CCNETWORK Comprehensive Center Network

REGION 16
Alaska
Oregon
Washington

Indigenous School Improvement

RESEARCH FINDINGS

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September 2022

About Region 16 Comprehensive Center

Region 16 Comprehensive Center, a network of 29 educational service agencies in Alaska, Oregon, and Washington, is a responsive and innovative partner guided by the needs of educators and communities to improve the quality and equity of education for each student. We engage state, regional, Tribal, school, and community partners to provide evidence-based services and supports. Region 16 Comprehensive Center's innovative model creates better networks of services and supports for students, staff members, families, and educators.

Acknowledgments

We would like to extend our gratitude to the many individuals who made this report possible. First, we want to thank our partners at Education Northwest for their collaboration conducting this analysis. We also want to express our deep appreciation for the insights and expertise shared by the individuals who participated in interviews, especially the Indigenous educators, administrators, and staff members who shared their time and expertise to inform these findings and recommendations.

The contents of this report were developed under a grant from the Department of Education. However, the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the federal government. This work was created in partnership with the Region 16 Comprehensive Center.

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Suggested citation

Davidson, S., Broaddus, M. S., Velie, Z., & Harry, K., (2022). Indigenous school improvement: Research findings. Region 16 Comprehensive Center.

Executive summary

Education Northwest partnered with the Region 16 Comprehensive Center to gather information on efforts and supports that reflect best practices in Indigenous school improvement. We carried out the study in two phases. First, we conducted a literature review of relevant documents including empirical articles, white papers, statements of research results, and other artifacts demonstrating exemplary uses of effective schooling practices for Native American/Alaska Native students. We specifically focused on evidence generated by and with Indigenous researchers and educators. Second, we conducted outreach to experts in the fields of school improvement and Native education to gain their perspectives on successful, evidence-based approaches to develop schools that holistically support Native American/Alaska Native students. We recruited and interviewed 11 individuals across the country with firsthand knowledge of implementing Indigenous pre-K–12 school improvement models.

This report summarizes findings that address two research questions:

1. What can school improvement models founded in Indigenous ways of knowing or grown out of Indigenous communities look like?
2. How can these findings inform ongoing and future work in Washington State?

The importance of Indigenous school improvement

To ground this project in the significance of Indigenous school improvement models, we searched for themes in the literature review and asked interview participants about what has necessitated this important work. Three strong themes emerged:

- Researchers and practitioners aim to reclaim and revitalize what has been disrupted by colonization
- The unique sovereign status of Tribal nations extends to educational sovereignty
- Place-based, culturally sustaining learning builds vital connections between students, communities, and the natural world

Features and conditions that promote success for Indigenous school improvement

Features of successful Indigenous school improvement models

- The educational program centers Indigenous history, culture, identity, and language in all instruction rather than "modifying" traditional Western curriculum and approaches.
- School/program leaders routinely consult with the community—including families, elders, and youth—on the trajectory of the school and its unique mission and purpose.
- The staff represents the community and is provided ample professional development and support.
- The school and all staff cultivate a sense of belonging among students by providing culturally sustaining learning experiences and holistic services that promote health, safety, and well-being.

Conditions for developing successful Indigenous school improvement models

- Stable and flexible funding and requirements (when applicable) allow for innovation and responsiveness to community needs.
- Accountability structures are built around Indigenous instruction and authentic assessments.
- Educators who perceive a climate of intellectual freedom feel safer discussing culture and race.
- Networks among schools engaged in new or newer models facilitate the sharing of knowledge and experience.

Contents

Chapter 1. Introduction

The Region 16 Comprehensive Center sought to facilitate a research project to build knowledge about school improvement models founded in Indigenous[1] ways of knowing. Native American and Alaska Native students in Washington State and Indigenous students across the United States experience pervasive racism, bias, low expectations, and outright violence in school (Castagno & Brayboy, 2008) and are pushed out of school at disproportionate rates. For instance, according to data from the Washington State Report Card (2020)[2], nearly 16 percent of Native students in Washington left school in the 2020–21 school year, higher than any other reported race or ethnicity.

The purpose of this report is to provide the Region 16 Comprehensive Center and the Office of Superintendent of Public Instruction (OSPI) Office of Native Education with findings on best practices in developing school improvement models grown by and out of Indigenous communities, focusing on two research questions:

1. What can school improvement models founded in Indigenous ways of knowing or grown out of Indigenous communities look like?
2. How can these findings inform ongoing and future work in Washington State?

Methodology

Education Northwest carried out the research project in two phases to gather information on efforts and supports that reflect best practices in Indigenous school improvement. First, we conducted a literature review of relevant documents including empirical articles, white papers, legislative action, impact reports, statements of research results, and artifacts demonstrating exemplary uses of effective schooling

[1]We use the term "Indigenous" in this report to refer broadly to individuals and communities that identify as American Indian/Native American, Alaska Native, Native Hawaiian, First Nations, and Aboriginal Australians, as the literature review and interviews encompassed findings from the United States (including Alaska and Hawai'i), Canada, and Australia.

[2] https://washingtonstatereportcard.ospi.k12.wa.us/

practices for supporting Native American/Alaska Native students. We specifically focused on evidence generated by and with Indigenous researchers and educators. Second, we drew from a network of contacts who are experts and practitioners in the fields of school improvement and Native education to gain perspectives on successful, evidence-based approaches to developing schools that holistically support Native American/Alaska Native students. From this group, we recruited and interviewed 11 individuals across the country with firsthand knowledge of implementing Indigenous pre-K–12 school improvement models. Each phase is described in detail below.

Phase 1. Scan of the field

Literature review

To identify promising practices from the literature, we co-developed a search strategy in collaboration with the Region 16 Comprehensive Center. The search strategy identified the following keywords: Indigenous peoples, Native American, Native Alaskan, Native Hawaiian, Pacific Islander, American Indian, ways of knowing, school improvement, model, education, strategy, place-based education, educational sovereignty. These terms were used in isolation and combination in Google Scholar, Academic Search Premier, ERIC, and LexisNexis Academic. In addition, we conducted a targeted search on American Indian and Alaska Native resources, including the National Indian Education Association and the Alaska Native Knowledge Network. We searched for English language articles published since 2000, including empirical papers, qualitative research and case studies, initiatives, legislation, white and gray literature, and dissertations. We did not restrict the geographic focus and included findings from other countries (e.g., Canada and Australia).

We then used the snowball method, prioritizing resources from Indigenous scholars. To do this, we reviewed each article from the search using screening criteria listed above, reviewed the references in the articles that met the screening criteria, and screened those articles until we reached a saturation point where no new articles were revealed. At that point, we compiled a final bibliography for a detailed review.

The literature review resulted in a scan of 46 articles. An annotated bibliography is provided in appendix C.

Phase 2. Expert interviews

After reviewing the literature, we compiled a list of scholars, expert leaders, and program administrators for our outreach and interview phase. To gain an understanding of evidence-based practices, we reached out to individuals or groups with adept knowledge in developing, implementing, or researching Indigenous school improvement models in the Pacific Northwest and beyond. We did not limit outreach to those with a certain number of years of experience or comprehensive expertise but rather included voices from the field at varying stages of developing and implementing initiatives to explore challenges and successes from multiple perspectives. We also leveraged our networks across the country in school improvement and Indigenous education for personalized outreach to those who seek to make an impact in their communities.

The sample of potential interview participants was developed in partnership with Region 16 Comprehensive Center to ensure that we were amplifying and centering the voices of those deeply invested in the outcomes and aspirations for Indigenous education improvements at multiple levels.

To contact the 24 individuals selected for our sample, we reached out using emails and phone calls. We shared the goals of the project and information about the interview with all potential participants and offered a small incentive in the form of a $25 gift card for participating. The final group of interviewees included 11 individuals: two university-based research experts, six school or district administrators, two state education administrators, and one education consultant (see appendix B for a table of interview participants).

During interviews, we used a semi-structured protocol developed in partnership with Region 16 Comprehensive Center to allow participants to share their stories and experiences in the field of Indigenous education and the lessons they had learned about grounding and reframing school improvement efforts in Indigenous ways of knowing. After the interviews were complete, we used content analysis (Krippendorff, 2018) to analyze the transcripts with the qualitative software Atlas.ti. The coding scheme was developed based on themes from the literature review and emergent themes from the interviews.

Report outline

In Chapter 2, we ground the findings in a discussion about the importance of pursuing research and practice in the evolving and developing dimensions of Indigenous school improvement, based on themes from both the literature review and interviews. We conclude the chapter with recommendations for continuing and expanding research and best practices on this topic to share out across Washington State.

Chapter 3 presents findings related to the primary research question about what school improvement models founded in Indigenous ways of knowing or grown out of Indigenous communities look like in Washington and around the country. We organize the findings into two main categories: *features* of successful Indigenous school models and *conditions* that help or hinder the development of successful models. The chapter concludes by addressing the second research question, offering recommendations for using these findings to inform ongoing and future work on Indigenous school improvement in Washington State.

Chapter 2. The importance of Indigenous school improvement

To highlight the significance of Indigenous school improvement efforts, we first searched for themes in the literature review. We then asked interview participants about the need to shift education paradigms for Native students and what motivates and encourages them in these efforts. In this section, we describe three key elements that emerged from our research and recommend next steps in advancing research around Indigenous school improvement efforts.

Three key elements of Indigenous school improvement

Three themes emerged from our research:

- Reclaiming and revitalizing education practices disrupted by colonization and colonialist mindsets
- Promoting sovereignty in all aspects of education
- Rooting education in place-based, culturally sustaining learning to connect students to the world around them

Researchers and practitioners aim to reclaim and revitalize what has been disrupted by colonization

> *"In order to live properly in the world, children must be educated in their people's ancient knowledge – politics, law, moral order, and the social contract that binds together their society's citizens."*
>
> *– Brayboy et al., 2015, p. 3*

Across the literature included in our review, authors described ways that colonial assimilationist education practices began to impact the educational lives of Native peoples in the United States in the late 19th century (Lee, 2010),

imposing values and sanctions that were antithetical to Native communities' desires to nurture and promote their culture (Brayboy et al., 2015).

Early colonial assimilationist education practices in the United States were designed explicitly to disrupt traditional ways of knowing and replace them with knowledge and behaviors that would assimilate Indigenous children into Western culture and values (Brayboy et al., 2015). Practices and systems envisioned and executed by the federal government included "physical, intellectual, and spiritual abuses intended to destroy students' traditional/Tribal ways" (Brayboy et al., 2015, p. 5).

