

# Securing our Futures through Land and Water Education

## Developing an Indigenous Language Curriculum in a Tribal Nation Early Learning Program

ANNA LEES

*University of Washington*

MICHELE BALAGOT

*Tulalip Tribes*

NATOSHA GOBIN

*Tulalip Tribes*

MICHELLE MYLES

*Tulalip Tribes*

ELIZABETH STARKS

*University of Washington*

DEVELOPING CURRICULUM to support the education of Indigenous children in settler colonial models of schooling is an important effort toward decolonization to support children's everyday wellness and ensure thriving Indigenous futures (Brayboy & Lomawaima, 2018; Simpson, 2017). Such efforts denounce "the settler colonial curricular project of replacement, which aims to vanish Indigenous peoples and replace them with settlers, who see themselves as the rightful claimants to land, and indeed, as indigenous" (Tuck & Gaztambide-Fernández, 2013, p. 73). In this article, we depict ways in which an Indigenous early learning program and language department have enacted educational self determination through curricular development that centers Indigenous axiologies, ontologies, and epistemologies (AOE) or what in this project, we refer to in the Lushootseed language as cək<sup>w</sup>-, təl, and hayəd k<sup>w</sup>i g<sup>w</sup>əshaydx<sup>w</sup>s. We make sense of how scholarship has engaged AOE's to capture the complexity of indigeneity as it takes form locally in a Coast Salish Tribal Nation:

- cək<sup>w</sup>- ‡ straight, be right, correct (axiology)
  - *Remember the teachings/way of life.*
- təl ‡ true/real (ontology)
  - *Our ancestors' lifeway survived thousands of years needing each other; how do we take what we already know and utilize the teachings?*
- hayəd k<sup>wi</sup> g<sup>wə</sup>shaydx<sup>ws</sup> ‡ know/learn about (epistemology)
  - *Learn, be humble, forgive, work together.*

We prioritize our discussion of how a localized framework of cək<sup>w</sup>-, təl, and hayəd k<sup>wi</sup> g<sup>wə</sup>shaydx<sup>ws</sup> drives an Indigenous early learning curriculum toward thriving futures as an example of our optimistic resistance of settler replacement (Tuck & Gaztambide-Fernández, 2013).

Examining efforts of erasure and replacement in practice, scholars have made clear that U.S. public schools have worked to eliminate Indigenous languages and cultures since the onset of boarding schools (Lomawaima & McCarty, 2006) and that assimilative aims continue as a core principle of school curriculum (Brayboy & Lomawaima, 2018; Masta, 2018; Sabzalian, 2019). With an understanding that schools are structured to advance settler colonialism (Brayboy & Lomawaima, 2018; Calderón, 2014; Wolfe, 2006), educators must consider ways communities have resisted these efforts to maintain and further develop systems of Indigenous education (McCoy & Villeneuve, 2020). Existing research depicts community efforts to center Indigenous AOE in educational programming (Barajas-López & Bang, 2018; Brayboy & Castagno, 2009; Brayboy & Lomawaima, 2018; Hermes, 2005; Lee & McCarty, 2017; Lees & Bang, 2023; Marin & Bang, 2018; McCoy et al., 2017; Pacini-Ketchabaw & Taylor, 2015). This literature confirms that Indigenous AOE, and pedagogical modes of teaching and learning, are very much present within Indigenous communities and that land-and-water-based education offers a construct for including Indigenous epistemologies in curriculum (Calderón, 2014; Hermes, 2005; Pacini-Ketchabaw & Taylor, 2015; Simpson, 2014) and teacher professional development (PD) (Calderón et al., 2021).

The early learning program featured in this research is embracing land-and-water-based curriculum development that is localized to the Coast Salish Tribal Nation's language and culture. The project centers the Nation's goal of Indigenous language/culture revitalization, and also meets state and federal licensing requirements for early learning. Our study examined the ways in which Indigenous language/culture teachers have developed a locally specific, land-and-water-based curriculum for children birth-to-age-five (b-5) to be implemented within a licensed early learning program, resisting the widespread shift toward standardization in Early Childhood Education (Adriany, 2018; Haslip & Gullo, 2017; Iorio & Parnell, 2015; Nxumalo et al., 2011). As an important aspect of this research, we depict the process of developing land-and-water-based curriculum to emphasize the significance of understanding processes toward decolonization. The development of a land-and-water-based language/culture curriculum focused on fostering relationships with land, water, and place supports children's holistic development connected to their community and serves as an example of Indigenous resurgence in practice (Deloria & Wildcat, 2001; Simpson, 2017) where an Indigenous community is determining the content and context of their children's education.

## Beginning with Story

We begin the depiction of our curriculum development with a traditional Coast Salish story, *Her First Basket*, told by taq<sup>w</sup>šəblu, Vi Hilbert. We do this for a few reasons. Opening with story grounds our work in cək<sup>w</sup>-, təl, and hayəd k<sup>w</sup>i g<sup>w</sup>əshaydx<sup>w</sup>s and hopefully guides the reader to consider our efforts through an Indigenous, Coast Salish perspective. It also represents our time together where we consistently revisited ancestral teachings, from humans and more-than-humans, to guide our work and often discussed teachings from traditional stories that helped to determine the curricular aims as well as content. *Her First Basket* is of particular relevance as, for us, the story depicts an iterative design process that offered reassurance as our own curriculum development took multiple forms and perseverance before coming to products we were satisfied with. It exemplifies Indigenous ways of teaching and learning that have guided our work throughout this process. Finally, this story is included in the developed curriculum, and sharing it here in its entirety offers insight into the curricular content and cək<sup>w</sup>-, təl, and hayəd k<sup>w</sup>i g<sup>w</sup>əshaydx<sup>w</sup>s we have worked to center within our learning environment.

