

Nature's Way-Our Way: A Journey Through the Co-Creation and Sharing of an Indigenous Physical Literacy Enriched Early Years Initiative

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Article abstract

Early years are a critical time in the healthy development of young children. It is essential for children to develop healthy bonds with family members to increase well-being. Colonialism has resulted in the loss of many Indigenous activities, intergenerational teachings and relationship-building strategies that encourage wholistic health-promoting behaviours. Research focused on physical activity behaviours among early years children has had limited success. To address these challenges, the Western concept of physical literacy that applies a wholistic approach to physical activity by focusing on physical, social, emotional, and spiritual wellness can align with many Indigenous Ways of Knowing, Being and Doing.

Purpose: Our multi-cultural team embarks on a journey to co-create, and expand a physical literacy enriched and culturally rooted initiative designed to promote wholistic wellness.

Methodology: Etuaptmumk (Two-eyed Seeing) guides the team through braiding Indigenous Ways of Knowing, Being and Doing in early childhood wellness and land- and nature-based games alongside Western knowledge of developing physical literacy and promoting risky/adventurous play. We apply a pre-mid-post design for the meaningful evaluation of the Nature's Way-Our Way initiative.

Impact: Partnering with communities, we aim to produce 40-45 activity cards to promote physical literacy and wholistic health in Indigenous and non-Indigenous communities.

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Nature's Way-Our Way: A Journey Through the Co-Creation and Sharing of an Indigenous Physical Literacy Enriched Early Years Initiative

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ABSTRACT Early years are a critical time in the healthy development of young children. It is essential for children to develop healthy bonds with family members to increase well-being. Colonialism has resulted in the loss of many Indigenous activities, intergenerational teachings and relationship-building strategies that encourage wholistic health-promoting behaviours. Research focused on physical activity behaviours among early years children has had limited success. To address these challenges, the Western concept of physical literacy that applies a wholistic approach to physical activity by focusing on physical, social, emotional, and spiritual wellness can align with many Indigenous Ways of Knowing, Being and Doing.

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KEYWORDS Physical literacy, child development, early intervention, Indigenous research, two-eyed seeing

Nature's Way-Our Way (NWOW) is an initiative co-designed with Elders and Knowledge Holders, Indigenous and non-Indigenous scholars, educators, and families to integrate physical literacy and risky play into Indigenous activities, cultural connections, and traditional teachings within Early Childhood Education Centres across Saskatchewan, Canada. This paper explores Mi'kmaw Elder Albert Marshall's theoretical framework of *etuaptmumk* (Two-Eyed Seeing), which harmonizes Indigenous knowledge with Western perspectives (Bartlett et al., 2012, Marshall et al., 2015). By highlighting culturally relevant resources, we illustrate

how the initiative fosters Indigenous self-determination and sovereignty by enhancing physical activity, wholistic health, and wellness throughout the lifespan.

In our pilot of the NWOW initiative, we share valuable insights on the significance of engagement and relationship-building, as well as the processes involved in disseminating our initiatives. We emphasize our efforts to connect with other communities, inviting them to collaborate by testing the cards we have created and offering feedback to tailor them to their unique needs. Our goal is to cultivate community ownership by encouraging groups to diversify the resource through developing their own cards that reflect their specific contexts. Ultimately, we aspire to create a growing resource that enables different communities to see themselves represented, which will foster a sense of belonging and shared ownership in the initiatives we collaboratively develop.

Background

A child's early years, particularly ages three to five, are a critical period for promoting the development of healthy behaviours (e.g., physical activity and healthy eating) (Bélanger et al., 2016; Mikkilä et al., 2005). Developing healthy behaviours in young children is considerably easier than in older children, adolescents, and adults (Goldfield et al., 2002). Furthermore, the earlier health-promoting behaviours are developed, the greater the health benefits, as these behaviours are more likely to become engrained in a child across their life course (Bandura, 1977). Adults who care for children (e.g., parents/guardians and early childhood educators) play a pivotal role in creating environments that can support or promote health promoting behaviours (Buckler et al., 2021). In addition to a child's home and family setting, these environments include childcare settings, as over half of Canadian children ages three to five receive out-of-home care in a childcare environment. As such, it is essential that adults caring for early years children have the self-efficacy to model and engage in behaviours that promote wellness throughout the life course (Froehlich Chow & Humbert, 2017; Nesdoly, 2019).

