by non-Indigenous standards, such as literacy rates. This inability to properly assess literacy outcomes among Indigenous students also limits the ability of school leadership to adapt and improve literacy programs to better meet the needs of Indigenous students.

5.3 Limitations of the Evidence

While there is a great deal of literature examining early literacy learning and the effectiveness of various approaches to promote literacy outcomes in young children, there is less literature examining the specific research questions for this review – namely, the effectiveness of strategies to support literacy learning in schools with Indigenous students; and the role of the school principal in leading this process. Furthermore, much of the relevant literature on the topic comes from countries outside Canada, such as Australia and the United States – leaving a gap in knowledge on literacy supports for First Nations, Métis and Inuit children in Canada. This is an important knowledge gap because Indigenous communities and contexts across Canada vary in significant ways from the Australian context in the present day, despite both countries having similar histories of colonialism, assimilation, and discrimination against Indigenous peoples.

For example, in Canada, First Nations, Métis and Inuit peoples represent distinct groups
with their own histories, cultures, traditions, and languages. There are more than 630 First
Nation communities across Canada, representing more than 50 Nations and 50 languages
(Government of Canada, 2021). Furthermore, there are stark differences between onreserve and off-reserve communities in aspects such as governance, availability and sources
of funding and support services, socioeconomic conditions, community structures, and
cultural traditions.

Additional gaps in the evidence base relate to the type and design of available studies – many of which are descriptive or qualitative studies or use a cross-sectional design. There are fewer studies that report quantitative research evidence on literacy outcomes for Indigenous students or

longitudinal evidence measuring changes or progress in literacy learning over time (Ball, 2010; Ozdemir et al., 2022). According to researchers such as Guiberson & Vining (2023), the lack of treatment-based research on language and literacy for Indigenous students is concerning given the known inequities in educational access and outcomes for Indigenous students as well as the growing number of Indigenous children in the population.

5.4 Future Research Needs

To overcome the limitations of the available evidence, more research is needed to provide further insights on best practices and methods for school leadership to improve literacy outcomes among the growing population of young Indigenous students. Scholars have identified the need for more sophisticated methods and measures to evaluate the impact of leadership actions and models on a range of outcomes – including the impact on schools, teachers, parents, communities, and student achievement (e.g. Dempster et al., 2012). Ideally, this research would utilize longitudinal experimental designs and include a range of possible factors that can affect the influence of school leaders on literacy outcomes – including the role of cultural, institutional, contextual, and individual level factors (Ball, 2010; Ozdemir et al., 2022). According to Ozdemir et al. (2022), future studies should examine the mediating and moderating roles of school leadership between various school, contextual, or student-level factors and literacy achievement. For example, the influence of school leaders may differ depending on the context or student characteristics.

In addition to more evidence-based research, additional qualitative and descriptive data could still be useful to improve our understanding of the perspectives of principals, teachers, and other members of the school community on literacy learning approaches, which could help to inform the development of future literacy programs in schools with Indigenous students Indeed, community engagement and participation is an essential component of any research involving First Nations, Métis and Inuit populations, and research on literacy programs has shown the benefits of "both ways learning" to consider and incorporate the knowledge and values of Indigenous communities.

5.5 Implications of the Findings

The findings from this review have important implications for school leaders and other educators working in schools with Indigenous students, as well as for policymakers in the educational sector.

5.5.1 General implications

The examples and models reviewed throughout this report can provide valuable insights into the development and implementation of literacy programs and supports for Indigenous children. However, as this review as shown, the effectiveness of literacy programs also depends on strong leadership to overcome some of the challenges and barriers to literacy learning progress (discussed in Section 5.2). Therefore, the findings may have an even greater impact when applied to the development of programs and supports for principals and other leaders in schools with Indigenous students, such as professional development and training modules, rather than focusing on specific programs themselves. In essence, strengthening the capacity of literacy leaders can then translate into improved literacy outcomes for Indigenous children and youth.

However, as noted by researchers such as Guiberson & Vining (2023), this knowledge must be also combined with meaningful consultation with Indigenous families and communities to guide future strategies that are specific to the local school or context. Through community engagement and collaboration, new strategies or modifications to existing approaches can be identified that best

support the literacy learning needs of Indigenous children. Indeed, one of the common themes in the literature is that the participation of Indigenous families, leaders, and community members is essential if school leaders aim to improve literacy outcomes for young Indigenous students. This can involve building and maintaining partnerships both within and beyond the school (Johnson et al., 2014). For example:

- Some programs have seen gains from including Indigenous leaders as members of the school literacy leadership team; although researchers have also identified the need for more effort to recruit Indigenous peoples into teacher and leadership positions within schools (Riley & Webster, 2016). As noted by Lovett & Fluckiger (2014), increasing the number and capacity of Indigenous leaders in schools would have wide-ranging benefits, from sharing their knowledge of effective literacy strategies to helping maintain relations between the school and community, and even ensuring the continuation of literacy programs and initiatives in the case of staff turnover.
- Studies also report the benefit of developing partnerships with Indigenous agencies or organizations in the community. Importantly, any partnerships between schools and Indigenous communities must be based on principles of trust, respect and reciprocity in order to be accepted and lead to meaningful action (Riley & Webster, 2016).
- Finally, researchers have also emphasized the need for school leadership to improve the home-school connection to more effectively engage parents and caregivers in their children's literacy learning (e.g. Johnson et al., 2014; Hare, 2012).