*Her First Basket told by taq<sup>w</sup>šəblu, Vi Hilbert*

*Long ago, before the world became the way it is today, there was a little girl. This little girl had been born with an illness that made her actions awkward. She could not run like the other children. She thought her thoughts in a different way. She spent a lot of time alone, because the children did not want her to be on their team or in their group. They felt uncomfortable with her, because she was different.*

*One day, she was sitting alone at the foot of a tree, feeling very sad. This tree happened to be a cedar tree, which is called the Grandmother of the People, x̄payac in our language. From this tree came everything that the people needed in life long ago. The Grandmother Tree had taught the people how to take strips of her bark and make all kinds of mats and baskets and hats and even towels and diapers with it. She taught them how to make houses and canoes from her trunk. She taught them how to make themselves strong with her boughs. But there was one thing she had not taught them yet: how to make baskets that could hold water without leaking.*

*This was the tree that the little girl had sat down by. Lucky for her. The Tree looked down and said, “Granddaughter, you seem very sad.” The Little Girl told the Tree all her troubles. That was one thing about the little girl: she could talk to the Tree very easily, unlike many people.*

*The Tree said, “Granddaughter, you are not only different; you are special. You will be a basket maker.”*

*The Little Girl said, “How can I make baskets, when my hands are so clumsy that I cannot even catch a ball most of the time?”*

*The Tree said, “Practice and know-how. I will offer up the know-how, and you must offer up the practice. First, you need to go down to the river. You will find a place where my roots are exposed. You will take as much of my root as you need to make your basket.”*

*The Little Girl said, “I don’t even know how much that is.”*

*The Tree said, “You will know.”*

*So, the Little Girl went and got the cedar roots. There is a special name for them in our language, capx̄. The Tree showed her how much root to take, how to prepare them for working and how to coil them around and stitch them tight to make a basket. The little girl worked hard. Her fingers were sore; her arms were sore; her patience almost ran out. She thought, “I can’t give*

up, or I might hurt the Tree's feelings. She is trying to be so nice to me, but I don't know if I can even make it to the end of this basket." The Tree smiled to herself. She knew what the little girl was thinking.

Finally, the basket was done. "There is one thing more," said the Tree. "You must go down to the river and dip up a basketful of water and bring it back to me." The Little Girl went to the river, dipped her basket full of water, and carried it back to the tree. Along the way, she could feel drops of water leaking out of the basket and falling on her legs. When she got back to the tree, her basket was almost empty.

"I walk so slowly because of my illness that all the water leaked out on my way back to you," she told the Tree.

"No," said the Tree. "Your basket was not tight enough. You need to take it apart and do it over." At first the Little Girl couldn't believe it. How mean, to make her take it all apart after all that work. But as she sat there, she gradually knew that she needed to take the basket apart.

"The second try is going to be just as bad as the first one," she said to herself. "I can't do this kind of work, because of my illness." Again, the Tree knew what she was thinking.

The little girl hardly heard her say, "The second one will be better than the first, because you know something now and you have practiced." It was almost as if the little girl had thought that herself.

Finally, the basket was finished for the second time. It looked very nice—even sides, tightly woven. "Now take it down to the river and dip up a basketful of water and bring it back to me." The Little Girl went down to the river, dipped her basketful of water and brought it back to the Tree. There was only a little bit of water on her legs this time. The basket was almost full, but not quite. "Not tight enough yet," said the Tree. "You need to take it apart and do it over."

The same thing happened all over again for a third time. Finally, the little girl brought back her fourth basket, and it stayed full. "I finished the basket now," she thought.

But then the Tree said, "You need to decorate your basket now."

"I don't know how to decorate a basket," said the little girl, almost crying. "I can't think of ideas like the other kids. I am not creative or smart, because of my illness."

"You can make a basket that holds water," said the Tree. "No one else can do that. Don't you think that is a smart thing to be able to do?"

"It's not because I am smart; it is because you taught me."

"And wasn't it smart of you to listen and to take it apart four times and never give up? So, for a design, just look around you. Take what you see, and make it yours."

The little girl looked around. The sun was shining and making her feel warm and happy. There was a dog walking by. He was a funny dog, always hanging around the village. From time to time, he would lie on his back with his feet in the air and bark. Everyone liked him. And there was a snake at her feet, sliding away from his old skin, with a beautiful pattern on his back.

The Tree said, as if she knew what the little girl was thinking, "Yes, you can put the sun and the dog and the snakeskin on your basket. That design will represent the thoughts and feelings that you are putting into your work. Then it will be a real basket, of the kind that we call *spæču*."

The little girl learned how to put the designs on the basket. When she showed it to the Tree, she felt a warmth in her hands as she held it. "I will keep this forever," she said. "Whenever I am sad, I will look at it and think of all the things I learned from you."

"No," said the Tree, "You must take it back to your village and present it to the oldest lady. That is what people must do with the first things that they make from my gifts. They must pass them on."