To date, studies targeting the development of health promoting behaviours within childcare settings have produced mixed findings (Mikkelsen et al., 2014). Physical activity is one of the most commonly targeted health promotion behaviours among preschool aged children; however, interventions have not consistently demonstrated long-term sustainable impacts on increasing physical activity participation among early years children (Temple & Robinson, 2014; Hnatiuk et al., 2019). In recent years, physical literacy has been proposed as the gateway to physical activity participation and identified as a promising approach to promoting lifelong movement and wholistic wellness (Cairney et al., 2019). *Physical literacy* is defined as the motivation, confidence, physical competence, knowledge, and understanding for engagement in physical activity throughout one's life; it contributes to children becoming more confident, competent, and motivated to engage in physical activity in different ways and varied environments, such as land, air, water, and ice (Cairney et al., 2019; ParticipACTION et al., 2015). Physical literacy encompasses /embraces/ a wholistic view of the child, recognizing that a child's physical literacy can impact physical, psychological, emotional, and social well-being, in addition to behavioural aspects such as physical activity participation (ParticipACTION et al., 2015). As a determinant of physical activity and health (Cairney et al., 2019), physical

literacy has gained worldwide attention from many national and international organizations as an optimal way to support more active populations (Government of Canada, 2018; International Physical Literacy Association, 2019). In contrast to a physical activity approach, which identifies targeted minutes of moderate-to-vigorous physical activity (MVPA) (Alberga et al., 2019), physical literacy emphasizes the intrinsic valuation of movement through the concurrent development of children's competence and psychological characteristics such as confidence, motivation, and happiness (Cairney et al., 2019). As such, physical literacy supports the importance of physical and socio-cultural movement contexts in creating a positive movement experience (Stuckey et al., 2021). Recent studies have demonstrated the potential protective effects of physical literacy in school-aged children regarding resilience (Jefferies et al., 2019) and protection against physical activity erosion during the pandemic (Houser et al., 2022). To support the wholistic development of physical literacy and the associated benefits, it is critical to provide the opportunity for positive movement experiences in various contexts and environments.

Physical literacy encompasses more than just movement; it involves social connections and our relationship with the land, nurturing a sense of joy in our hearts. It is easy to focus solely on the physical aspects, but true physical literacy acknowledges that it involves much more than motor skills and bodily movement. It is about the interconnectedness of all these elements—engaging in movement because you want to feel the earth beneath your feet, breathe in the fresh air, and connect deeply with your surroundings, often alongside those you cherish.

From a health perspective, wholistic wellness is tied to our relationships. Being connected to others enhances our social and emotional well-being. Recognizing that every element of the land is part of a larger creation fosters our spiritual connection. Physical wellness involves moving our bodies, while mental wellness includes understanding our ties to the land and the people around us, reinforcing intergenerational connections. When we know our identity and roots, we cultivate a sense of belonging, which is essential for our overall wellness.

Competence and confidence in navigating outdoor environments is a critical piece in the development of physical literacy. The benefits of outdoor play are numerous and are frequently noted as an excellent way to develop physical literacy (Tremblay et al., 2015). In addition, outdoor play provides for risky /adventurous play that allows children to test their boundaries and learn their capabilities as they navigate various environments (Brussoni et al., 2015; Herrington & Brussoni, 2015). Risky play is a pedagogical strategy that empowers children to test their limits, enhance their perceptual motor skills, and engage safely with potentially hazardous environments (Herrington & Brussoni, 2015; Pellegrini, 2021). Risky play encompasses activities that involve heights, speed, the use of tools, and rough-and-tumble play, among other challenges (Sandseter & Kennair, 2011; Tremblay et al., 2015).

Risky play emphasizes child agency and encourages children to make informed choices regarding their safety and that of others. This philosophy resonates with Indigenous Knowledges, which regard the body as essential to relationships with nature, fostering a wholistic understanding of being (Cajete, 2000). Risky play connects children with nature through interactions with natural materials (e.g., leaves and sticks), and it promotes fun and engaging opportunities for children in various cultural and social contexts (Bergeron et al., 2019). The

provision of such opportunities is shown to be essential for children's health, development, learning, social behaviour, self-esteem, independence, creative thinking, problem-solving, conflict resolution, risk detection, and risk competence (Brussoni et al., 2015; Sandseter & Kennair, 2011; Tremblay et al., 2015).