The importance of strengthening home-school connections for supporting children's literacy learning relates to the broader challenge of bridging the gap between home, community, and school contexts for many Indigenous children in Canada, who are more likely to disengage from formal education as a result of historical and cultural experiences of discrimination and exclusion (Cherubini, 2020). It should be noted that Indigenous students in Canada currently can receive education services through a variety of different systems, depending on where they live and whether their community has its own schools. For instance, First Nations children may attend schools on reserves funded and controlled by the federal government; local schools operated by individual First Nations; or provincial/territorial public schools (Andrews et al., 2023). Yet scholars have recognized not only the inadequate levels of support for Indigenous education, but also the failure of mainstream education practices to account for or include Indigenous content and epistemologies. As a result, Indigenous children have been marginalized and misrepresented in public education, and continue to experience a range of educational disparities (Cherubini, 2019; 2020). The growing awareness of the educational inequities between Indigenous and non-Indigenous students has led to various policy initiatives to attempt to reduce achievement gaps, such as the Ontario First Nation, Metis and Inuit Education Policy Framework (Government of Ontario, 2007). The framework pointed to several factors affecting First Nations, Métis and Inuit student success, such as a lack of understanding among school staff of First Nations, Métis and Inuit styles, cultures, histories and perspectives, a lack of curriculum and resources that reflect First Nations, Métis and Inuit worldviews, and failure to create inclusive and welcoming school environments for First Nations, Métis and Inuit families.

The issue of how to bridge this gap is a complex one, as many Indigenous families seek the dual goals of wanting to pass on their traditional knowledge and ways of learning, while also ensuring

that their children learn the knowledge and skills necessary for success in school and for opening up other opportunities in Western society (Hare, 2012). Given the ongoing disparities in literacy and other academic outcomes experienced by Indigenous students, this is clearly a critical area for future work – to explore ways of effectively integrating Indigenous knowledge and perspectives into mainstream education and to assess the impact this integration might have on outcomes such as academic achievement, literacy skills, attendance, and student engagement (Kanu, 2011). An important first step in this process is for educators to be more open, respectful, and accommodating towards young Indigenous learners and their families. By listening, learning, and validating forms of Indigenous knowledge in the classroom (e.g., by incorporating cultural activities, stories, languages and learning materials), teachers can help Indigenous students become more engaged and self-confident, which may ultimately reveal their literacy skills and strengths in new ways (Hare, 2012; Kanu, 2011).

Another strategy to enhance the knowledge and capacity of educators is through professional development and training opportunities, which have been identified by many of the researchers in this review as an essential part of an overall literacy strategy for schools with Indigenous students. Professional development can have two main purposes in relation to promoting literacy success for Indigenous students:

- a) Literacy competence supporting teachers to learn various strategies and pedagogies for promoting language and literacy and to design appropriate learning pathways to meet the learning needs and experiences of Indigenous students; and
- b) **Cultural competence and responsiveness** enhancing the cultural knowledge and awareness of educators as a starting point to help teachers and literacy leaders to reflect on their own understanding of cultural and historical experiences of Indigenous students and their families and how these experiences impact their literacy learning needs (Ball, 2010).

Essentially, teachers in schools with Indigenous students must learn not only *what* to teach but also *how* to teach First Nations, Métis and Inuit children in ways that support their literacy learning and overall growth (Andrews et al., 2023). Other strategies to enhance the impact of professional development that have been recommended in the literature include:

- Models of professional development for literacy leaders may involve communities of practice (COPs), which are increasingly recognized as an effective mechanism to support collective learning through the sharing of knowledge, experiences, tools and resources among a group of professionals with a shared interest or goal (Dion et al., 2022; Trimmer et al., 2021).
- Part of teachers' professional development may include mental health resources and support to help teachers better manage the complex social and mental health needs of Indigenous students (Andrews et al., 2023)
- It is also important to acknowledge the role of the school principal in supporting the professional development of school staff. Researchers such as Lear (2017) have noted that effective principals will seek out ways to promote the learning and growth of their staff and ensure that teachers have opportunities to engage in training and development experiences to deepen their pedagogical knowledge. Furthermore, when principals themselves participate in professional learning and development alongside teachers, this can

strengthen the school's overall commitment to literacy learning and signal to staff that personal and professional growth is a priority area (Lovett & Fluckiger, 2014; Taylor, 2004).

Finally, all of the efforts and strategies identified in this section will have limited impact without a system for monitoring and evaluation. Tracking outcomes relevant to literacy skills with ongoing data collection and analysis will help educators and other stakeholders to understand whether and where progress is being made, and to adapt or enhance strategies if needed (OECD, 2017). This monitoring should form part of a long-term plan developed by the school principal in collaboration with parents, the community and Indigenous leaders – which should also include a clear vision with goals and objectives for the literacy program as well as a timeline for full implementation (Hinchman, 2009).

5.5.2 Impact of the COVD-19 pandemic and implications for supporting literacy learning progress among Indigenous children

Addressing the educational disparities experienced by young Indigenous learners is even more important in the post-pandemic era. As noted in Section 1.2, the COVID-19 pandemic and its associated public health measures caused significant disruptions to student learning and progress across the globe. However, research has suggested that the lasting educational impacts of the pandemic may be even greater for students who were already marginalized in public education, including Indigenous students (Cherubini, 2020).

One of the major outcomes of pandemic-related school closures was the shift to virtual learning platforms. While the availability of online learning can offer convenience and flexibility for some students (i.e. those from households that have the necessary space, skills and resources to navigate these systems), a lack of access to appropriate technology remains a barrier for other students – particularly for Indigenous children living in more remote communities (e.g. Whitley et al., 2021). Not only is virtual learning less conducive to the development of early literacy skills in general, but online learning platforms also do not necessarily align with Indigenous ways of learning, which may be based on more holistic and communal approaches. As a result, the challenges that Indigenous students already face in public education may be exacerbated through the reliance on remote learning, leading to even greater achievement gaps between Indigenous and non-Indigenous students in the post-pandemic period (Cherubini, 2020). Furthermore, greater learning gaps can then perpetuate the deficit discourse that Indigenous students often face in mainstream schools and classrooms, whereby teachers tend to focus on the lower performance of Indigenous students rather than their abilities, leading to a cycle of inequitable treatment and outcomes (e.g. see pg 14 of this report).