*“What will I say to the oldest lady? I can never think of anything to say to grown-ups.”*

*“You will speak from your heart when the time comes.”*

*The little girl went to where the oldest lady was staying. This lady was in a lot of pain from arthritis. She did not like to see the little girl who had such trouble moving, because that little girl reminded her of her own trouble. She had often said, “Little girl, go away; don’t bother me.” The little girl was afraid to talk to that lady, so she turned back to her own house.*

*She waited until the people were all gathered, and she told the head speaker that she had a little bit of work to do. And then she sat and listened to the songs of her the people at the gathering. Finally, the time came when the head speaker said, “This little girl has something on her mind.”*

*She asked the head speaker to call the elder’s Indian name. Then she said, “This is my first basket. It holds water without leaking. On it are the warm sunlight, the little dog who makes us laugh, and the snake leaving his old skin behind. These are all things that made me happy the day I finished my basket. I am giving this basket to you because you, like my teacher, have lived a long time and are wise, and like me, you sometimes need cheering up.”*

*The old lady thought, “This little one understands how I feel. How could I have ever been so impatient with her?”*

*Time passed, and the little girl grew up. As she grew older, she helped many people through her basket making. She passed along the knowledge of how to make a basket watertight. She lived according to the teachings that the Tree and the elder lady (who became her friend) gave her. And she became a treasure to her people. It would be nice to think that her illness left her. But it didn’t. She suffered from that illness all her life, and she accomplished all those things anyway.*

*We can still learn from her even to this very day. This story has no end, because her teachings have continued from long ago right up until now.*

This story, *Her First Basket*, is one that holds teachings that guided our curriculum development process, the curriculum content, and pedagogical aspirations in our work with Indigenous children. We name the curriculum *huyadadčəł*, *our ways*, to convey how the curriculum design builds on the lifeways carried on from ancestors of this community since time immemorial. Like the little girl learning to weave, our process has also taken multiple efforts and benefited from the support, guidance, and patience of human and more-than-human teachers. We depict how “practice and know-how” are interspersed in our process where we gain practice by writing, implementing, and revising curriculum and draw on know-how from *huyadadčəł*. The story we tell spans just three short years of committed curriculum work and focuses on the efforts of a Coast Salish language department and early learning program with the involvement of an Indigenous scholar who works as faculty at a local university.

What we share here is embedded in a greater research project that utilized Critical Indigenous Research Methods (Brayboy et al., 2012) with multiple data sources including daily observations of classroom language teaching using Indigenous Culture-Based Education Rubrics (Demmert et al., 2014), interviews with language teachers and classroom teachers, observations of regular curriculum meetings, and curriculum artifacts. In Lushootseed, we call this:

- *ptidg<sup>w</sup>asəb* † *think, think about, reflect, realize* (methodology). In connection with *huyadadčəł*, *our ways*
  - *This is how we will survive*

In this article, we depict our process of curriculum development focused on *huyadadčəł* and our *ptidg<sup>w</sup>asəb* to understand how this work engaged our theoretical commitments and the daily experiences and positive development of both children and teachers. We engage this writing through our personal narratives and storying (Archibald, 2008) as they took form through a self-facilitated, audio recorded discussion. We come together as researchers, educators, and community members. Anna is a Waganakasing Odawa descendent with Scottish, German, Italian, English, and African American ancestry. She has experience as an infant, preschool, and kindergarten teacher and works as an associate professor in early childhood teacher education. Anna lives near the reservation and has been working closely with the community over the past three years. Michele is a Coast Salish tribal citizen and began her work as a receptionist and then teacher assistant in 1990 at the early learning program. She is currently the director of the language department, where she began working in 1997. Natosha is a Coast Salish tribal citizen and supervisor and teacher in the language department where she has been working since 2000. Natosha began her teaching in the early learning program and currently teaches high school Lushootseed. Michelle is also a Coast Salish tribal citizen and supervisor and teacher in the language department who also teaches high school Lushootseed classes. Michelle began working in the department in 1995 as a teacher in the early learning program. Elizabeth is a Zuni Pueblo citizen with Diné and Anglo backgrounds. She has been working as a Research Scientist and artist with OpenSTEM Research Group at University of Washington and provided support designing materials and collecting data as a Research Assistant with Western Washington University.

Next, we share the process we underwent in developing a tribally specific, land-and-water-based Indigenous language curriculum for children birth-to-age-five (b-5) and the resulting curriculum design that may inform others engaged in such work.

### **A Process for Developing Early Learning Indigenous Language Curriculum**

This journey began when Anna was invited by the director of early learning to support a process of curriculum development between the early learning and language departments. There are two important points to consider in how this work began: 1) the early learning leadership expressed dedication to language and culture revitalization and put forth time and resources to engage that work, and 2) teachers were not the ones to ask for outside support. So, while the project had important support and administrative resources, there were also tensions. When asked about this during our reflective discussion, one of the language leaders stated,

I thought, “Oh, okay, this lady’s [Anna] going to come in here and start telling us what to do, and she’s smarter than thou,” just in my mind. But then as I got to know you, I was like, “Okay, she’s not treating us like we’re stupid.” It was totally different. It was like you were genuinely here to help us get our stuff in order and to really help us out to get our program ... to get our curriculum in shape ... And I’m glad that you’re Native ... because you can relate to what we’re going through from your own tribe. And if you bring a non-tribal in here, they’re all about the ... they’re all about the outside.

This brief recollection and the relationship building between Anna and the language/culture teachers spanned months of work as the project took form. It included many ups and downs and expressed frustrations but was always guided by the dedication to children’s thriving futures.

During this time of coming to know and trust each other we built our collective commitments and theoretical groundings that drove the curriculum design; like *Her First Basket*, the process was not easy, but we persevered, and with our continued efforts, our work strengthened.