To this day, Indigenous students in the United States experience pervasive racism in educational settings, manifesting in numerous ways including "paternalism, prejudice, harmful assumptions, low expectations, stereotypes, violence, and biased curricular materials" (Dehyle, 1995; Hickling-Hudson & Ahlquist, 2003; Sparks, 2000; Ward, 1998, as cited in Castagno & Brayboy, 2008, p. 950).

Assimilationist educational policy and practice fails to recognize that before colonization, Indigenous youth were educated in modes and methods that far better suited their development. In fact, "traditional education processes were carefully constructed around observing natural processes, adapting modes of survival, obtaining sustenance from the plant and animal world, and using natural materials to make their tools and implements" (Barnhardt & Kawagley, 2005, p. 10). Educational content was—and still is—made understandable through demonstration, observation, and embedding lessons thoughtfully into stories (Cajete, 2000; Kawagley, 1995). These points were highlighted by several of our interview participants, who contextualized Indigenous school improvement efforts in both traditional and contemporary examples of educational practices rooted in Indigenous ways of knowing.

> ***"How can we pause or disrupt even our own internalized reliance upon—or acceptance of—the permanence of these Western models? And instead ask the question, 'How have our people always done teaching and learning?' … we've been here, some people say forever, some people say 10,000 years, and these schools have been here a few hundred. They're just baby institutions compared to our institutions."***
>
> – Interview participant

Barnhardt and Kawagley (2005) point out that when teaching practices, assessments, and curricular materials are "based on a worldview that does not adequately recognize

or appreciate Indigenous notions of an interdependent universe and the importance of place in their societies" (p. 10), it can lead to student disengagement in school (see also Kawagley & Barnhardt, 1998). When colonialist education practices do not align with students' worldviews and values, there is a risk of misattributing lack of student engagement to intellectual deficits, instead of more accurately attributing disparities to a hostile and imposed institutional culture (Battiste, 2005).

Beyond individual academic performance, school-level performance is determined by standards that may not align with the objectives, aspirations, and values of an Indigenous group or community. School leaders, educators, students, and those in the learning community can also end up feeling marginalized when their education outcomes differ from those dictated by misaligned standards. One interview participant described the role of language and terminology in deepening the stigma attached to school improvement measures:

> ***"When you say school improvement, I get these certain buttons pushed for me. The labels that are used—underperforming, failing, struggling, hard to staff—those labels have been with me my whole career."***
>
> – Interview participant

Scholars assert that Indigenous students and schools would be better served by education systems that center on Indigenous epistemologies.

> ***"Accountability measures, standardized tests, and countless other policies are too often developed and sustained according to dominant, mainstream norms and interests. We must center Indigenous norms and Tribal nations' interests if we hope to engage in [culturally responsive schooling] for Indigenous youth."***
>
> – Castagno & Brayboy, 2008, p. 978

Noting that educators are always asking students to take risks and learn through experience, one interview participant suggested that education leaders should lead by example, taking courageous strides to model the spirit of learning.

> ***"Be honest with yourself: are those systems currently working that you have? And if they're not, we owe it to our kids and our communities to do something different. And don't be afraid. We tell our kids all the time, 'Don't be afraid to try and fail' … so be brave and don't be afraid to fall. Don't be afraid to reach out to people. There are people doing amazing things across***

> *Indian Country … we know our communities are always into sharing. They want to share. It takes a lot of effort and legwork to build those relationships, but it'll pay off in the end if you're building structures and systems to acquire knowledge, to utilize knowledge, build your own knowledge base … it starts with transparency, honesty, listening."*
>
> *– Interview participant*

The unique sovereign status of Tribal nations extends to educational sovereignty

> *"True to what sovereignty and self-determination is on its deepest level is the reality that no other community can, or should, define the culture and components in that center."* – RedCorn, 2020, p. 499

One important and distinguishing feature of the relationship between sovereign Tribal nations and the U.S. government is that "Indigenous peoples have not, like other marginalized groups, fought for inclusion into the democratic body politic. Rather, [American Indians, Alaska Natives, and Native Hawaiians] have asserted, and continue to assert, their right to remain distinct, sovereign, and Tribal peoples" (Alfred, 1999, 2005; Cornell & Kalt, 1998; Deloria, 1988; Grande, 2004; Wilkins, 2002, as cited in Brayboy et al., 2015, p. 2).

A legacy of treaties, constitutional rulings, executive orders, and legislative acts have acknowledged and reaffirmed the sovereign status of Tribal nations and the accompanying trust responsibilities inherent in these government-to-government relationships (Wilkins, 1997, 2002; Wilkins & Lomawaima, 2001). However, the ramifications of sovereignty for Indigenous educational systems are reflected ambiguously in education policy. As one interview participant from a state education agency said, "Our school districts don't understand the sovereignty of our Tribal people."

Numerous sources from the literature review as well as interview participants stressed this tension between political sovereignty and educational sovereignty, highlighting the paradox that in the United States, "Native nations are politically sovereign and have certain inherent rights, [yet] our systems of education are entangled in state and federal bureaucracies" (RedCorn, 2020, p. 498–499). One interview participant underlined how difficult this tension is to resolve under current conditions.

> ***"The improvement systems are dictated by the state, and from everything that I have heard and read about Tribal sovereignty, that's not going to change … unless the state is willing to actually acknowledge that Indigenous knowledge systems are as valuable, or I would say probably more valuable than Western knowledge systems."***
>
> – Interview participant

Castagno and Brayboy (2008) asserted that political sovereignty should include the provision "at a minimum that Tribal nations have inherent rights to determine the nature of schooling provided to their youth" (p. 949). Lomawaima and McCarty (2006) defined sovereignty within the context of education as "the inherent right of a people to self-government, self-determination, and self-education" (as cited in (Brayboy et al., 2015, p. 3).

Indigenous education models, therefore, can benefit in the future with further research and understanding so that they can be developed in ways that account for sovereignty and self-determination by a Tribe, Tribal community or Tribal citizens, including the right to linguistic and cultural expression according to local Indigenous norms (Brayboy et al., 2015). However, as one interview participant said that engaging in such research requires intentional, sustained communication and partnership with Tribes, avoiding "one-off" outreach efforts to gather information without following up.

> ***"We think that we're in transactional relationships where [a researcher] can ask a question, get the information from the Tribal community or elders or students or families, and then go do what [they] have to do. I think if we are concerned with instead replacing that with authentic relationality, there is a sustained relationship and nurtured relationship over time."***
>
> – Interview participant

Place-based learning builds vital connections between students, communities, and the natural world

> ***"It is of vital importance to relate classroom learning to lifeworld of the student; that without repeatable and relatable experience, decontextualized information has no meaning or relevance to the learner."***
>
> – Scully, 2015, p. 91

According to numerous sources from our literature review, place is particularly significant in Indigenous education because it reflects the unique perspectives that people have in looking at and relating to the world, the universe, and each other (Cajete, 1994; Tuck et al., 2014). Indigenous education has always emphasized "familiarity with the personality of objects and entities of the natural world ... where each living being had its proper place ... knowing places enabled people to relate to the living entities inhabiting it" (Deloria & Wildcat, 2001, p. 3). Place and community were inseparable components in many Indigenous world views, requiring interconnected relationships and reciprocity be maintained and held in high value. This was essential to the survival of the group. Centering place within each learning experience allows students to connect to vital aspects of their real lives such as the natural environment, social relationships, community participation, and culture (Kawagley & Barnhardt, 1999; Lee, 2010; Sianturi et al., 2018; Smith & Sobel, 2010).

> ***"Every cultural group established their relations to [their place] over time. Whether that place is in the desert, a mountain valley, or along a seashore, it is in the context of natural community, and through that understanding they established an educational process that was practical, ultimately ecological, and spiritual. In this way they sought and found their life."***
>
> – Lowan, 2009, p. 47

Meanwhile, mainstream schooling practices introduced by colonialism tend to be built on "a worldview that does not adequately recognize or appreciate Indigenous notions of an interdependent universe and the importance of place in their society" (Barnhardt & Kawagley, 2005, p. 10). Instead, Western education ideals can center around people as the dominant force over the natural world, a world that must bend to the desires, preferences and out-right will of humans.

Smith (2002) outlined five elements of place-based education, suggesting ways that educational settings can emphasize place and experience for students. Smith states

that changes will not be easy to initiate, requiring in some respects "a fundamental rethinking of what it is that we mean by education and a reevaluation of the way children are provided with the experiences they require to become fully participating members of adult society" (Smith, 2002, p. 594). However, early experiments with place-based features have led to positive achievement outcomes for students, suggesting that "adopting them is not something that will necessitate the abandonment of our current educational system." (Smith, 2002, p. 594).

Five Elements of Place-Based Education (Smith, 2002)

1. Teachers and students develop curricula based on phenomena immediately around them, using these experiences as a base for examining more distant and abstract knowledge from other places.
2. There is an emphasis on learning experiences that allow students to become creators rather than consumers of knowledge.
3. Students' questions and concerns play a central role in determining their learning agenda, leading to increased student ownership of and engagement in learning.
4. Teachers act as "experienced guides, co-learners, and brokers of community resources and learning possibilities" (p. 593), helping students acquire the skills and dispositions of effective learners.
5. The wall between school and community becomes more permeable, with community members taking an active role. Students participate in activities that are valued by the adults who are important to them, and their work is assessed on "competence and its contribution to community well-being and sustainability" (p. 593).

Recommended next steps in researching and planning Indigenous school improvement efforts

Recommendations for regional and state-level entities such as educational service districts, the Office of Superintendent of Public Instruction, the Washington Student Achievement Council, the State Board for Community and Technical Colleges, the Washington Association of Colleges for Teacher Education, the Professional Educator Standards Board, and others include:

- Ensure that communication, planning and effort reflect principles of educational sovereignty.
- Demonstrate awareness that terminology common in Western educational systems—such as "school improvement"—can carry the weight of colonialist legacies that may not align with ways that Indigenous communities view the purpose and direction of schooling.
- Ensure that communities who are impacted by decisions about education at the state level are involved in shaping and making those decisions.
- Engage in sustained communication and relationship-building in Indigenous communities, including demonstrating and sharing the results of research efforts back with those who contribute to research.
- Lead by example, showing the next generation of learners that education leaders are willing to take courageous steps to acknowledge past systemic educational failures and grow and support the very best efforts to serve Indigenous students and communities.