While these concerns have been noted in the literature, there is currently a lack of published evidence demonstrating the actual impact of the pandemic and school closures on Indigenous student outcomes, particularly literacy outcomes. Findings are largely limited to reports from school boards and news articles which have observed declines in student literacy rates.

• For example, school boards in Saskatchewan reported drops in Grade 3 reading level rates in almost every division during the pandemic (Simes, 2023). While some recovery was observed in the 2021-22 school year, rates were still lower compared to pre-pandemic levels. Moreover, reading rates among Indigenous students were consistently lower both pre- and post-pandemic, suggesting a need for more resources and funding to support students in under-resourced areas. For example, in one school division, the Grade 3 reading

rate decreased from 79% in 2018-19 to 62% in 2021-22 among all students, yet it was much lower in 2021-21 (39%) among Indigenous students (Simes, 2023).

The collection of data on Indigenous student outcomes in Canada is clearly a priority area for policymakers and educators in these critical post-pandemic years, especially given that virtual learning remains in place for many schools and students as an alternative teaching method. In the absence of concrete evidence, however, educators must still be prepared to support Indigenous students as they work to recover from learning losses due to pandemic school closures. While the issue of post-pandemic learning gaps and recommendations for promoting the recovery of literacy skills for Indigenous students is beyond the scope of this report, some strategies that have been noted in the literature are briefly summarized in the box below.

Strategies for Literacy Leaders following the COVID-19 Pandemic

As students return to in-person learning following the pandemic, teachers face the challenge of adapting to new learning modes and environments, which may require greater flexibility and creativity (Dwyer et al., 2022). Teachers must be able to account for variation in students' learning progress following school closures and respond to diverse student learning needs and preferences. This may require recognizing and accommodating the different technological resources and skills of students and taking additional care to create a culturally inclusive and welcoming school environment to promote re-engagement for Indigenous students.

In terms of literacy instruction, experts recommend a focus on evidence-based literacy practices that were effective prior to the pandemic, then adapting as needed (e.g. for remote or hybrid instruction). Some students may also benefit from targeted literacy instruction in small groups or one-on-one settings in addition to larger classroom instruction (Dwyer et al., 2022). The involvement of parents and caregivers remains an important part of students' literacy learning, and parents may need additional support and guidance from school leadership to navigate remote learning environments. This could also include adjusting time schedules of lessons to facilitate family participation (Dwyer et al., 2022).

Finally, researchers such as Cherubini (2020) also recommend that more schools and educators consider the benefits of land-based education for Indigenous students, which may be more effective in promoting student engagement than online learning models.

5.6 Conclusion

First Nations, Métis and Inuit children in Canada continue to experience disparities in educational access and outcomes, including literacy skills – affecting their chances of academic success as well as their ability to grow and develop as confident, engaged, and supported learners. This review has shown the importance of school leadership for improving literacy outcomes for young Indigenous students. An effective leadership approach can influence the school culture, the curriculum and teaching practices, and the professional development of teachers in ways that facilitate the development and understanding of Indigenous ways of knowing and learning and that ultimately enhance student literacy achievement (e.g. Trimmer et al., 2021).

While this review primarily focused on the role of school principals in promoting literacy learning for Indigenous students, school leadership represents just one factor that can influence literacy outcomes. Educators as well as policymakers must also take into consideration the complex social, cultural and environmental systems in which Indigenous students learn and develop literacy skills both inside and outside of school and develop strategies that account for these many interrelated factors (Vagi et al., 2017). As suggested in this review, this can only be achieved through meaningful community engagement and involvement, which can lead to: a) better understanding of the literacy needs and experiences of Indigenous students; b) a more inclusive, accessible, and knowledgeable leadership team; and c) a shared commitment among schools, families, and their communities to work together in support of children's literacy learning and achievement.

Furthermore, it is important to recognize that the challenge of effectively supporting early literacy development among Indigenous students is part of a more complex and long-standing problem embedded in historical and structural inequities experienced by Indigenous peoples. Therefore, addressing the issue will require not only stronger efforts at the school and district level to enhance the capacity of school leadership, but also broader reform at a structural level (e.g. Ball, 2010). As summarized by Trimmer et al. (2021, p. 32: "Required changes can only be brought about by the recognition of community needs and the development of dynamic and flexible educational policy and organisational structures that work with community as partners to improve engagement, retention and academic and social outcomes."

In summary, this report has demonstrated the need for a comprehensive and holistic approach to best support Indigenous student literacy learning and promote more equitable outcomes for First Nations, Métis and Inuit students. This should involve a multi-level and multi-systems response that includes strong school leadership, supported by parents/caregivers, family and Indigenous community members; government coordination and funding for appropriate resources; investment into training and professional development opportunities; as well as engagement of researchers to evaluate interventions in culturally relevant ways.