### Theoretical Framing

While each individual involved in the curriculum development process has contributed their own world views, a shared theoretical framework took form in year two of this project. While we each respected and valued each other's perspectives by this time, developing a theoretical aim of the curriculum project proved a necessary foundation that ultimately served as a source of support and motivation throughout the design and challenges of implementation. At this time, most of the staff were on work-from-home status due to COVID-19. The language department leaders who were working on-site decided to continue forward with the curriculum project and invited Anna back to the office to support the project. As we revisited the curriculum work that had been developed, we stepped away from content and worked to determine the scope of curricular experiences for children birth-to-age-5. Developing a scope and sequence had been an ongoing challenge for the language department as narrowing the complexity of Indigenous lifeways and drawing on huyadadčəł as a curriculum plan was arguably a paradoxical process. We spent extensive time discussing what it is Indigenous children in this community need to know and how learning their language guided their development toward thriving futures. A language leader recalled the shift in curriculum organization that resulted from our process:

Before ... our curriculum was we had it, but it wasn't in any kind of order. It wasn't as detailed as it is now. We did a lot of words, instead of trying to get kids to talk with phrases ... We didn't have a lot of the cultural pieces that we do now. I mean, we had some, but that wasn't how we figured out how we were going to teach what the themes were going to be for the month. It seems the way that we did it, every year we were changing our curriculum.

As we worked to determine a curricular scope, we also discussed the pragmatic challenges of language instruction being limited to an hour each day with most classroom teachers offering limited, if any, extensions throughout the day (for a variety of complex reasons). Through this, we knew, as so many have named before (see Bang et al., 2014; Corntassel, 2012; Simpson, 2014, 2017), that to better serve Indigenous children we needed the curriculum to center land and water. We also agreed that integrating a land-and-water-based curriculum within the classrooms would require a process of decolonization (Smith, 2013; Tuck & Yang, 2012) as the primarily white classroom teachers expressed their concerns and pressure of having time to teach culture while feeling responsible toward kindergarten readiness (Iorio & Parnell, 2015). We recognized that, to integrate cək<sup>w</sup>-, təl, and hayəd k<sup>wi</sup> g<sup>wə</sup>shaydx<sup>ws</sup> within school-based education (Brayboy & Lomawaima, 2018; Grande, 2015; McCarty & Lee, 2014), we needed to consider the settler colonial constructs that drive both policy (Reyhner & Eder, 2017) and curriculum development (Calderón, 2014; Sabzalian, 2019) within the early learning program. Ultimately, we agreed that the best way to develop the huyadadčəł curriculum, while navigating the complexities of school-based education, was to begin with land and water (Bang et al., 2014; Cajete, 2015; Deloria & Wildcat, 2001; Simpson, 2017).

## Development of the Unit Calendar

With shared principles determined, we developed a seasonal based curriculum calendar relevant to the Coast Salish Tribal Nation. Progressing with the school year, we asked “what happens ecologically and culturally during this time?” and discussed the important human and more-than-human lifeways that took place throughout each season. In this, we emphasized human and more than human lifeways as connected to and driven by the seasons. This included weather observations as an important skill to understand seasonality and the connected lifeways and was a different approach than what is often seen in early learning as disembodied, human-centric units that teach about weather and seasons as abstract phenomena. Figure 1 depicts the curriculum topics that were decided upon through these discussions.

**Figure 1** – *Seasonal Curriculum*



It is important to note, this iteration of our work and the determined unit calendar was developed after a number of units had previously been created collaboratively between the language/culture and early learning teachers. This was a rebeginning to the curriculum initiative, this time led by the language department leadership team, and to launch the process, the language leaders each



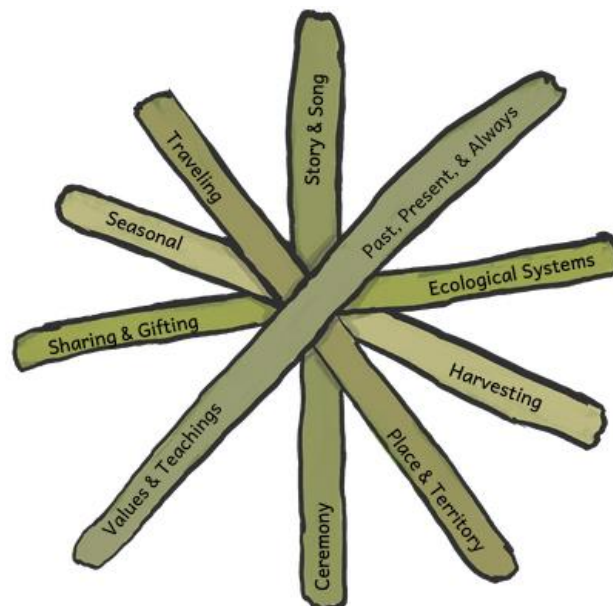
wrote an initial unit. In doing this, we were able to further concretize our commitments to decolonization through land-and-water-based education within the planned curriculum.

As staff returned from COVID-19 related furlough, the curriculum writing was divided where each language teacher would draft the unit plan, bring it to the group for feedback, make revisions, and finalize the plans. Due to COVID-19 policies, these plans were taught remotely for the first iteration with language teachers pre-recording the lessons and early learning teachers implementing them with children. We received feedback on the developmental appropriateness of the curriculum and what activities were of most interest to the children and subsequently engaged in another round of curriculum revisions. This aspect was a challenge of coming to shared understandings between classroom teachers and language teachers of what developmental appropriateness should look like for an Indigenous early learning curriculum and what pedagogical supports were needed to support the implementation of planned experiences. The work here was productive in moving beyond colonial perspectives of child development and upholding community values and teachings to design appropriate learning experiences for young children. Like *Her First Basket*, our work was strengthened with each revision, and like the little girl in that story, the process of redoing was a challenge and sometimes frustrating.