Chapter 3. Features and conditions of successful Indigenous school improvement models

This chapter first highlights specific features of successful Indigenous education models in theory and practice, based on findings from the literature review and interviews. We then summarize conditions in the broader education policy and system landscape that either help or hinder the development and implementation of Indigenous school improvement models. The chapter closes with recommendations for state and regional agencies in Washington to develop and sustain innovative school improvement models rooted in Indigenous ways of knowing.

Features of successful Indigenous school improvement models

> ***"Native experiences and perspectives – both resistance to imposed education and the creation of alternative models – reveal the liberating power of choice and the importance of self-determination for communities."***
>
> – Lomawaima and McCarty, 2006, p.5

In the literature review and responses to interview questions about successful Indigenous education efforts, four features emerged as key to developing, implementing, and sustaining innovative models:

- Centering Indigenous ways of knowing
- Prioritizing deep and continuous involvement between schools and communities
- Having staff that represents the community and is well supported in its work
- Providing holistic care for the well-being of students and families

The educational program centers Indigenous history, culture, identity and language in all instruction rather than "modifying" traditional Western curriculum and approaches

Culturally responsive instruction and curriculum is a central feature of Indigenous school improvement models. The literature describes culturally responsive schooling as that which "builds a bridge" between a child's home culture and the school to improve learning and school achievement (Pewewardy & Hammer, 2003, as cited in Castagno & Brayboy, 2008, p. 958). Culturally responsive schooling has been linked to the following positive outcomes for Indigenous youth:

- Enhanced self-esteem (Agbo, 2004; Cleary & Peacock, 1998) and healthy identity formation (Trujillo et al., 2002)
- More self-directed and politically active behavior (Garcia & Ahler, 1992)
- Expression of more respect to Tribal elders (Agbo, 2004) and motivation to have a positive influence in their Tribal communities (Cleary & Peacock, 1998; Pewewardy, 1998)
- More positive classroom behavior and engagement (Cleary & Peacock, 1998; Lipka, 1990)
- Higher academic achievement (Apthorp et al., 2002; Demmert, 2001)

The Alaska Native Knowledge Network (1998, as cited in Castagno & Brayboy, 2008, p. 958) listed standards for students involved in culturally responsive schooling:

1. Culturally knowledgeable students are well grounded in the cultural heritage and traditions of their community.
2. Culturally knowledgeable students can build on the knowledge and skills of the local cultural community as a foundation from which to achieve personal and academic success throughout life.
3. Culturally knowledgeable students can actively participate in various cultural environments.
4. Culturally knowledgeable students can engage effectively in learning activities that are based on traditional ways of knowing and learning.
5. Culturally knowledgeable students demonstrate an awareness of the relationships and processes of interaction of all elements in the world around them.

Literature on Indigenous education stresses that students' languages, literacies, and cultural ways of being must be centered meaningfully and consistently in classroom learning instead of being considered as add-ons. For example, Castagno and Brayboy (2008) describe how inserting cultural knowledge as self-contained curricular material—as opposed to grounding curriculum holistically in cultural knowledge—can force students to choose between academic success and their Indigenous identity, while also falling short of altering the structure of schooling.

> ***"Much of the scholarship on [culturally responsive schooling] encourages educational approaches that assume culture to be something that can and should be taught as a discrete school subject. Our discontent with these tendencies provides yet another impetus for our suggestion that sovereignty and self-determination, institutional racism, and Indigenous epistemologies must take center stage in future articulations of and for [culturally responsive schooling] for Indigenous youth."***
>
> – Castagno & Brayboy, 2008, p. 957

Interview participants described ways that they have seen Indigenous knowledge being successfully centered in curriculum and instructional practices. For example, a practitioner described embedding science lessons into experiential learning about hunting.

> ***"That's chemistry. That's physics … you calculate into the time you're going to take to build a tent from a hide, even to making a bow and arrow and understanding what type of string you're going to need when you make a bow and how long it's going to last."***
>
> – Interview participant

Another interview participant described how cultural practices are powerful tools for promoting social and emotional learning and can help students regulate emotions and behavior when introduced in the learning environment. As an example, one participant described how engaging in traditional arts can prevent students from experiencing intense neurological responses to stress, sometimes referred to as "flipping one's lid."

> ***"Culture is embedded in social emotional learning. When we're talking about social emotional curriculums and all of those things, they are not really relevant if a kid can't see themselves in it … culture comes in and does co-regulation with song and dance. It does a number of fine motor skills.***

> *You can't physically flip your lid when you're doing weaving and beading and all of those pieces."*– Interview participant

Marchant (2009) wrote that "flexibility is a key ingredient in adjusting curriculum, timetables, scheduling and activities to be in harmony with community events" (p. 92). Likewise, several interview participants described the importance of centering Indigenous values in not only curriculum and instruction, but also in school schedules, calendars, assessments, wellness programs, and other features of schooling. These practices can in turn have significant impacts on overall school climate, aligning the needs, rhythms, and values of the community with the school. Practitioners stressed that the Western education system is not flexible enough to accommodate students who need to engage in cultural activities during school time.

> *"If students want to go back moose hunting, or pick berries, or need to go back for a family event, they would come back to school, and they would've missed homework … they would be digging themselves out of a hole academically. The outcomes are not very good for Native students in that situation."*
>
> – Interview participant

> *"We structure our calendar off the traditional calendar of the community … also taking in consideration the students that are from different Tribes, to show support for them."*
>
> – Interview participant

School or program leaders routinely involve the community—including families, elders, and youth—in the trajectory of the school and its unique mission and purpose

Several Indigenous scholars have noted how continuous engagement with the community can promote learning for Indigenous students. Both professional cultural specialists and individuals from the community at large can play critical roles in these efforts: community leaders who keep and share knowledge in and out of school settings take many different forms.

> ***"There is a need to first locate content area specialists who are active within the community's cultural systems. These may be ceremonial leaders, fluent language speakers, elders, spiritual leaders, or other forms of cultural leadership or specialist, but might lack a degree in education … these are the individuals that likely know how to truly center educational systems around local values and worldviews, and might also be able to articulate the boundaries between what cultural content is appropriate to bring over to new learning environments and what should remain in traditional cultural systems operating outside of 'schools.'"***
>
> – RedCorn, 2020, p. 502

During interviews, several school leaders described hiring liaisons to bridge the gap between the school and the community. Others described seeking opportunities to bring community members, particularly elders and cultural leaders, into school in less formal capacities, such as curriculum and learning experiences. This way, schools not only tap into "cultural genius" and make educational content relevant and interesting for students but also give students a chance to see how they can take on professional roles and pass their own knowledge on to future generations of students like themselves.

> ***"Historically the government or the public education system told the community what the kids need or the community needs to be successful. Our communities know full well what they want for their kids and how their kids and community can be successful and healthy."***
>
> – Interview participant

> ***"We want our kids exposed to positive influences in our community, because when kids want to dream and think about a path they want to go, usually someone has gone that path."***
>
> – Interview participant

Interview participants described how it was possible for different community members to get involved in educational settings. One former school administrator stressed the importance of engaging individuals of different ages, saying "A lot of times, the leadership is the elders … I feel like that engagement process really needs to include the younger generations, and make sure those voices are heard." Career and technical education (CTE) was mentioned as a way to involve younger professionals, exposing students to jobs

and experiences that can benefit their own future and that of the community in turn.

> *"Our CTE program is tied to Tribal enterprises. [Students] are getting direct experiences with the businesses and the people coming in to support our kids in a wraparound program … the CTE program is giving us that vehicle to get the community back in the school, to get parents interested."*
>
> – Interview participant

According to several interview participants, community involvement and consultation should extend to all aspects of schooling, including design, governance, accountability, and even evaluation. A state education administrator described what happens when community members are involved in assessing the progress and performance of their own schools.

> *"Many of our researchers and evaluators are not [Indigenous]. So they have a different perspective, which is fine, but it does cause a cultural shift in … how they engage with the community, how they ensure that data is being shared back, that there's an open loop of communication, that they're involving community as participatory co-researchers and co-investigators … several of our [Indigenous] focused charter schools [are doing] their own culturally relevant assessment for their schools. They've established a framework [with] support and ongoing professional development for their teachers and [elders]. And they're also involving community."*
>
> – Interview participant

Staff represents the community and is provided ample professional development and support

> *"Capacity is built, and sovereignty is liberated, when people feel fulfilled in their work environment."*
>
> – RedCorn, 2020, p. 512

Research has established that teachers' awareness, understanding, and appreciation of cultural knowledge are linked to students' successful academic performance (Butterfield, 1994, as cited in Castagno & Brayboy, 2008). Beyond the benefits to

individual students, schools and communities experience positive outcomes when teachers of Indigenous students possess culturally responsive knowledge.

Most interview participants described the value of connecting students with teachers who share their background and cultural values.

> ***"Our littlest ones are gaining access on a daily basis to people that look like them, to communities that are similar to our kids' communities."***
>
> – Interview participant

Representation, however highly valued, presented challenges for some current and former school leaders that we interviewed. They cited difficulties in not only recruiting educators from within the community but also finding educators who would relocate from outside the community and stay for the long term.

> ***"I've had great resumes [from] individuals from Harvard and all these places but they just didn't have a heart for the place … I'm blessed to have a consistent staff that want to be here and be able to adjust to the community."***
>
> – Interview participant

Given the complexity of the issues around teacher recruitment and retention, interview participants described the need for adequate preparation for educators new to the system and community, meaningful professional development opportunities, and ongoing supports—both professional and social—for educators to thrive in Indigenous learning environments (see the Region 16 Comprehensive Center landscape analysis by Brey et al., 2022). One interview participant emphasized the need to not only support educators but also take meaningful steps to improve educational conditions for students and educators of color.

> ***"I have lots of thoughts about lots of critiques about diversifying the teacher workforce without then changing what we're doing to welcome Black and Brown people into [school]."***
>
> – Interview participant

The school community cultivates a sense of belonging by providing positive, culturally sustaining, trauma-informed learning experiences and holistic services that promote health, safety, and well-being

Research suggests that promoting positive identity development can have a powerful impact on sense of self and belonging. In many Indigenous communities this is an integral part of young people's sense of self as it relates back to the group, family, clan, or Tribe. Understanding ones identity, including culture, history, language, and tradition, is a protective factor that can support Indigenous students through challenges and struggles.