6.0 References

- Anderson, T. (2021, December). Chapter 4: Indigenous youth in Canada. Government of Canada, Statistics Canada. https://www150.statcan.gc.ca/n1/pub/42-28-0001/2021001/article/00004-eng.htm
- Andrews, J.W., Murry, A., & Istvanffy, P. (2023). A holistic approach to on-reserve school transformation: Pursuing pedagogy, leadership, cultural knowledge, and mental health as paths of change. *Canadian Journal of School Psychology, 38*(1), 64–85. https://doi.org/10.1177/08295735221146354
- Baker, O. (2022, November 29). Young learners falling behind on literacy rates, say First Nations educators. *CBC*. https://www.cbc.ca/news/indigenous/early-literacy-rates-first-nation-schools-1.6664429
- Commonwealth of Australia (2017). *Closing the gap Prime Minister's report 2017*. Department of the Prime Minister and Cabinet. https://www.niaa.gov.au/sites/default/files/reports/closing-the-gap-2017/sites/default/files/ctg-report-2017.pdf

- Commonwealth of Australia. (2020). *Closing the gap report 2020.* Department of the Prime Minister and Cabinet. https://ctgreport.niaa.gov.au/sites/default/files/pdf/closing-the-gap-report-2020.pdf
- Ball, J. (2010). *Promoting young Indigenous children's emergent literacy in Canada*. Paper prepared for the Canadian Child Care Federation. https://ecdip.org/wp-content/uploads/2022/01/Emergent-literacy-Revised-Apr-27-811.pdf
- Best Start Resource Centre. (2010). Founded in culture: Strategies to promote early learning in First Nations children in Ontario. https://resources.beststart.org/wp-content/uploads/2011/01/K13-A.pdf
- Campbell, C. (2020). Educational equity in Canada: The case of Ontario's strategies and actions to advance excellence and equity for students. *School Leadership & Management*, *41*, 409–428.
- Canadian Heritage. (2022, February 21). Joint statement The government of Canada, national Indigenous leaders and the Commissioner of Indigenous Languages mark the start of the international decade of Indigenous languages. Government of Canada.

 https://www.canada.ca/en/canadian-heritage/news/2022/02/joint-statement--the-government-of-canada-national-indigenous-leaders-and-the-commissioner-of-indigenous-languages-mark-the-start-of-the-internatio.html
- Cazden, C., Cope, B., Fairclough, N., Gee, J., Kalantzis, M., Kress, G., Luke, A., Luke, C., Michaels, S., & Nakata, N. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60–92.
- Cherubini, L. (2019). Teacher candidates' expectations: Equity education, critical literacy, and Indigenous students' epistemologies. *Journal of Teaching and Learning*, *13*(2), 1–22.
- Cherubini, L. (2020). Education in the post-pandemic era: Indigenous children and youth. International Indigenous Policy Journal, 11(3), https://doi.org/10.18584/iipj.2020.11.3.10679
- Commonwealth of Australia, Department of the Prime Minister and Cabinet. (2017). *Closing the gap. Prime Minister's Report 2017*. https://www.niaa.gov.au/sites/default/files/reports/closing-the-gap-2017/sites/default/files/ctg-report-2017.pdf
- DeBaryshe, B. D., & Gorecki, D. M. (2005). Learning connections: A home-school partnership to enhance emergent literacy and emergent math skills in at-risk preschoolers. In A.E. Maynard & M.I. Martini (Eds.), *Learning in cultural context: Family, peers, and school* (pp. 175–198). Springer US. https://doi.org/10.1007/0387275509_8
- Deer, F. (2022). To revitalize Indigenous communities, the Residential School settlement must prioritize language education. The Royal Society of Canada. https://rsc-src.ca/en/voices/to-revitalize-indigenous-communities-residential-school-settlement-must-prioritize-language
- Dempster, N., Konza, D., Robson, G., Gaffney, M., Lock, G., & McKennariey, K. (2012). *Principals as literacy leaders: Confident, credible and connected.* Australian Primary Principals Association. https://www.pall.asn.au/wp-content/uploads/2015/09/PALL Research Report Confident Credible and Connected.pdf
- Dion, A., Sansone, G., Vandermorris, A., & Fallon, B. (2022). *Communities of practice and peer mentorship to support professional learning networks among Indigenous and non-Indigenous*

- early childhood professionals: Literature review. Policy Bench, Fraser Mustard Institute of Human Development, University of Toronto.
- Dwyer, M., Gumm, R., Hoffman, K., & Williams, J. (2022). Literacy leads, learning follows, students succeed: Advice for grades 1–3 literacy leaders. National Comprehensive Center at Westat. https://compcenternetwork.org/ccn-products/multimedia/literacy-leads-setting-follows/#/
- Ehrich, J., Wolgemuth, J., Helmer, J., Oteng, G., Lea, T., Bartlett, C., Smith, H., & Emmett, S. (2010). Attendance, performance and the acquisition of early literacy skills: A comparison of Indigenous and non-Indigenous school children. *Australian Journal of Learning Difficulties*, 15(2), 131–149. https://doi.org/10.1080/19404150903524580
- Ehrlich, S.B., Gwynne, J.A., Stitziel Pareja, A., & Allensworth, E.M. (2014). Preschool attendance in Chicago public schools: Relationships with learning outcomes and reasons for absences. Research Report. https://www.attendanceworks.org/wp-content/uploads/2017/09/CCSR-Pre-K-Attendance-Full-Report-May-2014-revised-1.pdf
- First Nation School Board (FNSB). (n.d.). First Nation School Board: Yukon First Nations pedagogy delivered through a student-centered public school education. https://www.fnsb.ca/