### An Early Learning Indigenous Language Curriculum Framework

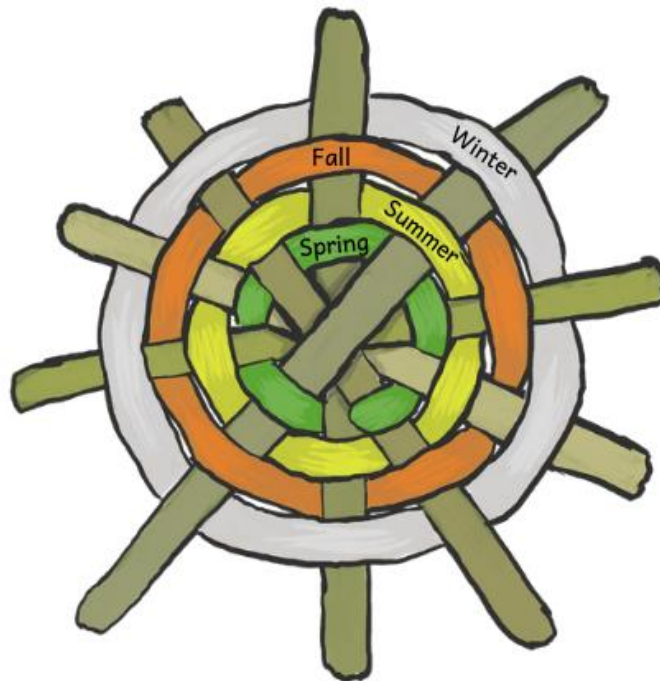
With the unit calendar determined and a process underway, we developed curriculum units that spanned the course of an academic year. Each unit is built on *huyadadčəł*: Values & Teachings; Past, Present, Always; Ecological Systems; Sharing and Gifting; Ceremony; Story & Song; Harvesting; Seasons; Traveling; Place & Territory. Figure 2 depicts *huyadadčəł* as curricular teachings through a metaphor of weaving; together, the teachings act as the tines that give structure to the curriculum basket and strengthening children's understandings of *huyadadčəł* through the seasons. The content and teachings woven through the seasons connect to established community lifeways.

**Figure 2** - *huyadadčəł*



Each seasonal unit weaves through these teachings, building on each other over the course of the year. As the year goes on, the structure becomes stronger as the curricular pattern and teachings are repeated. Additionally, this calendar spans the b-5 continuum, so as children progress in their early learning program, their depth of understanding and language proficiency increases. This curricular approach is fixed in nature and not inquiry driven in a way that designs experiences based on in the moment interests and experience. The predetermined seasonal calendar places value on children's lived experiences and family knowledge systems as important in their school-based learning and ensures these lifeways continue into the future. Figure 3 portrays the curriculum design as it takes form through the seasonal calendar.

**Figure 3** - *Weaving through the Seasons*



To offer an example of how the curriculum takes form in classrooms with young children, we offer an overview of the Hunting and Feasting: Big Game unit. Taking place in late fall, children learn about traditional and contemporary hunting practices of their community. Figure 4 details examples of how huyadadčəł take form through teachings across activities within a particular unit.

**Figure 4 - Unit Example**



One activity in this unit engages children in a dramatization of hunting utilizing a life-size print of elk and deer, as well as predator animals such a cougar and wolf that hunters must be mindful of. In this activity, children select the big game animal they will hunt and work to identify the correct animal track to follow and locate their game (see Figure 5).

**Figure 5 - Hunting Activity**

Through this activity, teachers foster children’s developing understandings of complex *ecological systems* to identify the animal tracks, discuss the habitat of their hunting in the mountains, and understand the roles of predator species for both humans and more-than-humans. Before they begin tracking, teachers sing the “hunting” *song* with the students and discuss the *ceremonial* practices of asking permission to kill the deer/elk and expressing their gratitude and intent of using the game to feed their family. As children take on the role of hunter, they are asked to consider who they will *share* or *gift* the kill with, gaining *teachings and values* of taking only what you need and using all that is offered. Teachers work to make connections with the children’s lived experiences by discussing who in their families hunt and reflecting across generations, *past, present, and always*, by teaching how their ancestors hunted a long time ago (with spears and *traveling* by canoe into the mountains), that their families hunt now (with guns and by driving to the mountains), and that their people will always hunt and they too can become skilled hunters. This unit also integrates traditional and contemporary *stories* (see [Deer and the Changer](#)) that help children to further understand cultural values around hunting as well as foundational teachings to know who is *harvested* (deer and elk) in what *season* (fall). This aspect is integrated through circle discussions and also through the use of a storyboard map depicting the reservation and usual and accustomed territories (see figure 6) where children can become familiar with the *place and territory* where they reside and have treaty rights for hunting and gathering.

**Figure 6 - Map of Territory**

While the hunting dramatization and storyboard map activities are representational in nature, they offer opportunities for language teachers to engage the unit's phrases and vocabulary to support children's emerging language development through culturally and seasonally relevant and playful activities. Activity types vary throughout the year to include games (e.g., card matching, board games, scavenger hunts), arts (e.g., weaving, painting, building), Indigenous foods (e.g., teas, drying meat and fish, making jam), book making, and outdoor land-and-water-based activities. The latter include plant walks, beach walks, and culture-based seasonal activities such as washing canoes in the early spring or having a clam bake in early summer. We have also worked to bring the outdoors inside when the ecosystem around the early learning academy does not include plant relatives we are working to build relationships with. As an example, when learning about cedar and having no cedar trees in the area, the teachers harvest cedar boughs to then bring into the classrooms for a variety of learning experiences: making cedar prints, preparing cedar infused oil, and hanging cedar boughs above the doorways. Cedar is also offered as a resource to the classroom teachers, some of whom add it to their sensory tables, science and art spaces, and infuse into playdough (see Figures 7 and 8).