> ***"Having a positive sense of who you are as a people impacts your sense of self and your sense of belonging."***
>
> – Freeman, 2004, as cited in Whitlow et al., 2019, p. 569

In addition to positive identify development, several interview participants described the need for educational settings to help address the health and safety needs of the community, which in turn fosters greater trust and sense of belonging in education. School leaders described offering resources that extend beyond traditional educational services to include wraparound supports for students and families. Examples of wraparound supports mentioned in interviews included counseling services, health care referrals, and even help with accessing insurance and programming for substance use or other health challenges. These supports can often be proactive measures that alleviate stressors. One participant described how wraparound supports can also serve as an alternative to punitive responses to behavior issues that may stem from unmet physical and mental health needs.

> ***"We've all seen that in our families, that if we can get to the kid early, then let's do it. Because if I expel the kid, what does that do? What does that do to him or the family? So there's got to be another way to reach the kid and reach the family and use your Tribal programs the best you can."***
>
> – Interview participant

Another interview participant discussed their school's use of a tool called a wellness wheel, which they described as "a four-part approach to working with our youth and families so that we're paying attention to the whole child." By offering services that

are trauma informed and responsive to students' needs, school settings can foster the physical, social, and emotional safety that youth require to learn and thrive.

> *"Being involved in the community … and creating an environment where they feel safe [not just] physically, but feel safe to fail and feel safe enough to learn, to be successful [while] coming through an education system that's not made for us. Being able to have that dynamic where they trust the school … that takes time to develop, but again, creating that space that they feel safe enough to fail and safe enough to succeed is very important."*
>
> – Interview participant

Conditions for developing and sustaining successful Indigenous school improvement models

> *"Ancient knowledge, as created by the ancestors of Indigenous communities, contains the very essence of Tribal sovereignty. To this end, education for Indigenous peoples is part of a movement toward self-determination, wherein communities respond to both federal and state educational mandates as well as those of their own Tribal nations."*
>
> – Brayboy et al.,2015, p. 4

Having described some features of innovative Indigenous education models that are supported by both research and anecdotal evidence based on emerging best practices, we sought to understand the conditions that are necessary for those features to develop and grow. We specifically sought information on conditions that state and regional agencies can foster to promote effective, culturally sustaining Indigenous education models.

Stable and flexible funding and requirements allow for innovation and responsiveness to community needs

> *"So as long as we are on a good trajectory and we are making gains, I think that there should be some defined autonomy so that we're getting the things done and the way that we need to do it for our kids."*
>
> – Interview participant

Indigenous education settings can take many forms and structures; each interview participant described a model that differed from the next in fundamental ways. School leaders described a variety of structures for funding, licensing, and accreditation, each with benefits and drawbacks.

Below we list three examples of different funding, accountability, and decision-making structures that interview participants described.

State charter school. A school leader from a state charter school described their model as being "literally our own school district." The school is responsible for "all the federal programs" and everything that a traditional school district must do, which differentiates this model from charter schools that fall under the authority of the local school district. The interview participant said the benefit of the state charter model is greater autonomy and decision-making power to "switch" programming that does not work as desired. For this particular school, funding streams included federal and state-level programs such as the Indian Education Act and Indian Education Program, as well as grants secured by school leaders. In terms of accountability, the interview participant described a process in which "every five years we have to present to the state on our achievement," which they explained as the difference between this model and a traditional public school. The interview participant said school leaders felt the need to "justify our existence" by showing academic progress among students, even when progress might be masked by established metrics, such as state requirements for SAT or ACT pass rates. The interview participant said, "Even though we don't hit that mark, sometimes we can show academic improvement … we have to play a game. We have to make sure we hit that mark."

Cultural charter school. Another interview participant described a charter school model that is chartered under the local school district, "but the Tribe is hosting the school on Tribal land and setting up the facility and leasing the facility to the school through the school district." This arrangement relied heavily on grant funding and a lengthy, extensive community engagement process. The interview participant also

described a challenging request for proposals process requiring "a lot of work from the school district and the borough" to get the charter and facilities approved by both the local school district and the state school board.

State compact school. An interview participant from a state compact school stated that the school was able to function because it could access Bureau of Indian Education funding and funding from the state "like any traditional school would." According to the school leadership, "What we don't have as a school is the ability to run bonds and levies. We rely on the appeal of Tribal council to give us some supplemental funds, kind of like a levy would be." This model was linked to drawbacks such as unstable access to funding for things like sports programs, extracurriculars, and repairs, which can reach staggering costs when they involve major systems such as heating and air conditioning. Despite serving a small community with limited infrastructure, the school is required to do "the exact same amount of reporting that a school district of 23,000 has." The interview participant described the lack of consistent funding as common for "any Tribal school," requiring school leaders and staff members to spend extra time writing grants. In their own words, "We're constantly playing this shell game, and it's constantly robbing one [funding source] to pay for another because we know … what's right for students." The interviewee also said that the school CTE program is completely funded by grants because "we don't have any of the apportionment." School leadership credited the staff for being "really creative" in findings ways to secure funds "to make this dream a reality."

In interviews, school-level practitioners and state-level education administrators shared challenges associated with accessing stable funding and sustainable infrastructure. Some challenges included:

- **Maintaining facilities and addressing deferred maintenance.** A state education administrator shared that across the state's Indigenous-serving charter schools "we have children that don't have a cafeteria, or they have to use a park for a gym, or they have no clean ventilation for their classrooms."
- **Overcoming barriers to applying for federal government funding**, whether by centralizing the process through establishing a lead educational agency, providing technical assistance, or streamlining reporting.
- **Gaining clarity on how states distribute and allocate federal funding** and on which funding streams Tribes are eligible to receive, then supporting Tribes to proactively pursue funding for which they are eligible.
- **Bringing people together** who are "willing to start something from the beginning" and move forward in the face of multiple obstacles. Interviewees shared examples of schools being started in laundromats and convenience

stores and described the investment in time and resources needed to gradually upgrade facilities and expand services.
- **Navigating partnerships**, particularly in cases where funding is largely reliant on philanthropy. Sometimes the effort to align "what you're doing already" with donor and funder requirements can lead to partnerships that do not match local values and contexts or are not sustainable over the long term.

Throughout the discussions of challenges and barriers, a common theme was the creativity and resilience of people dedicated to creating culturally sustaining institutions that promote educational sovereignty for Indigenous communities.

Accountability structures are built around Indigenous instruction and assessments

Nearly every interview participant said that a necessary condition for success was accountability structures that allow for Tribal autonomy in governance and assessing student progress and development. This sentiment reflects extant literature calling for:

> ***"... new approaches [that contribute] to our understanding of the relationship between Indigenous ways of knowing and those associated with Western society and formal education. Our challenge now is to devise a system of education for all people that respects the epistemological and pedagogical foundations provided by Indigenous as well as Western cultural traditions."***
>
> – Barnhardt & Kawagley, 2005, p. 10

Interview participants described the challenge of navigating overarching education systems that are "so totally tied to a Western framework of accountability and schooling." Specific challenging conditions that interview participants discussed included state-level testing requirements, pacing guides, and content area credits required for graduation. The ability to return to or build back in aspects of traditional learning methodologies—like apprenticeship and skill mastery—are essential to meeting the needs of Indigenous children. Leaders from a state compact school described success in offering Indigenous physical education and music offerings for graduation credits. For another interview participant, a system overhaul is needed to

create conditions in which Indigenous education models can overturn the enduring legacy of harmful colonialist standards.

> *"The more we explore nation building and strengthening, somebody along the way has to reckon with what that means for settler colonialism … if [we] were to reclaim power and enact it over time, what does that mean for [the] school districts, the counties, the United States? … I think one of the main macro structural conditions for why things don't get sustained over time is people knowingly or unknowingly default back to settler logics, which then turn into settler policies."*
>
> – Interview participant

Educators who perceive a climate of intellectual freedom feel safer discussing culture and race

At a national level, controversy around the teaching of race and culture in schools hinders educators from providing culturally responsive and sustaining instruction. Across many different types of educational institutions, the politicization of diversity, equity, and inclusion efforts and critical race theory creates unsafe environments for educators, who need to have support from all levels of leadership and the community to feel confident regarding decisions about curriculum and instruction.

> *"They're trying these tactics to try not to let us talk about what really happened and actually where we're at."*
>
> – Interview participant

Networks among schools engaged in new or newer models facilitate the sharing of knowledge and experience

Several interview participants discussed the ongoing need for communication and sharing among Indigenous education practitioners, leaders, and scholars. Ideas, strategies, and best practices can and should be shared among the growing number of education settings that focus on Indigenous learning, including community engagement, fiscal considerations, trauma informed environments, flexibility in school calendars and schedules, and culturally responsive or Tribally specific teaching and learning. One interview participant who said they were already "sharing what we do with other schools" described what this can look like in practice.

> *"I'll call a colleague and ask, 'What do your teacher contracts look like? And what do your handbooks look like?'"*
>
> – Interview participant

One interview participant described the practice of sharing knowledge as a key piece of Indigenous identity, one that should continue to be fostered and institutionalized in a more widespread, intentional way with infrastructure to support it.

> *"I think sharing knowledge is just a practice that we've seen in our communities since time immemorial, and how can we better do that? How can we create a web of, I guess, of knowledge makers and sharers out there in Indian Country, of talking about how an after-school program or the development of a literacy curriculum went, or engaging our families and youth, or tapping into culture? How are we using those systems to work for us and not against us?"*
>
> – Interview participant

Recommendations for fostering and sustaining successful Indigenous school improvement efforts

Indigenous school improvement models can repair damage from colonialist legacies, promote educational sovereignty, and ground education in place-based learning. Below are recommendations for regional and state-level entities to foster and sustain successful Indigenous school improvement models.

Recommendations for promoting features of successful Indigenous school models

- Ensure that school improvement efforts include opportunities for schools to center Indigenous history, culture, and language curriculum and instruction rather than "modifying" traditional Western curriculum.
- Involve the community in research and evaluation from the onset of efforts, including sharing results in an open loop of learning and feedback. Create processes that allow for non-Western ideals and values to be demonstrated in

research and evaluation. Grow capacity among community members to engage in this work.
- Continue to support the expansion of programs that allow community members to remain close to home while in teacher preparation programs (see the Region 16 Comprehensive Center landscape analysis by Brey et al., 2022).
- Facilitate partnerships that either bring important services into the school or that enable connections between students and families with resources around health, safety, and wellness.