- First Nations Information Governance Centre (FNIGC) (2020). Factors associated with school outcomes among First Nations youth. Ottawa, Ontario. https://fnigc.ca/wp-content/uploads/2021/04/FNIGC-Research-Series-School-Outcomes FINAL Dec.212020v2-1.pdf
- Freeman, L., & Bochner, S. (2008). Bridging the gap: improving literacy outcomes for Indigenous students. *Australian Journal of Early Childhood*, *33*(4), 9–17.
- Friesen, J., & Krauth, B. (2012). *Key policy issues in aboriginal education: An evidence-based approach*. Council of Ministers of Education, Canada (CMEC). https://www.cmec.ca/Publications/Lists/Publications/Attachments/295/Key-Policy-Issues-in-Aboriginal-Education EN.pdf
- Frigo, T., Corrigan, M., Adams, I., Hughes, P., Stephens, M., & Woods, D. (2003). Supporting English literacy and numeracy learning for Indigenous students in the early years. Research Monograph 57. Australian Council for Educational Research. https://research.acer.edu.au/cgi/viewcontent.cgi?article=1010&context=indigenous_education
- Government of British Columbia. (2019). More B.C. students completing K-12 education than ever before. Ministry of Education. https://news.gov.bc.ca/factsheets/more-bc-students-completing-k-12-education-than-ever-before
- Government of British Columbia. (2022). Education by the numbers. Ministry of Education and

- Child Care. https://news.gov.bc.ca/releases/2022ECC0066-001332
- Government of Canada. (2021). First Nations. Crown-Indigenous Relations and Northern Affairs Canada, Government of Canada. https://www.rcaanc-cirnac.gc.ca/eng/1100100013791/1535470872302
- Government of Manitoba. (2023). High school graduation rates and student achievement statistics | Manitoba education and early childhood learning. https://www.edu.gov.mb.ca/k12/grad_rates/student-tracked.html
- Government of Ontario. (2007). *Ontario First Nation, Métis and Inuit education policy framework.*Ministry of Education. https://www.ontario.ca/page/ontario-first-nation-metis-and-inuit-education-policy-framework-2007
- Government of Ontario (2018). Strengthening our learning journey: Third progress report on the implementation of the Ontario First Nations, Métis and Inuit education policy framework.

 Ministry of Education. https://www.ontario.ca/page/strengthening-our-learning-journey-third-progress-report-implementation-ontario-first-nation
- Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). *How principals affect students and schools: A systematic synthesis of two decades of research.* The Wallace Foundation. http://www.wallacefoundation.org/principalsynthesis
- Guiberson, M., & Vining, C. B. (2023). Language and literacy strategies for Indigenous children: A scoping review. *Seminars in Speech and Language*, 44(1), 26–41. https://doi.org/10.1055/s-0042-1758802
- Gutierrez, A. M., Lowe, K. B., & Guenther, J. (2021). Indigenous student literacy outcomes in Australia: A systematic review of literacy programmes. *Asia-Pacific Journal of Teacher Education*, 49(1), 37–60. https://doi.org/10.1080/1359866x.2019.1700214
- Hallinger, P. (2005). Instructional leadership and the school principal: a passing fancy that refuses to fade away, leadership and policy in schools. *Leadership and Policy in Schools, 4*(3), 221-239. https://doi.org/10.1080/15700760500244793
- Hare, J. (2012). "They tell a story and there's meaning behind that story": Indigenous knowledge and young Indigenous children's literacy learning. *Journal of Early Childhood Literacy*, 12(4), 389–414. https://doi.org/10.1177/1468798411417378
- Hernandez, D. J. (2011). *Double jeopardy: How third-grade reading skills and poverty influence high school graduation*. Annie E. Casey Foundation. https://eric.ed.gov/?id=ED518818
- Hinchman, K. A. (2009). How school principals can foster effective literacy instruction: A ten-step plan. *Language and Literacy Spectrum*, *19*, 3–19. https://eric.ed.gov/?id=EJ1059530
- Indigenous Services Canada (ISC). (2020). Evaluation of the elementary & secondary education program. Government of Canada. https://www.sac-isc.gc.ca/eng/1612448148193/1612448173148
- Jenkins, B. (2009). What it takes to be an instructional leader. National Association of Elementary School Principals (NAESP). *Principal*, 88(3), 34-37. https://www.naesp.org/sites/default/files/J-F p34.pdf
- Johnson, G., Dempster, N., & McKenzie, L. (2013). The principals as literacy leaders with Indigenous

- communities: professional learning and research. *Journal of Education for Teaching*, 39(4), 457-458, DOI: 10.1080/02607476.2013.797290
- Johnson , G., Dempster, N., Mckenzie, L., Klieve , H., & Fluckiger , B. (2014). *Principals as literacy leaders with Indigenous communities: Leadership for learning to read "Both ways".* Kingston, Australia: Australian Primary Principals Association. https://ro.uow.edu.au/sspapers/2293/
- Kanu, Y. (2011). *Integrating aboriginal perspectives into the school curriculum: Purposes, possibilities, and challenges.* University of Toronto Press.
- Keehne, C. N. K., Sarsona, M. W., Kawakami, A. J., & Au, K. H. (2018). Culturally responsive instruction and literacy learning. *Journal of Literacy Research*, 50(2), 141–166. https://doi.org/10.1177/1086296X18767226
- Klieve, H., & Flückiger, B. (2015). Towards an evidence base: Exploring the impact of community-based literacy programs in remote Indigenous communities. *Australasian Journal of Early Childhood*, 40(2), 89–98. https://doi.org/10.1177/183693911504000211
- Lavoie, C., Sarkar, M., Mark, M.P., & Jenniss, B. (2012). Multiliteracies pedagogy in language teaching: An example from an Innu community in Quebec. *Canadian Journal of Native Education*, 35(1), 194–210.
- Lear , J. M. (2017). Principal perceptions as literacy leaders at high-need elementary schools [Electronic Theses and Dissertations, University of Denver]. https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=2244&context=etd
- Leithwood, K., Seashore, K., Anderson, S., & Wahlstrom, K. (2004). *Review of research: How leadership influences student learning.* The Wallace Foundation.