**Figure 7 - Cedar Infused Oil**



**Figure 8 - Cedar Infused Playdough**



The desire for classroom teachers to integrate the Indigenous language and curricular content throughout their classroom environment and daily activities, as depicted above, is a foundational aspect of the curriculum design toward language revitalization. The degree to which classroom teachers have done this is varied and will be further discussed in the following sections.

### **Reflecting on Our Process**

Like *Her First Basket*, our process of curriculum development through a model of land and water education took patience, perseverance, and trust. We relied on the guidance of each other, our ancestors, and more-than-human relations. As we reflect on this process, we've done so with joy, hope for our futures, and gratitude for each other and the work we have accomplished collectively. The Indigenous language department in this project has engaged in curricular development for decades, so in this iteration, a driving question was: what would we do differently to further reach the department's goals of an early learning curriculum that cultivated language

acquisition? Focusing on what leveraged our capacity to complete a year long curriculum that is intended to last over time, one of the language leaders shared her reflections:

I feel like there was a point where we felt empowered to just do what we've always wanted to do. And finally felt like we had that ability to be like, Hey, this is how it's going to go. This is how we want to write it. This is how it's going to be implemented. Not that it's been easy, but it was, I think it did help. I think having you [Anna] as an outside supporter of the project helped to ensure that we could implement it.

Two aspects of this reflection have repeatedly been discussed as important to the project's success: 1) deciding to "just do what we've always wanted to do," and 2) having an "outside supporter." With these structures, we were able to overcome previously faced challenges such as determining a seasonal unit calendar and sticking to it, following a unit planning framework and lesson plan structure, and committing to the curricular teaching discussed above as an effort of resurgence and self-determination. These commitments led to the fully developed curriculum with a localized, seasonally based, scope and sequence of learning experiences that consistently centers huyadadčəł. This is a shift in previously developed curriculum that often replicated colonial schooling that was present within the early learning classrooms. One of the language leaders depicted this difference:

From what I've witnessed over the years of the curriculum, our department has had a lot of great ideas for what should have been taught in the classroom, but we didn't necessarily receive the support in the classroom of implementing it the way that we wanted to implement it. For instance, if we wanted to stick to our curriculum the way that we developed it, we would have teachers tell us, "Oh, I'm teaching sea life in the fall. So, can you do sea life then?"

Having an outside facilitator to support the work also proved valuable as outside support offered structure and accountability through regularly scheduled meetings and timelines, as well as understandings of both Indigenous education and early learning. This was strengthened as the project became grant funded and research based, which came with both resources and a framework for documenting the process.

### **Teacher Professional Development**

Beyond building our relational adherence and structure for curriculum development, a variety of challenges have been present in this work. With a primary goal of language revitalization, we are excited about how land-and-water-based learning will propel children's language development and understandings of huyadadčəł through authentic, cultural, and seasonal based experiences. Indigenous language teachers enter their positions with a commitment to their language, and many have extensive understandings of huyadadčəł through their lived experiences and ancestral teachings that have driven the content of the developed curriculum. However, most have not had preparation specific to working with young children, frameworks of land-and-water-based education, or pedagogical approaches to teaching Indigenous language and culture. One of the language leaders offered an example of how this impacts classroom teaching:

A lot of people here don't know what age-appropriate work is for preschool, kindergarten, etc, etc. They come up with this big, fantastic lesson, but you've got 15 minutes, and it took 20 minutes just to explain how the game worked. ... And if they did get a chance to play it, they got to play it for two minutes. You need to make activities that are not so in depth of instruction that there's no time for the kids to play. And we move so fast, they're really not going to get it anyway. So, you need to think of simpler lessons for the kids that are going to be repetitive over and over again.

With Indigenous language teachers in this community holding curriculum content understandings, we have recognized, and worked to integrate, professional development around Indigenous pedagogies, child learning and development, and land-and-water-based curriculum. This has taken form through our curriculum design meetings, classroom observations and in the moment coaching, and harvesting opportunities to prepare for curriculum activities. We see a need for integrating these aspects of teacher professional development through efforts of land education teacher professional development (see Calderón et al., 2021; Lees et al., 2022) where we support teachers' relationships with land and water while building their understandings of how to facilitate children's developing understandings and language skills through their interactions with the natural world. And while some of these efforts have been initiated, in practice and balanced with complex teacher demands, land-and-water-based professional development is challenging. One of the language leaders reflects on this after having resistance and logistical barriers to land-and-water-based professional development. In an effort to integrate pragmatic supports to foster more teacher learning on and with land and water, she offered,

Everybody should have a harvesting outfit, some harvesting shoes, some harvesting gear [in the office]. So, at any moment that the weather is good, there's no excuse for anybody needing to go back home. There's no excuse for nobody having a ride. There's no excuse. Put them sweats on, put that sweatshirt on, put them rain boots on, grab these gloves. If we have all of that here, then there's no excuse.