Recommendations for fostering conditions needed for successful Indigenous school models

- Continue to explore and understand contexts for funding and other requirements that might allow for greater flexibility for Indigenous education models.
- Ensure that educators have support from all levels of school leadership and community, as they build culturally sustaining learning environments where Indigenous and Tribally specific histories, experiences, and culture are centered and elevated.
- Create opportunities for those already engaged in new models, or for those just beginning, to gather and dialogue about various aspects of the work. This important exchange of information can help build greater successes and a community of practice that will provide ongoing support.

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Appendix A. Interview protocol

Oral consent script

My name is [name] and I work Education Northwest, an education nonprofit that supports work with schools, Tribes, and communities. We are working with an entity in the state of Washington called a comprehensive center, which is funded by the U.S. Department of Education.

We are working together to gather information to address the question, "What could school improvement models founded in Indigenous ways of knowing or grown out of Indigenous communities look like?" The overall goal is for Washington's education leaders to develop a blueprint for schools that holistically support Native American/Alaska Native students by way of educational sovereignty.

Thank you for taking the time today to participate in this interview, which should take about 60 minutes or less. We would like to learn about your perspective on building effective models, strategies, and practices as well as challenges and recommendations for further learning.

- It is up to you if you would like to participate. You can choose to withdraw from the interview at any time or choose not to answer any questions.
- There are no risks or benefits to participating. We are not here to evaluate the performance of any school or program.
- We will keep everything shared today confidential and will summarize what was shared across all interviewees in a report to the Region 16 Comprehensive Center. The Region 16 Comprehensive Center may share the report with their partners or publish it on their website. Any direct quotes will be attributed to "a study participant." Your name or anything else that could identify you will not be made public.
- All our notes and analyses will be stored on a secure server.
- We will provide you with a $25 gift card as a small token of appreciation for your time.

Do you have any questions?

Please contact Shannon Davidson at shannon.davidson@ednw.org or at (503) 275-9645 if you have any questions.

Do you agree to participate in this discussion?

We would like to record the session to ensure that we accurately represent what you say. The recording may be transcribed by a professional transcription company, a third party. This recording and any transcriptions will be stored securely and destroyed at the end of the project.

Do you agree to the interview being recorded and transcribed?

Interview questions

1. Please tell us about yourself and your current role (for example, organization, position, length of time in current position, length of time that current/ongoing work has been operating).
    a. For practitioners: Can you tell us a little about your work at XXX? What do you like the public to understand the most about your organization or school?
    b. For academics/researchers: Can you tell us a little about the research you have done at/with XXX? What are some of the ways that you typically share your findings?

2. In your view, why is it important to develop innovative education models that are culturally sustaining and rooted in Indigenous ways of knowing?

3. What contextual conditions or structures have helped or hindered this work?
    a. For practitioners, probe for funding that enabled their initiative

4. What do you see as the foundational elements or top priorities in the design and implementation of a new model that serves American Indian and Alaska Native students?
    Probe for:
    a. Language programming/preservation
    b. Flexible school day/schedule/calendar
    c. Culturally responsive/Tribally specific curriculum use
    d. Parent/family/Tribal engagement

    e. Student engagement/empowerment
    f. Staff development/professional growth

5. What have been successful strategies for developing Indigenous school improvement models?
    a. How were these strategies devised and developed?
    b. Who were others that you learned from and/or who helped in this work?
    c. [How did you engage community, family members, Tribal council?]

6. What challenges have existed or do you perceive in developing these new school models?

7. What recommendations do you have for any entity [district? Tribal government?] that would like to start developing an Indigenous model?

8. What resources or supports are needed to further develop, scale, or sustain Indigenous education models?

9. Is there a person or organization you think we should talk to about developing Indigenous school models?

10. Is there anything else you would like to share?

Appendix B. Interview participants

We compiled a list of 23 potential interviewees using findings from the literature review and expertise within our team and the Region 16 Comprehensive Center. We reached out to all of those interviewees. We received responses from 12 individuals who referred us to 2 additional interview participants. Ultimately, we conducted interviews with 11 participants as presented in table B1.

Table B1. Interview participants for the Indigenous school improvement research project

Program/ organization type	Rationale for selection	Location	Number of interviewees
University-based research expert	Literature review, Region 16 Comprehensive Center recommendations, interviewee referral	Alaska, Washington	2
School/district administrator	Literature review, Region 16 Comprehensive Center recommendations, Education Northwest contact	Washington, South Dakota, New Mexico	6
State education administrator	Literature review, Education Northwest contact	Hawai'i, Nevada	2
Education consultant	Education Northwest contact	Alaska	1

Source: Authors' analysis of interview data

Appendix C. Annotated Bibliography

Agbo, S. A. (2004). First Nations perspectives on transforming the status of culture and language in schooling. *Journal of American Indian Education*, 1-31.

One of the challenges facing Aboriginal education is how to enhance Aboriginal students' achievement through culturally responsive pedagogies. The issue involved is not merely that of methods of teaching and learning but of acquiring the necessary tools for shaping and implementing a socially and culturally oriented curriculum that recognizes Aboriginal local resources in context and reinforces and maximizes their use in education to make school learning an integral component of the social and cultural context of Aboriginal children's heritage. This paper is about First Nations' perspectives, opinions, and attitudes about the status of language and culture in schooling and their suggested strategies to revitalize and preserve First Nations cultures. The paper concludes that the issue involved is not merely one of cultural education of students but also of helping Euro-Canadian teachers to attain the necessary cultural tools for determining and putting into practice a socially and culturally oriented program.

Alfred, T. (G. R.). (1999). *Peace, power, righteousness: An Indigenous manifesto*. Oxford University Press (Don Mills, Canada).

This visionary manifesto, first published in 1999, has significantly improved our understanding of First Nations' issues. Taiaiake Alfred calls for the Indigenous peoples of North America to move beyond their 500-year history of pain, loss, and colonization, and move forward to the reality of self-determination. A leading Kanien'kehaka scholar and activist with intimate knowledge of both Native and Western traditions of thought, Alfred is uniquely placed to write this inspiring book. His account of the history and future of the Indigenous peoples of North America is at once a bold and forceful critique of Indigenous leaders and politics and a sensitive reflection on the traumas of colonization that shape our existence.

Alfred, T. (G. R.). (2005). *Wasáse: Indigenous pathways of action and freedom*. Broadview Press.

The word *Wasáse* is the Kanienkeha (Mohawk) word for the ancient war dance ceremony of unity, strength, and commitment to action. The author notes, "This book traces the journey of those Indigenous people who have found a way to transcend the colonial identities which are the legacy of our history and live as *Onkwehonwe*, original people. It is dialogue and reflection on the process of transcending colonialism in a personal and collective sense: making meaningful change in our lives and transforming society by recreating our personalities, regenerating our cultures, and surging against forces that keep us bound to our colonial past."

Apthorp, H. S., D'Amato, E. D., & Richardson, A. (2002). *Effective standards-based practices for Native American students: A review of research literature*. Mid-Continent Research for Education and Learning.

This report reviews education programs and practices that have improved Native American student achievement in English language arts and mathematics. In Navajo Tribal schools, teaching Indigenous language and literacy first, followed by teaching English and promoting bilingualism, helped students perform well on tests of vocabulary, comprehension, and writing. In Hawaii, a culturally congruent English language arts program significantly improved Native Hawaiian children's achievement in reading. Emphasis on comprehension over mechanics and phonics allowed children to learn in ways that were congruent with their everyday experiences outside of school. The use of ethnomathematics, based on the same principles of cultural congruence, led to improved student achievement for Native Hawaiian children and Alaskan rural middle school students. All these programs required extensive collaboration and time. Although limited in scope, the evidence suggests that congruency between the school environment and the culture of the community is critical to educational success. Collaborative research and development efforts, carried out at the local level, are needed. Seven action steps are recommended in this regard. An appendix outlines plans for further research.

Barnhardt, R., & Oscar Kawagley, A. (2005). Indigenous knowledge systems and Alaska Native ways of knowing. *Anthropology & Education Quarterly*, *36*(1), 8-23.

Drawing on experiences across Fourth World contexts, with an emphasis on the Alaska context, this article seeks to extend our understandings of the learning processes within and at the intersection of diverse worldviews and knowledge systems. We outline the rationale for a comprehensive program of educational initiatives closely articulated with the emergence of a new generation of Indigenous

scholars who seek to move the role of Indigenous knowledge and learning from the margins to the center of educational research, thereby confronting some of the most intractable and salient educational issues of our times.

Battiste, M. (2005). Indigenous knowledge: Foundations for First Nations. *WINHEC: International Journal of Indigenous Education Scholarship*, (1), 1-17.

This essay seeks to clarify the theoretical frameworks that have been developed to understand Indigenous knowledge, provide some insight into the reasons for the tensions between Indigenous and Eurocentric ways of knowing, and point out the challenges these conflicts bring to educational systems. It is part of a study that responds to the Government of Canada's working partnership with First Nations to improve the quality of Aboriginal life and education in Canada through research conducted with the Education Renewal Initiative.

Brayboy, B. M. J., Faircloth, S. C., Lee, T. S., Maaka, M. J., & Richardson, T. A. (2015). Sovereignty and education: An overview of the unique nature of Indigenous education. *Journal of American Indian Education*, *54*(1), 1-9.

According to Creek scholar K. Tsianina Lomawaima, "The history of American Indian education can be summarized in three simple words: battle for power." This statement concisely illustrates the larger complex struggle regarding the schooling of American Indians, Alaska Natives, and Native Hawaiians. Education was, and in many ways continues to be, (1) a battle for the hearts and minds of Indigenous nations; (2) a colonial call for assimilation; and (3) a responsibility of the federal government arising from a series of agreements between Indian nations and the U.S. meant to open up land bases to a burgeoning immigrant population. In short, the education of Indigenous peoples is intricately intertwined with the legal/political relationship between Indigenous peoples and the U.S. government, as well as myriad racist policies and practices that have devastated Indian children and communities. In this introduction, we briefly outline this relationship and offer an overview of the articles that follow.