 https://www.wallacefoundation.org/knowledge-center/Documents/How-Leadership-Influences-Student-Learning.pdf
- Lessard, S., & Eckel, E. (2018, November). Meadow lake early literacy project. Meadow Lake Tribal Council. https://indspire.ca/wp-content/uploads/2019/12/Indspire-Meadow-Lake-Early-Literacy-Project-FINAL.pdf
- Lindstrom, G., Choate, P. W., Bastien, L., Weasel Traveller, A., Breaker, S., Breaker, C., Good Striker, W., & Good Striker, E. (2016). Nistawatsimin: Exploring First Nations parenting: A literature review and expert consultation with Blackfoot Elders. Mount Royal University.
- Lovett, S., & Flűckiger, B. (2014). The impact and effects of attempts to implement leadership for reading "both ways": A case study in an Indigenous school. *Journal of Educational Leadership, Policy and Practice, 29*(2), 18-31.
- McKeough, A., Bird, S., Tourigny, E., Romaine, A., & Graham, S. (2008). Storytelling as a foundation to literacy development for aboriginal children: Culturally and developmentally appropriate practices. *Canadian Psychology*, 49(2), 148–154.
- Munro, J. (2012). Principals as leaders in literacy A strategy for literacy improvement in primary schools. In What Works. The Work Program: CORE ISSUES 11.

 https://www.education.vic.gov.au/Documents/school/teachers/teachingresources/discipline/english/assessment/What%20Works%20Principals%20as%20Leaders%20in%20Teaching%20Literacy.pdf

- Northern Territory Government. (2007). *Annual report 2006-2007*. Department of Employment Education and Training. https://hdl.handle.net/10070/410977
- O'Sullivan, J. (2021). *Model schools literacy project: Investing in children*. Martin Family Initiative: Montreal, Canada. https://themfi.ca/investing-in-children
- OECD. (2017). Supporting success for Indigenous students. <u>https://www.oecd.org/education/Supporting-Success-for-Indigenous-Students.pdf</u>
- Overstreet, M. (2022). Literacy lens: Literacy leadership for positive change. Education Northwest. https://educationnorthwest.org/insights/literacy-lens-literacy-leadership-positive-change
- Özdemir, N., Gümüş, S., Bellibaş, M. Ş., & Kılınç, A. Ç. (2022). A systematic review of research on the relationship between school leadership and student achievement: An updated framework and future direction. *Educational Management Administration & Leadership*, 0(0). https://doi.org/10.1177/17411432221118662
- Ready, D. D. (2010). Socioeconomic disadvantage, school attendance, and early cognitive development: The differential effects of school exposure. *American Psychology Association*, 83(4), 271–286. https://doi.org/10.1177/0038040710383520
- Rennie, J. (2006). Meeting kids at the school gate: The literacy and numeracy practices of a remote indigenous community. *The Australian Educational Researcher*, 33(3). 123-140.
- Riggs, J. (2012). Working with First Nations, Inuit and Métis families who have experienced family violence. Ontario Association of Children's Aid Societies.
- Riley, T., & Webster, A. (2016). Principals as literacy leaders with Indigenous communities (PALLIC) building relationships: one school's quest to raise Indigenous learners' literacy. *Teaching Education*, *27*(2), 136–155. https://doi.org/10.1080/10476210.2015.1049261
- Robinson, R., McHugh, C., & McHugh-Dillon, H. (2009). Emergent literacy, Indigenous children and families: A discussion paper on practice and principles. Victoria, Australia. https://www.rch.org.au/uploadedFiles/Main/Content/ccch/Lets%20Read%20Indig%20Vic%20Disc%20Paper%2024%20Oct%2009(1).pdf
- Robinson, V., Hohepa, M., & Lloyd, C. (2021). School leadership and student outcomes: Identifying what works and why. New Zealand Ministry of Education.

 https://www.educationcounts.govt.nz/ data/assets/pdf file/0015/60180/BES
 Leadership-Web-updated-foreword-2015.pdf
- Sandiford, K. (2023). First Nation school board launches bold new literacy plan. First Nations School Board.

 https://static1.squarespace.com/static/629ee33aa097881ba5d44355/t/63e55ceb750ad969c858baaf/1675975917390/Media+Release+-+Literacy+Plan+Launch.pdf
- Scull, J. (2016). Effective literacy teaching for Indigenous students: Principles from evidence-based practices. *The Australian Journal of Language and Literacy, 39*(1), 54–63. https://doi.org/10.1007/bf03651906
- Simes, J. (2023, January 6). Sask. reading levels among school children continue to struggle post 2020. *Regina Leader Post.* https://leaderpost.com/news/saskatchewan/sask-reading-levels-among-school-children-continue-to-struggle-post-2020

- Sistovaris, M., Fallon, B., Sajedinejad, S., & Sansone, G. (2021). *Parenting capacity assessments and indigenous parents in Canada: Policy brief.* Policy Bench, Fraser Mustard Institute for Human Development, University of Toronto.
- Statistics Canada. (2022). The daily Indigenous population continues to grow and is much younger than the non-Indigenous population, although the pace of growth has slowed. https://www150.statcan.gc.ca/n1/daily-quotidien/220921/dq220921a-eng.htm
- Statistics Canada (2023, March 29). Census in brief Indigenous languages across Canada. https://www12.statcan.gc.ca/census-recensement/2021/as-sa/98-200-X/2021012/98-200-X2021012-eng.cfm
- Taylor, R. T. (2004). Using literacy leadership to improve the achievement of struggling students. *Middle School Journal*, *36*(1), 26–31. https://doi.org/10.1080/00940771.2004.11461461
- Thompson, L. (2021). A principal as literacy leader: Promoting literacy outcomes for a principal as literacy leader: Promoting literacy outcomes for third-grade students of color third-grade students of color [Dissertation, Georgia State University].