These experiences are necessary, and this notion was present in *Her First Basket*, where we see a child needing explicit teaching and pedagogical support to nurture her understanding. To do so, Indigenous teachers also need support, and while many come with content understandings and a depth of community teachings, others are re-learning the curriculum while simultaneously designing and teaching children. "It's not just the kids down there learning it. It's some of our staff that have never experienced Salmon Ceremony ... you can't teach something if you've never experienced or have never read anything about it." Anna also reflected on how language teachers expressed their experiences of learning, planning, and teaching simultaneously:

We were doing the edits, and we were going over the feasting unit. I remember the feasting unit being very stressful with the teachers, and we're going over it, and I'm looking back to their reflections, and there were things like, "This was just too much. We need to shorten these stories. We need to not have the song." Whatever it was, things were too much and overwhelming. During our reflection, one of the teachers said, "I think, I remember feeling like that, but I don't really think it's about the curriculum. I think it's just because I was new, and that it doesn't actually feel like too much now." And it was such a beautiful



reflection and kind of validation for us of like yeah, it's a lot when you're doing it for the first time, like what's the teacher development that needs to take place?

Through these reflections, we have also identified where curriculum was planned with seasonal practices in mind that did not in fact align with the seasons. This has made clear where barriers exist in reaching our goals of more outdoor learning experiences for children and where our own knowledge of the local ecosystem and seasonal changes must grow. As discussed, we have found limitations in our planning due to the constraints of classroom-based learning and what topics are deemed important for children to explore vs. the local ecosystem where the early learning center is situated. However, the commitment to furthering land-and-water-based education with opportunities for children to learn outdoors has only grown through this experience. One of the language leaders depicted the desires with the barriers:

Some of the stuff that we put in there wasn't the time of the season. But, what we wanted was the kids to be able to hands on experience what is really happening in that month; well, now we're having problems trying to find a Cedar tree; these are things that really do happen at that time, but we don't have any way of doing hands on with them because we have no transportation [to visit cedar trees]. And now that we're redoing things, we could put like no dandelions really come out at this time. So, I think it was all about trying to get [the kids] to do more hands on and be able to learn through that, through doing it instead of just seeing it on a picture.

Recognizing the areas where we have reached our curricular goals and where we need continued work has been an important part of our process. As the little girl in *Her First Basket* was supported by Cedar Tree and with desire to contribute to her community, we too were supported through this process in our shared goals to share this curriculum as a gift to children and families.

## Conclusion

Developing an Indigenous early learning curriculum through a framework of land and water education has been an extended process that came with challenges and beautiful moments of celebration. An important take away for us through the experience has been the importance of continuing forward in this work while recognizing the imperfections. We recognize the limitations of a land-and-water-based model while children continue most of their learning indoors. We also know the limitations of teaching language with limited instructional time. And while we could continue naming our shortcomings, we see children using language and enacting their cultural teachings. As educators, our understandings have deepened through the curriculum development, and we see the positive impact on children. In the next phase of our research, we are examining how children are learning and using their Indigenous language and culture through the developed curriculum. For us, this is what Indigenous resurgence looks like in the everyday. Tuck and Gaztambide-Fernández (2013) put forth an important articulation of the ways in which Indigenous knowledges are taken up in curricular initiatives to secure settler futurities through the continued dispossession and replacement of Indigenous peoples. By taking on the call to develop this curriculum and doing so on our terms through huyadadčəł where “we felt empowered to just do

what we've always wanted to do," we reject constructs of settler replacement and enact educational sovereignty toward thriving Indigenous futures.

## References

- Adriany, V. (2018). Neoliberalism and practices of early childhood education in Asia. *Policy Futures in Education, 16*(1), 3–10. <http://dx.doi.org/10.1177/1478210317739500>
- Archibald, J. (2008). *Indigenous storywork: Educating the heart, mind, body, and spirit*. UBC Press.
- Bang, M., Curley, L., Kessel, A., Marin, A., Suzukovich, E. S., III, & Strack, G. (2014). Muskrat theories, tobacco in the streets, and living Chicago as Indigenous land. *Environmental Education Research, 20*(1), 37–55. <https://doi.org/10.1080/13504622.2013.865113>
- Barajas-López, F., & Bang, M. (2018). Indigenous making and sharing: Claywork in an Indigenous STEAM program. *Equity & Excellence in Education, 51*(1), 7–20. <https://doi.org/10.1080/10665684.2018.1437847>
- Brayboy, B. M. J., & Castagno, A. E. (2009). Self-determination through self-education: Culturally responsive schooling for Indigenous students in the USA. *Teaching Education, 20*(1), 31–53. <https://doi.org/10.1080/10476210802681709>
- Brayboy, B. M. J., Gough, H. R., Leonard, B., Roehl, I. I., Roy, F., & Solyom, J. A. (2012). Reclaiming scholarship: Critical Indigenous research methodologies. In S. D. Lapan, M. T. Quartaroli, & F. J. Riemer (Eds.), *Qualitative research: An introduction to methods and designs* (pp. 423–450). Jossey-Bass/Wiley.
- Brayboy, B. M. J., & Lomawaima, K. T. (2018). Why don't more Indians do better in school? The battle between US schooling & American Indian/Alaska Native education. *Daedalus, 147*(2), 82–94. [https://doi.org/10.1162/DAED\\_a\\_00492](https://doi.org/10.1162/DAED_a_00492)
- Cajete, G. (2015). *Indigenous community: Rekindling the teachings of the seventh fire*. Living Justice Press.
- Calderón, D. (2014). Speaking back to manifest destinies: A land education-based approach to critical curriculum inquiry. *Environmental Education Research, 20*(1), 24–36. <https://doi.org/10.1080/13504622.2013.865114>
- Calderón, D., Lees, A., Swan Waite, R., & Wilson, C. (2021). 'Crossing the bridge': Land education teacher professional development. *Professional Development in Education, 47*(2-3), 348–362. <https://doi.org/10.1080/19415257.2021.1891957>
- Corntassel, J. (2012). Re-envisioning resurgence: Indigenous pathways to decolonization and sustainable self-determination. *Decolonization: Indigeneity, Education & Society, 1*(1). <https://jps.library.utoronto.ca/index.php/des/article/view/18627>
- Deloria, V., Jr., & Wildcat, D. (2001). *Power and place: Indian education in America*. Fulcrum Publishing.
- Demmert, W., Hilberg, S., Beaulieu, D., Rawlins, N., Kamana, K., French, K., & Johnson, F. T. (2014). *Indigenous culture-based education rubrics*. Western Washington University.
- Grande, S. (2015). *Red pedagogy: Native American social and political thought*. Rowman & Littlefield.
- Haslip, M. J., & Gullo, D. F. (2018). The changing landscape of early childhood education: Implications for policy and practice. *Early Childhood Education Journal, 46*(3), 249–264. <https://doi.org/10.1007/s10643-017-0865-7>