Butterneld, R. (1994). *Blueprints for Indian education: Improving mainstream schooling*. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools.

The Indian Nations At Risk Task Force and the White House Conference on Indian Education suggested systemic reforms that would improve the education of Native

students who attend public schools. These reforms focus on fostering intercultural harmony in schools, improving teacher preparation, developing instructional curricula and strategies that support diverse cultural needs and learning styles, including American Indian and Alaska Native (AI/AN) parents in the education process, and adopting a new paradigm for evaluation of AI/AN student progress and success. Proven practices that establish intercultural harmony in schools include developing positive self-regard in students; increasing intergroup contact under specified conditions; introducing in-depth multicultural activities at an early age; and engaging in activities that replace inaccurate information, negative attitudes, and discriminatory behavior. Non-Native educators need in-depth, sustained multicultural training to prepare for teaching culturally diverse student populations. A culturally relevant curriculum takes into account the interests and needs of AI/AN students and their learning strengths for visual, perceptual, and spatial information. Schools must make special efforts to include AI/AN parents, as this often improves student attitudes as well as achievement and behavior. Finally, more authentic indicators of learning, such as criterion-referenced tests or portfolios of student progress, are needed to measure AI/AN educational progress.

Cajete, G. A. (1994). Land and education. *Winds of Change*, *8*(1), 42-47.

This article discusses the philosophy and cultural values of American Indians as expressed through their connection to the natural world. Gregory Cajete stresses the importance of revitalizing the value of living in a harmonious and sustainable relationship to the land and, building on this relationship, a thorough development of Indian-based environmental science curricula.

Cajete, G. (2000). *Native science: Natural laws of interdependence*. Santa Fe, NM: Clear Light Publishers.

In *Native Science*, Gregory Cajete "tells the story" of Indigenous science as a way of understanding, experiencing, and feeling the natural world. He points to parallels and differences between the Indigenous science and Western science paradigms, with special emphasis on environmental/ecological studies. After discussing philosophical foundations, Cajete addresses such topics as history and myth, primal elements, social ecology, animals in myth and reality, plants and human health, and cosmology and astronomy. In the Indigenous view, human observers are in no way separate from the world and its creatures and forces. Because all creatures and forces are related and thus bear responsibility to and for one another, all are co-creators. Five centuries ago,

Europeans arrived on the American continent, but they did not listen to the people who had lived for millennia in spiritual and physical harmony with this land. In a time of global environmental degradation, the science and worldview of the continent's First Peoples offer perspectives that can help us work toward solutions.

Castagno, A. E., & Brayboy, B. M. J. (2008). Culturally responsive schooling for Indigenous youth: A review of the literature. *Review of Educational Research*, *78*(4), 941–993. https://doi.org/10.3102/0034654308323036

This article argues that federally funded Indigenous teacher preparation programs housed at mainstream, predominantly white universities can be colonial and thus require significant focused work in order to ensure that they are not. The article has three interrelated objectives: first, to discuss efforts to prepare Indigenous teachers for Indigenous schools within predominantly white university teacher preparation programs; second, to examine whether these programs continue the legacy of colonization and assimilation or advance Tribal nations' goals of sovereignty and self-determination; and third, to extend the theoretical capacities of critical race theory and Tribal critical race theory by using their analytic tools to make sense of particular efforts in Indigenous education. The preparation of culturally responsive Indigenous teachers for schools serving Indigenous youth is clearly needed, but this is difficult work given the larger context of imperialism, white supremacy, and assimilation that still structures our educational institutions.

Cleary, L. M., & Peacock, T. D. (1998). *Collected wisdom: American Indian education*. Allyn & Bacon.

Based on interviews and classroom observation, this book presents the "collected wisdom" of 60 teachers of American Indian students in all parts of the U.S., as well as teachers of Indigenous students in Australia and Costa Rica. Chapter 1, "The Teacher as Learner" presents the authors' backgrounds, the study's emerging themes, the general procedures of the study, and the rationale for the final presentation of data. The study was based on the premise that teachers in schools that serve Indian children should see themselves as learners who are open to understanding the reasons that children and communities are the way they are, who are willing to discover and consider the differences between school and home cultures, and who are willing to change their ways of teaching to give children a better chance in school and life. Each subsequent chapter has a theme and standard format: a story that introduces the chapter's content, questions to tap the reader's prior knowledge, a profile of a teacher-interviewee, a problematic case study, a summary of research on the theme

and its implications for practice, and references. Chapter titles include "Cultural Difference: Recognizing the Gap into Which Students and Teachers Fall"; "What Has Gone Wrong: The Remnants of Oppression"; "Creating a Two-Way Bridge: Being Indian in a Non-Indian World"; "Issues of Native Language"; "Ways of Learning"; "Literacy, Thought, and Empowerment"; and "What Works: Student Motivation as a Guide to Practice." The last chapter is an epilogue that discusses the universality of issues in Indigenous education, the strength and tenacity of culture, and the need for an integrated approach to educational problems. Appendixes detail the research methodology and provide questions to guide a teacher's change to authentic assessment.

Cornell, S., & Kalt, J. P. (1998). Sovereignty and nation-building: The development challenges in Indian country today. *American Culture and Research Journal*, *22*, 187–214.

The Indian nations of the U.S. face a rare opportunity. This is not the occasional business opportunity of reservation legend, when some eager investor would arrive at Tribal offices with a proposal "guaranteed" to produce millions of dollars for the Tribe—although such investors still appear, promises in hand. Nor is it the niche economic opportunity of gaming, although that has transformed some Tribes' situations in important ways. This opportunity is a political and organizational one. It is a chance to rethink, restructure, reorganize—a chance not to start a business or exploit an economic niche but substantially reshape the future. It is the opportunity for nation building.

Deyhle, D. (1995). Navajo youth and Anglo racism: Cultural integrity and resistance. *Harvard Educational Review*, *65*(3), 403-445.

In this article, Donna Deyhle presents the results of a decade-long ethnographic study of the lives, both in and out of school, of Navajo youth in a border reservation community. She describes the racial and cultural struggle between Navajos and Anglos and the manifestation of that struggle in schools and the workplace. While differences in culture play a role in the divisions between Anglos and Navajos, Deyhle asserts that these differences intertwine with power relations in the larger community, and that Navajo school success and failure are best understood as part of this process of racial conflict. Navajos, subjected to discrimination in the workplace and a vocationally centered assimilationist curriculum in schools, are more academically successful when they are more secure in their traditional culture. This study demonstrates that those students who embrace this life-affirming vision both gain a solid place in their society and are more successful in the Anglo world of the school.

Deloria Jr., V. (1988). *Custer died for your sins: An Indian manifesto*. Norman: University of Oklahoma Press.

In his preface to the paperback edition, the author observes, "The Indian world has changed so substantially since the first publication of this book that some things contained in it seem new again." Indeed, it seems that each generation of whites and Indians will have to read and reread Vine Deloria's manifesto for some time to come before we absorb his special, ironic Indian point of view and what he tells us, with a great deal of humor, about U.S. race relations, federal bureaucracies, Christian churches, and social scientists.

Deloria, V., Deloria Jr., V., & Wildcat, D. R. (2001). *Power and place: Indian education in America*. Fulcrum Publishing.

Power and Place examines the issues facing Native American students as they progress through schools, colleges, and on into professions. This collection of sixteen essays is at once philosophic, practical, and visionary. It is an effort to open discussion about the unique experience of Native Americans and offers a concise reference for administrators, educators, students, and community leaders involved with Indian Education.

Demmert Jr., W. G. (2001). *Improving academic performance among Native American students: A review of the research literature*. ERIC Clearinghouse on Rural Education and Small Schools.

Improving the quality of education for Native American (American Indian, Alaska Native, and Native Hawaiian) students—particularly with the intent of improving academic performance—presents a complex challenge for schools serving Native communities. Especially important players in meeting this challenge are Native American educators, researchers, parents, and Tribal and political leaders.

Freeman, M. B. (2004). *The resiliency of a people: A Haudenosaunee concept of helping* [Doctoral dissertation, McMaster University].

This paper explores the impact of traumatic experiences of colonialism, government policies, genocide, racism, discrimination, oppression, residential schools, and more that have affected Aboriginal peoples' lives for many generations. These traumas have compounded into many layers of grief and loss. Aboriginal people have not had the opportunity to grieve, heal, or recover from such pain and suffering, leaving communities, families, and individuals in states of deprivation, apathy,

powerlessness, and hopelessness. First Nations communities are faced with devastating conditions and high rates of suicide, alcoholism, violence, family breakdowns, drug addiction, poverty, unemployment, and homelessness—all symptoms of much deeper underlying problems. Each Aboriginal person, family, and nation accumulates and carries the pains and trauma from generations before, not knowing how to abolish or recover from this emotional, psychological, and spiritual wounding. This research highlights the importance of cultural knowledge, practices, and connections to the land in assisting Aboriginal people in recovering from generations of trauma, loss, and pain. The research focuses on the Six Nations Iroquois Haudenosaunee people of the Grand River. It explores the cultural teachings of the Iroquois Haudenosaunee and how social work and counselling practitioners are using traditional Haudenosaunee/Iroquois knowledge as a foundation to their practice in helping Iroquois people recover from generational trauma. As a result of this research, a cultural model for social work practice has been produced to assist practitioners in their role and work with Aboriginal people.

Grande, S. (2004). *Red pedagogy: Native American social and political thought*. New York: Rowman & Littlefield.

This ground-breaking text explores the intersection between dominant modes of critical educational theory and the socio-political landscape of American Indian education. Grande asserts that, with few exceptions, the matters of Indigenous people and Indian education have been either largely ignored or indiscriminately absorbed within critical theories of education. Furthermore, American Indian scholars and educators have largely resisted engagement with critical educational theory, tending to concentrate instead on the production of historical monographs, ethnographic studies, Tribally-centered curricula, and site-based research. Such a focus stems from the fact that most American Indian scholars feel compelled to address the socio-economic urgencies of their own communities, against which engagement in abstract theory appears to be a luxury of the academic elite. While Grande acknowledges the dire need for practical, community-based research, she maintains that the global encroachment on Indigenous lands, resources, cultures, and communities points to the equally urgent need to develop transcendent theories of decolonization and to build broad-based coalitions.