 https://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1263&context=eps_diss
- Thompson, L. D., & Brezicha, K. (2022). Under pressure: Leadership for literacy and cultural responsiveness. *Journal of Cases in Educational Leadership*, *25*(4), 352–363. https://doi.org/10.1177/15554589221119406
- Trimmer, K., Dixon, R., & Guenther, J. (2021). School leadership and Aboriginal student outcomes: Systematic review. *Asia-Pacific Journal of Teacher Education, 49*(1), 1–17. https://doi.org/10.1080/1359866x.2019.1685646
- Truth and Reconciliation Commission of Canada [TRC]. (2015). *Truth and Reconciliation Commission of Canada: Calls to action.* Truth and Reconciliation Commission of Canada. https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/indigenous-people/aboriginal-peoples-documents/calls to action english2.pdf
- Turner, A. & Thompson, A. (2015). School mobility and educational outcomes of off-reserve First Nations students. Statistics Canada. https://www150.statcan.gc.ca/n1/pub/89-653-x/89-653-x2015006-eng.htm
- Vagi, R. L., Collins, C., & Clark, T. (2017). Identifying scalable policy solutions: A state-wide cross-classified analysis of factors related to early childhood literacy. *Education Policy Analysis Archives*, *25*(9). https://doi.org/10.14507/epaa.25.2686
- Whitley, J., Beauchamp, M., & Brown, C. (2021). The impact of COVID-19 on the learning and achievement of vulnerable Canadian children and youth. *FACETS*, 6, 1693–1713. https://doi.org/10.1139/facets-2021-0096
- Williams, C. (2018, January 12). Improving reading outcomes and the principal's role. Center for Student Achievement Solutions.

 https://www.studentachievementsolutions.com/improving-reading-outcomes-principals-role/

Appendix A – Strategies to Promote Early Learning for First Nations Children

Source: Best Start Resource Centre. (2010). *Founded in Culture: Strategies to Promote Early Learning in First Nations Children in Ontario.* Toronto, Ontario, Canada. https://resources.beststart.org/wp-content/uploads/2011/01/K13-A.pdf

Summary: Key information obtained from a review of research and policy on early learning with Indigenous children in Ontario as well as interviews with key informants (including education experts, Indigenous organizations and early learning programs) led to the identification of 10 steps and strategies for service providers working with First Nations parents/caregivers to support early learning.

10 steps identified:

1. Understanding Indigenous history, culture and social contexts

When working with Indigenous families, it is important to have an understanding of Indigenous history, culture, and current social contexts because these factors impact parenting.

2. Creating a welcoming environment

Children and parents need to feel welcomed into an environment that reflects Indigenous culture and is child-friendly. For example, the tradition of sharing belongings and sharing food is an important part of Indigenous culture. This can be expressed by hosting feasts, which is a common practice among Indigenous peoples.

3. Building a relationship with parents and families

This is the most important strategy in supporting early learning. Family and extended family play a vital role in child care and the education of Indigenous children.

4. Involving parents in decision-making

This is an effective way of empowering parents. At a family level, parents are involved in identifying their strengths and service needs. At a program level, it could mean involvement in a parent advisory committee.

These is a historic mistrust of the formal education system stemming from experiences with the residential school system. Allowing parents to make choices about what is best for their children is a powerful method of building a good working partnership with families. At a broader, societal level, the literature suggests that self-determination could see Aboriginal people having jurisdiction and control of their education.

5. Working from strengths

A strength-based approach considers the skills, knowledge, and resources that parents and families already have and builds upon them. Because every child and family is unique, programming should be customized for each child and the family's needs and goals.

6. Encouraging learning at home

Early learning begins in the home environment when parents talk, read, and play with their children, and expands into the broader community and school environment. Indigenous people know that effective learning takes place within a cultural and community context. By supporting this idea, the formal learning environment can be extended into all areas of a child's life and can support learning in a holistic way.

7. Linking to the community

To have a sense of belonging and of identity as an Indigenous person, it is important for children and families to be connected to their community. Many Indigenous people still maintain strong ties to their home communities. Supporting these ties fosters good relations with the child and family in the long term.

8. Respecting diverse cultures

Accommodating the diversity of Indigenous cultural groups can be challenging. Each cultural group has its own beliefs, customs, and practices that must be respected and supported. This is why it is important to involve Elders and other traditional people in early learning programs.

9. Supporting children with special needs

In mainstream environments, supporting children with special needs is important in making them feel accepted and that they belong. It also helps other children in these environments learn to accept differences. Early intervention is important. Having resources to support children with special needs is critical. A kind and respectful approach is needed to help parents recognize the challenges their child is facing. Any intervention deemed necessary by parents and educators should take place at the best time to meet the child's developmental needs.

10. Learning from and about the land

There were various suggestions on how to connect to the land and support early learning. These included learning traditional skills through activities such as camping, ceremonies, retreats, and picking berries and sweet grass.