- Hermes, M. (2005). “Ma’iingan is just a misspelling of the word wolf”: A case for teaching culture through language. *Anthropology & Education Quarterly*, 36(1), 43–56.
- Iorio, J. M., & Parnell, W. (2015). *Rethinking readiness in early childhood education: Implications for policy and practice*. Springer.
- Lee, T. S., & McCarty, T. L. (2017). Upholding indigenous education sovereignty through critical culturally sustaining/revitalizing pedagogy. In D. Paris & H.S. Alim (Eds.), *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world* (pp. 61–82). Teachers College Press.
- Lees, A., & Bang, M. (2023). Indigenous pedagogies: Land, water, and kinship. *Bank Street Occasional Paper Series*, 2023(49), Article 1.  
<https://educate.bankstreet.edu/cgi/viewcontent.cgi?article=1500&context=occasional-paper-series>
- Lees, A., Wilson, C., Swan-Waite, R., & Calderón, D. (2022). Centering Indigenous land education in teacher professional development . In C. D. Gist & T. J. Bristol (Eds.), *Handbook of research on teachers of color and Indigenous teachers* (pp. 531–548). American Educational Research Association.
- Lomawaima, K. T., & McCarty, T. L. (2006). “To remain an Indian”: Lessons in democracy from a century of Native American education. Teachers College Press.
- Marin, A., & Bang, M. (2018). “Look it, this is how you know:” Family forest walks as a context for knowledge-building about the natural world. *Cognition and Instruction*, 36(2), 89–118.  
<https://doi.org/10.1080/07370008.2018.1429443>
- Masta, S. (2018). Settler colonial legacies: Indigenous student reflections on K-12 social studies curriculum. *Intersections: Critical Issues in Education*, 2(2), 76–88.  
<https://digitalrepository.unm.edu/intersections/vol2/iss2/4/>
- McCarty, T., & Lee, T. (2014). Critical culturally sustaining/revitalizing pedagogy and Indigenous education sovereignty. *Harvard Educational Review*, 84(1), 101–124.  
<https://doi.org/10.17763/haer.84.1.q83746nl5pj34216>
- McCoy, M. L., & Villeneuve, M. (2020). Reconceiving schooling: Centering Indigenous experimentation in Indian education history. *History of Education Quarterly*, 60(4), 487–519. <https://doi.org/10.1017/heq.2020.53>
- McCoy, K., Tuck, E., & McKenzie, M. (Eds.). (2017). *Land education: Rethinking pedagogies of place from Indigenous, postcolonial, and decolonizing perspectives*. Routledge.
- Nxumalo, F., Pacini-Ketchabaw, V., & Rowan, M. (2011). Lunch time at the child care centre: Neoliberal assemblages in early childhood education. *Journal of Pedagogy*, 2(2), 195–223.  
<https://doi.org/10.2478/v10159-011-0010-4>
- Pacini-Ketchabaw, V., & Taylor, A. (Eds.). (2015). *Unsettling the colonial places and spaces of early childhood education*. Routledge.
- Reyhner, J., & Eder, J. (2017). *American Indian education: A history*. University of Oklahoma Press.
- Sabzalian, L. (2019). *Indigenous children’s survivance in public schools*. Routledge.
- Simpson, L. B. (2014). Land as pedagogy: Nishnaabeg intelligence and rebellious transformation. *Decolonization: Indigeneity, Education & Society*, 3(3).  
<https://jps.library.utoronto.ca/index.php/des/article/view/22170>
- Simpson, L. B. (2017). *As we have always done: Indigenous freedom through radical resistance*. University of Minnesota Press.
- Smith, L. T. (2013). *Decolonizing methodologies: Research and indigenous peoples*. Zed Books.

- Tuck, E., & Gaztambide-Fernández, R. A. (2013). Curriculum, replacement, and settler futurity. *Journal of Curriculum Theorizing*, 29(1).  
<https://journal.jctonline.org/index.php/jct/article/view/411>
- Tuck, E., & Yang, K. W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society*, 1(1). <https://jps.library.utoronto.ca/index.php/des/article/view/18630>
- Wolfe, P. (2006). Settler colonialism and the elimination of the native. *Journal of Genocide Research*, 8(4), 387–409. <https://doi.org/10.1080/14623520601056240>