Hare, J., & Pidgeon, M. (2011). The way of the warrior: Indigenous youth navigating the challenges of schooling. *Canadian Journal of Education, 34*(2), 93–111.

The study examines the educational experiences of 39 First Nations youth, ages 16-20, from two First Nations on-reserve communities in northern Ontario, who share their reflections and experiences of reserve and public schooling. We drew on the Indigenous metaphor of the "new warrior" to analyze how these youth experienced and responded to educational challenges. Their conversations describe how racism framed their schooling experiences and how they made use of their Indigenous sources of strength, which included family and community structures, to address the inequalities in their schooling.

Hermes, M. (2005). Resources for teachers to Indigenize education. *The Tribal College Journal: Tribal College Journal of American Indian Higher Education, 76*(3), 1-5.

This is written for non-Native teachers at Tribal colleges, for Native American instructors who were likely schooled in Western-oriented universities, and for veterans who have taught for many years but who still ask, "How do we teach math in an Indigenous way? Or a Navajo way? How do we teach basic writing skills in an Ojibwe way?"

Hermes, M. (2007). Moving toward the language: Reflections on teaching in an Indigenous-immersion school. *Journal of American Indian Education, 46*(3).

A powerful tool for creating culture—while at the same time a cognitively rigorous exercise—Indigenous language immersion could be a key for producing both language fluency and academic success in culture-based schools. Drawing on seven years of critical ethnographic research at Ojibwe schools in Minnesota and Wisconsin, this researcher suggests Indigenous schools consider shifting from a culture-based curriculum to teaching culture through the Indigenous language. In this article, the researcher chronicles her thinking that led to direct involvement in the founding of an Ojibwe language-immersion school. Reflecting on one year of co-teaching, some of the success and challenges of teaching in a new immersion school are articulated.

Hickling-Hudson, A., & Ahlquist, R. (2003). Whose culture? The colonising school and the miseducation of Indigenous children. *Journal of Postcolonial Education*, 2(2), 15-35.

This paper explores the problematic legacy of deculturalisation in the education of Indigenous primary school students in Australia. The authors observed the curriculum provided at a government school for Indigenous children in a rural community. They discuss how a model of white-supremacist schooling operates as an agent of

assimilation, and becomes pivotal in the attempt to eradicate Indigenous cultures. In exploring challenges and dilemmas for teacher educators and education policymakers arising out of these issues, the paper continues the postcolonial debate about forging creative approaches to cross-cultural and anti-racist education for Indigenous children in their community contexts.

Kawagley, A. O. (1995). *Incorporation of the world views of Indigenous cultures: A dilemma in the practice and teaching of Western science*. Paper presented at the International History, Philosophy, and Science Teaching Conference, Minneapolis, MN.

The teaching of science in the U.S. is dominated by examples of the contributions of European and American scientists. The multitude of contributions of knowledge and ways of thinking of the many other cultures of the world have been largely ignored. This paper presents evidence from the Yupiaq culture in Southwestern Alaska that demonstrates that Indigenous cultures have developed their own scientific bodies of knowledge and ways of thinking about the world that differ in crucial ways from that of Western science. Yupiaq contributions to science and technology and Yupiaq worldviews are described. Implications for curriculum development and pedagogy are discussed.

Kawagley, A. O., & Barnhardt, R. (1998). *Education Indigenous to place: Western science meets Native reality*. Alaska Native Knowledge Network.

Indigenous peoples throughout the world have sustained their unique worldviews and associated knowledge systems for millennia. Many core values, beliefs, and practices associated with those worldviews have an adaptive integrity that is as valid today as in the past. However, traditional educational processes to transmit Indigenous beliefs and practices have frequently conflicted with Western formal schooling and its worldview. This paper examines the relationship between Native ways of knowing and those associated with Western science and formalized schooling in order to provide a basis for an education system that respects the philosophical and pedagogical foundations of both cultural traditions. Although examples are drawn from the Alaska Native context, they illustrate issues that emerge anywhere that efforts are underway to reconnect education to a sense of place. Elements of Indigenous and Western worldviews are contrasted. Vignettes and examples depict the obstacles to communication between state agency personnel and local elders discussing wildlife and ecology issues; a cross-cultural immersion program for non-Native educators

held at a remote camp with Native elders as instructors; areas of common ground across worldviews; and Indigenous implications for a pedagogy of place. Educational applications of four Indigenous views are discussed: long-term perspective, interconnectedness of all things, adaptation to change, and commitment to the commons.

Kawagley, A. O., & Barnhardt, R. (1999). *A long journey: Alaska onward to excellence in Yupiit/Tuluksak schools* [Case study]. Northwest Regional Educational Lab.

As part of a larger study of systemic education reform in rural Alaska, this case study examines the school improvement process undertaken in Yupiit School District (YSD). YSD consists of three Yupiaq villages in Southwest Alaska that joined together in 1984 to form the Yupiit Nation and run their own schools. In 1992 a district-level leadership team, trained in the Alaska Onward to Excellence school improvement process, called the first community-wide meetings to discuss the values and beliefs that should be passed on to the next generation. The district team then compiled community values and beliefs, drew up a draft mission statement, and listed tentative student goals. After extensive community feedback, the YSD school board adopted the following student goals: knowledge of Yup'ik values, culture, and subsistence skills; preparation for work and further education; respect and positive attitudes toward life, learning, and community; development as law-abiding citizens; and ability to communicate in Yup'ik and English. Local leadership teams then identified the goal of greatest concern in each community and developed specific actions to advance that goal. By the third year of the process, results included improved student attendance, increased parent and elder participation, provision of curricular training, and closer school-community cooperation. This cooperation was particularly noteworthy in the development of a seasonally-organized cultural curriculum. Through this curriculum, everyone in the community becomes a teacher, every place is a potential classroom, and every community activity constitutes a learning opportunity.

Krippendorff, K. (2018). *Content analysis: An introduction to its methodology* (4th ed.). Sage publications.

What matters in people's social lives? What motivates and inspires our society? How do we enact what we know? Since the first edition published in 1980, *Content Analysis* has helped shape and define the field. In the highly anticipated fourth edition, award-winning scholar and author Klaus Krippendorff introduces the most current method of analyzing the textual fabric of contemporary society. Students and scholars will

learn to treat data not as physical events but as communications that are created and disseminated to be seen, read, interpreted, enacted, and reflected upon according to the meanings they have for their recipients. Interpreting communications as texts in the contexts of their social uses distinguishes content analysis from other empirical methods of inquiry.

Lee, T. S. (2010). *Complex ecologies of Indigenous education at the Native American Community Academy*. Paper presentation at the annual conference of the American Educational Research Association.

The Native American Community Academy (NACA) is demonstrating an example of Indigenous philosophies and practices in education through its holistic, student-centered approach to education. NACA was one school in a large statewide study on Indian education in New Mexico. Focus groups with students, teachers, and community members illustrate the evolution of complex ecologies NACA creates to facilitate students' growth intellectually, socially, emotionally, and physically. The experiences and perspectives of the participants at this secondary-level charter school are shared to illustrate how this school exemplifies a model of Indigenous education, how it creates and builds community, and how it teaches students to know themselves by motivating a critical Indigenous consciousness and a sense of service toward building sustainable communities.

Lipka, J. (1990). Integrating cultural form and content in one Yup'ik Eskimo classroom: A case study. *Canadian Journal of Native Education*, *17*(2), 18-32.

Analysis of an exemplary lesson by a Yupik first grade teacher reveals that the teacher contextualized the lesson by choosing a cultural activity, using an interactional style of teacher demonstration and student observation and demonstration, and emphasizing the importance of the activity to community and kin.

Lomawaima, K. T., & McCarty, T. L. (2006). *"To remain an Indian": Lessons in democracy from a century of Native American education*. Teachers College Press.

What might we learn from Native American experiences with schools to help us forge a new vision of the democratic ideal—one that respects, protects, and promotes diversity and human rights? In this fascinating portrait of American Indian education over the past century, the authors critically evaluate U.S. education policies and practices, from early twentieth-century federal incarnations of colonial education

through the contemporary standards movement. In the process, they refute the notion of "dangerous cultural difference" and point to the promise of diversity as a source of national strength.

Lowan, G. (2009). Exploring place from an Aboriginal perspective: Considerations for outdoor and environmental education. *Canadian Journal of Environmental Education*, *14*, 42-58.

This article reports on a recent study about Outward Bound Canada's Giwaykiwin program for Aboriginal youth. A key finding that emerged from the study was the need to design contemporary Aboriginal education programs based on a recognition of the evolution of Indigenous cultures and languages in close relationship with specific geographical areas. The implications of these findings are presented for both Aboriginal and non-Aboriginal educators interested in incorporating an Aboriginal understanding of place in their practice. Recommendations are also provided for grounding outdoor and environmental education programs in local Indigenous traditions.

Marchant, H. C. (2009). Indigenous ways of learning, being and teaching: Implications for new teachers to first nations schools. [Masters dissertation, University of Victoria].

As First Nations communities in British Columbia take control over the education of their children, it is important for teachers to understand some of the distinctions and nuances of the culture particular to First Nations schools and communities. This project attempts to provide some of that information. Three sources of information provide the reader with important cultural knowledge for teachers new to First Nations schools. Interviews with five respected principals and five respected educators at First Nations schools in British Columbia provide the first source of knowledge. Personal and significant cultural experiences, obtained over seven years teaching in First Nations schools, provide the second source. Finally, a literature review depicting aspects of Indigenous cultures, important for new teachers to understand, provides the third source.

Pewewardy, C. (1998). Fluff and feathers: Treatment of American Indians in the literature and the classroom. *Equity & Excellence*, *31*(1), 69-76.

There is a critical need for culturally responsive teachers for American Indian children in American schools today. Public school educators as a group have a colonial mindset, viewing Indigenous peoples and other minorities from a falsely superior "we" versus "they" perspective. In the midst of this cultural mismatch, the public school system is failing American Indian learners. Educational statistics indicate underachievement, absenteeism, overage students, and low socioeconomic status. More subjective evaluations add negative educational goals and low levels of aspiration. There are volumes of research and evidence that prove the need for change, but people who have been teaching American Indian children for many years already know the status of Indian education today and are committed to improving the condition for future generations.

RedCorn, A. (2020). Liberating sovereign potential: A working education capacity building model for Native Nations. *Journal of School Leadership*, *30*(6), 493-518.