Appendix B - Examples of Literacy Programs for Young Indigenous Students in Australia

Source: Scull, J. (2016). Effective literacy teaching for Indigenous students: Principles from evidence-based practices. *The Australian Journal of Language and Literacy*, *39*(1), 54–63. https://doi.org/10.1007/bf03651906

Program	Description	Additional Resources
Abecedarian Approach Australia (3a)	Involves a suite of teaching and learning strategies to support high quality early childhood education and the later academic achievement of children from at risk and under-resourced families. Is a model of primary prevention designed for children from birth to the third grade. The program is intended as a comprehensive approach to prevention, designed to overcome the odds of developmental delays and the academic failure of children born into low-income families.	Community Early Learning Australia – What is the Abecedarian Approach? Early Development Resources – The Abecedarian Approach Summary - The Abecedarian Approach and Highlights of Key Research Findings Sparling & Meunier (2019) – Abecedarian: an early childhood education approach
Literacy Acquisition for Preprimary Students (LAPS)	Based on the Language, Learning and Literacy (L3) program developed by the New South Wales, Department of Education and Training. Students receive daily, explicit instruction in reading and/or writing strategies in small groups and then rotate to independent individual or group tasks.	New South Wales Government – <u>L3</u> <u>Review</u>
Reading Recovery	Provides daily teaching for students identified as making the slowest progress in literacy learning after one year of instruction. Reading Recovery was introduced in the Kimberley region of Western Australia in 2006 to provide some of Australia's most geographically isolated students access to programs offered to students in other locations. This supplementary program aims to promote literacy skills and foster the development of reading and writing strategies by tailoring individualised lessons to each student. Reading Recovery Training provides teachers with professional knowledge that results in more effective teaching of all students making them experts in using interactive, responsive teaching. This empowers teachers to positively affect at risk learners by customizing a distinct series of lessons for each individual learner.	Reading Recovery Australia

Appendix C - Ten-Step Plan for School Principals to Foster Effective Literacy Instruction

Source: Hinchman, K. A. (2009). How School Principals Can Foster Effective Literacy Instruction: A Ten-Step Plan. *Language and Literacy Spectrum*, 19, 3–19. https://eric.ed.gov/?id=EJ1059530

Summary: School principals can cannot sufficiently model the multiple facets of alone. Instead, principals can foster effective literacy instruction by orchestrating community collaboration in an ongoing cycle of literacy program development, implementation, evaluation, and revision. This 10-step plan is inspired by work done with dozens of elementary, secondary level schools in both rural and suburban settings and is meant to support literacy instruction school-wide at the elementary or secondary school level.

Steps Identified:

1. Form a community advisory board

By developing a community literacy advisory board, the board can brainstorm regarding the vision for such a program. It can then meet at least quarterly to review, advise, advertise and bring community resources to the school literacy plan. This board should not be the same as the elected school board, but it must report to the school board; a school board will not have time to keep literacy in the spotlight amidst its other concerns.

2. Appoint a building literacy leader

The principal needs to appoint a building literacy leader whose job is to keep the constituents focused on literacy instruction. It is important that that they be knowledgeable about literacy development, with at least an M.S. in reading or literacy education and evidence that they know about assessment, instruction, coaching and program development at the appropriate grade levels.

3. Form a building literacy team

A principal will help their chosen literacy leader form a literacy team. This collaborative group completes the rest of the plan's steps, facilitated by the building literacy leader and the principal. The team should include representatives from all constituents, including library media specialists, school psychologists, parents, and students, depending on grade level, as well as the principal. So that the plan includes attention to literacy-related interventions for young people who struggle with literacy, as well as instructional ideas for all students, the team should include representatives of regular and special education classrooms, all grade levels, and all subject-areas.

4. Conduct a literacy audit

The literacy team will orchestrate a building literacy audit, facilitated by the literacy leader and the principal. The purpose of this audit is to assess constituents' ideas about literacy program needs and possible solutions, and to uncover the human and capital resources that are available within the building and community. It will likely find useful texts, technology, and human resources to help with the literacy program.

5. Foster professional development

Before developing a literacy plan, the principal and rest of the literacy team should study how young people develop reading, writing, and digital skills in and out of school. The literacy team should also read about and visit successful programs from within and outside their state,

acknowledging differences in state standards and assessments. In consultation with the community advisory board, members of the team should talk with colleagues in nearby school districts, attend state and national conferences, comb the Internet for ideas, and consult with literacy experts from around the country to identify suitable program components. The literacy team's initial study should be a model for later professional development by all program constituents, with team members making their professional learning visible to colleagues through ongoing discussion. The literacy team will want to plan for various kinds of professional development to suit the varied needs of all instructional staff and other program constituents. As a vision for the school literacy program concretizes, the building literacy team will want to encourage more systematic opportunities for staff to read about and study identified core literacy program components.

6. Develop a long-term plan

The principal, literacy leader, literacy team, and community advisory board should articulate a vision for the literacy program, then based on this vision develop a long-term literacy plan in consultation with the community literacy advisory board and colleagues from throughout the school. The literacy plan contains goals and objectives for all program constituents, mapping from state standards and district goals for all teachers and students at each grade level. The plan should involve parents and community in various aspects of delivery. The plan should describe core instructional components that involve all staff and community volunteers, and it should explain how these components are to be modified for differentiated instruction across grade levels.

7. Create a literacy building culture

Regular building walkthroughs that notice classrooms engaged in extended, meaningful reading and writing, along with monthly changes in hallway and classroom displays of student work, can also help to create a climate the promotes literacy. This can look like book displays, reading and writing goals in every classroom and student work put up around the school.

8. Foster instructional approaches that help young people to engage in multiple facets of literacy in increasingly sophisticated ways

The literacy plan will contain a vision for the development of literacy instruction, building culture, and professional development. The principal's job is to work with the literacy leader and team and the community advisory board, to develop this plan and to ensure that everyone has the support needed to move forward with it.

9. Implement an assessment system

Progress monitoring that informs instructional decision-making and evaluation should occur at multiple levels with multiple constituents--including students as they age and begin to understand their literacy performance. The principal and literacy team will need to monitor annual performance on mandated state assessments as a primary piece of program evaluation data. Such data are also reported to the community literacy advisory board, the school community, and the state and federal government.

10. Choose commercial materials carefully

No commercial literacy program has research proving that it meets all students' needs. Therefore, the principal's role is to facilitate the literacy team's selection of commercial materials, looking for materials that will provide the most resources for the investment that will be used by the most people.