With culturally sustaining pedagogies gaining momentum in our evolving educational landscape, the political backdrop of sovereignty and the pursuit of self-determination through education for Indigenous peoples creates a truly unique leadership context. The purpose of this conceptual article is to introduce a working model for educational leaders in Native nations to liberate educational sovereignty by engaging in broad and dynamic systems thinking that centers on their nation's cultural and governance systems. From this positionality, this model then calls for leaders to engage in the iterative work of (a) assessing the educational landscape and identifying community assets, (b) fostering professional growth across systems, and (c) engaging in ongoing systems development and alignment advocacy. Furthermore, this model calls for leaders to incorporate critical Indigenous education frameworks and philosophies into these efforts, as well as foster a healthy community of practice across all systems of education to cultivate conditions for ongoing learning and connectivity among professionals. Through these efforts, over time leaders in Native nations can increase their ability to liberate educational sovereignty by creating an army of change agents working to (re)center systems of learning around Native nations' cultural and governance systems, and pull learning systems away from the assimilationist trajectory found in the status quo of settler-colonial education.

Sianturi, M., Chiang, C. L., & Au Hurit, A. (2018). Impact of a place-based education curriculum on Indigenous teacher and students. *International Journal of Instruction*, *11*(1), 311-328.

This study aimed to investigate the impact of a place-based education curriculum (PBE) on Indigenous teacher empowerment and improvement of Indigenous students' learning achievement. This study applied mixed-method research—particularly concurrent triangulation design. The study took place in a remote Indigenous elementary school in Papua, Indonesia. The participants were an Indigenous teacher and eleven Indigenous students. The PBE curriculum entitled "Who is Papuans" was developed by integrating the Indigenous students' place. The study revealed the development and practice of the PBE curriculum to be an effective teaching method. In order to teach Indigenous students effectively, there is a need for the Indigenous teacher to (a) focus on the curriculum; (b) start from the daily realities of students' lives; (c) emphasize the use of dialog, pictures, story, writing, and telling; and (d) utilize the cultural approach to enable students' learning achievement. By developing and practicing the PBE curriculum, the Indigenous teacher also obtained a new sight of culture awareness.

Scully, A. (2015). Unsettling place-based education: Whiteness and land in Indigenous education in Canadian teacher education. *Canadian Journal of Native Education*, *38*(1).

Indigenous education is being increasingly emphasized in Canadian faculties of education. While this must prioritize addressing the learning needs of Indigenous students, it must also serve to shift the gravely lacking common knowledge of most Canadians regarding Indigenous peoples in Canada. In this article, the author shares the results of her doctoral study investigating the use of critical place-based education, in Indigenous education in teacher education, to address and improve the preparedness of predominantly white settler pre-service teachers in building relationships in their own teaching practice so that they can do a good job of including Indigenous peoples and perspectives in their teaching. Employing the methodology of self-study of teacher education practice (S-STEP), she has analyzed trends and patterns in student assignments, responses, and anonymous feedback in 17 sections of a required course in Aboriginal education in a faculty of education. Centering land and local Indigenous peoples can support unsettling whiteness, and can reveal and recover Canadians' existing citizenship implications related to land and Indigenous peoples to serve a just future in Canada.

Smith, G. A. (2002). Place-based education: Learning to be where we are. Phi Delta Kappan, 83(8), 584–594. https://doi.org/10.1177/003172170208300806

One of the primary strengths of place-based education is that it can adapt to the unique characteristics of particular places, and in this way it can help overcome the disjuncture between school and children's lives that is found in too many classrooms.

Sparks, S. (2000). Classroom and curriculum accommodations for Native American students. *Intervention in School and Clinic, 35*(5), 259-263.

This article explores ways to enhance the classroom and the curriculum to meet the learning and social needs of Native American students. By using a culture-specific approach, the teacher helps to improve academic performance, social understanding, and acceptance by peers. Achieving these outcomes is a primary focus of this article.

Trujillo, O., Viri, D., & Figueira, A. (2002). The Native Educators Research Project.

In fall 2001, the Center for Indian Education at Arizona State University received a federal grant to conduct research on issues of Native language and culture in the classroom. The study focuses on a large cohort of American Indian, Alaska Native, and Native Hawaiian candidates in teacher preparation programs to investigate how such programs contribute to the development of effective practices that integrate Native language and culture and positively affect students' learning and social development. In the project's first year, nine researchers gather data on 670 Native pre-service teachers in 28 teacher education programs to examine the pre-service teachers' attitudes toward inclusion of Native language and culture in schooling, how their teacher preparation programs impact these attitudes, and which components of programs evidence their specific interest in the needs of Native students. Case studies are undertaken in the project's second year, as participants begin their induction year as teachers situated in their own classrooms. The inductees are trained in the procedures of teacher research and gather data related to issues of language, culture, and student achievement in their classrooms and school sites. This study aims to lead the way toward sound models and effective practices in the professional development of Native teachers.

Tuck, E., McKenzie, M., & McCoy, K. (2014). Land education: Indigenous, post-colonial, and decolonizing perspectives on place and environmental education research. *Environmental Education Research*, *20*(1), 1–23. https://doi.org/10.1080/13504622.2013.877708

This editorial introduces a special issue of *Environmental Education Research* titled "Land education: Indigenous, post-colonial, and decolonizing perspectives on place and environmental education research." The editorial begins with an overview of each of the nine articles in the issue and their contributions to land and environmental education, before outlining features of land education in more detail. "Key considerations" of land education are discussed, including: *land and settler colonialism, land and Indigenous cosmologies, land and Indigenous agency and resistance,* and *the significance of naming.* The editorial engages the question "Why land education?" by drawing distinctions between land education and current forms of place-based education. It closes with a discussion of modes and methods of land education research.

Ward, C. (1998). Community resources and school performance: The Northern Cheyenne case. *Sociological Inquiry, 68*(1), 83-113.

This research investigates the school performance of Indian students on the Northern Cheyenne reservation using both quantitative and qualitative data. Understanding influences on school performance is important since previous research established its impact on dropout behavior. Statistical analyses assess the relative effects of students' residence in reservation communities, the type of schools students attend (public, Catholic, or Tribal), gender, family characteristics, and school experience variables. Findings reveal the importance of students' community residence for explaining performance levels at the two Indian schools, the Tribally controlled and Catholic schools, and school experiences for understanding performance of the non-Indian public school students. Qualitative data on contextual factors for communities and schools help to explain how community characteristics such as population size, community access to the school, support for education, and traditional culture interact with the specific schools serving the community. This research suggests that contrary to conventional analyses of American Indian assimilation, the traditional culture, social resources, and interaction patterns of students' communities can have positive effects on students' schooling outcomes.

Whitlow, K. B., Oliver, V., Anderson, K., Brozowski, K., Tschirhart, S., Charles, D., & Ransom, K. (2019). Yehyatonhserayenteri. *Canadian Journal of Education/Revue canadienne de l'éducation*, *42*(2), 553-575.

Focusing on Onkwehonwe (Indigenous) ways of knowing, and Haudenosaunee ways of knowing in particular, this article showcases the strengths of Onkwehonwe-led education and leadership. Under the leadership of our Youth Advisory Council, 22 young people (11

Onkwehonwe and 11 non-Onkwehonwe) took part in three days of workshops on Six Nations. The workshops were led and conducted by Haudenosaunee knowledge keepers who covered a range of topics. Six months after the completion of the workshops, 18 of the 22 youths participated in one-on-one follow-up interviews. Community impact interviews were also conducted with 10 adult community members from Six Nations and Brantford. The workshops and interviews showed that Nation-specific learning helped to inform non-Onkwehonwe youth about the history of the lands on which they live, granting them access to traditions and ceremonies that resonated with them in both emotional and intellectual ways. Through experiential education and Haudenosaunee leadership, both Onkwehonwe and non-Onkwehonwe youth learned to value the original instructions, build relationships, and address the challenges of decolonization in an increasingly uncertain world.

Wilkins, D. E., & Lomawaima, K. T. (2001). *Uneven ground: American Indian sovereignty and federal law*. University of Oklahoma Press.

In the early 1970s, the federal government began recognizing self-determination for American Indian nations. As sovereign entities, Indian nations have been able to establish policies concerning healthcare, education, religious freedom, law enforcement, gaming, and taxation. Yet these gains have not gone unchallenged. Starting in the late 1980s, states have tried to regulate and profit from casino gambling on Indian lands. Treaty rights to hunt, fish, and gather remain hotly contested, and traditional religious practices have been denied.

Wilkins, D. E. (1997). *American Indian sovereignty and the U.S. Supreme Court: The masking of justice*. University of Texas Press.

"Like the miner's canary, the Indian marks the shift from fresh air to poison gas in our political atmosphere; and our treatment of Indians, even more than our treatment of other minorities, reflects the rise and fall in our democratic faith," wrote Felix S. Cohen, an early expert in Indian legal affairs. In this book, David Wilkins charts the "fall in our democratic faith" through fifteen landmark cases in which the Supreme Court significantly curtailed Indian rights. He offers compelling evidence that Supreme Court justices selectively used precedents and facts, both historical and contemporary, to arrive at decisions that have undermined Tribal sovereignty, legitimated massive Tribal land losses, sanctioned the diminishment of Indian religious rights, and curtailed other rights as well. These case studies—and their implications for all minority groups—make important and troubling reading at a time when the Supreme Court is at the vortex of political and moral developments that are

redefining the nature of American government, transforming the relationship between the legal and political branches, and altering the very meaning of federalism.

Wilkins, D. E. (2002). *American Indian politics and the American political system* (4th ed.). Rowman & Littlefield.

American Indian Politics and the American Political System is a comprehensive text written from a political science perspective. It analyzes the structures and functions of Indigenous governments (including Alaskan Native communities and Hawaiian Natives) and the distinctive legal and political rights these nations exercise internally. It also examines the fascinating intergovernmental relationship that exists between Native nations, the states, and the federal government. In the fourth edition, Wilkins and Stark analyze the challenges facing Indigenous nations as they develop new and innovative strategies to defend and demand recognition of their national character and rights. They also seek to address issues that continue to plague many nations, such as notions of belonging and citizenship, implementation of governing structures and processes attentive to Indigenous political and legal traditions, and the promotion and enactment of sustainable practices that support interdependence in an increasingly globalized world.