Indigenous peoples living in rural and remote communities face numerous barriers to participating in sports and recreation such as inadequate infrastructure, limited public transport, and financial constraints that hinder engagement in both traditional and recreational activities (National Collaborating Centre for Indigenous Health [NCCIH], 2023). For Indigenous youth, these barriers are similarly pronounced, including restricted access to community spaces, defunded programs, and poorly maintained facilities (NCCIH, 2023). The need for resources (i.e., programming, training, web-based materials such as a website, hard materials such as activity cards, manuals, handouts, and curriculum) to support the health and wellness of Indigenous (First Nations, Métis, and Inuit) and non-Indigenous children and families living in rural areas is emphasized by the fact that, compared to those living in urban settings, individuals in rural communities have more limited access to many of these health-promoting resources (Chief Public Health Officer, 2016; DesMeules & Pong, 2006; Foulds et al., 2012; Indigenous Services Canada, 2018). Further, colonial policies and practices, including residential schools, along with systemic racism, have significantly contributed to the loss of diverse Indigenous cultural identities and practices (Paul et al., 2019) that naturally required increased levels of physical activity and physical literacy. Moreover, Indigenous cultures have a rich history of engaging in physical activities requiring considerable physical literacy skills attributable to physical and mental wellness (National Collaborating Centre for Aboriginal Health [NACCAH], 2013; Paul et al., 2019). For example, skills learned that involve movement (e.g., running, jumping, dodging, hand-eye coordination, timing, throwing, and catching), socialization (e.g., cooperation, communication, taking turns, and teamwork), body control, creativity, self-expression, confidence, and spatial awareness (Healthy Start - Départ Santé, 2021) can all be used to partake in cultural activities such as dancing, which relies on the participants' ability to have good body control, creativity, the ability to jump, etc. Many Elders can recall the physical demands of living off the land for survival (Paul et al., 2019). Indigenous communities have long embodied physical literacy, often demonstrating a deeper understanding of these concepts than their Western counterparts. They practiced physical literacy long before it was defined in Western terms, integrating it seamlessly into their daily lives and cultural practices.

However, after years of structural marginalization and violence, most Indigenous communities have moved from being physically active to becoming sedentary and reliant upon colonial conveniences (Paul et al., 2019). Colonialism has systematically eradicated traditional knowledges and ways of being, denying Indigenous peoples the opportunity to lead and share their practices. These traditional ways of life were inherently aligned with the Western concept of physical literacy, emphasizing connections to community, the land, and a wholistic perspective on spiritual and mental well-being. Unfortunately, these rich traditions have been lost through the forces of colonialism and systemic racism, resulting in the rejection and suppression of Indigenous knowledge.

To address this loss of opportunities, our team has developed the community-based NWOW initiative, which aligns with the Truth and Reconciliation Commission of Canada's (2015) Calls to Action 12 and 89, in developing "culturally appropriate early childhood education programs for Aboriginal families" (p. 152) and promoting "physical activity as a fundamental element of health and wellbeing" (p. 299) through partnerships with rural Indigenous families, educators, and Elders/Knowledge Holders. As an early years-focused, culturally representative physical literacy enriched initiative, the purpose of NWOW is to engage childcare centres located in urban and rural First Nations and Métis communities serving both Indigenous and non-Indigenous children, to promote the development of physical literacy and risky/adventurous play, and to strengthen bonds between early years children, their families, and educators. This paper aims to a) share our journey through the co-creation of the NWOW initiative and b) describe the culturally rooted delivery of NWOW when it is shared across urban and rural First Nations and Métis childcare centres.

The Roots of Nature's Way-Our Way

NWOW is an initiative stemming from the bilingual Healthy Start-Départ Santé project. Developed in 2012, Healthy Start-Départ Santé promoted physical activity, gross motor skills, and healthy eating among English and French-speaking children between three and five years of age attending childcare centres in Saskatchewan and New Brunswick (Ward et al., 2018). Healthy Start-Départ Santé aimed to encourage and enable families and educators to integrate physical activity and healthy eating into the daily lives of young children through improved knowledge, attitudes, and self-efficacy of early childhood educators and directors. Healthy Start-Départ Santé sought to influence factors at the intrapersonal (e.g., eating and physical activity behaviours of children), interpersonal (e.g., educators and parents), organizational (e.g., childcare center), community (e.g., community organization involvement), physical environment (e.g., built and natural), and political levels (e.g., policies). Healthy Start-Départ Santé was implemented in 140 licensed childcare centres; results indicate increased fundamental movement skills and healthier eating among children participating in the initiative (Chow et al., 2016; Ward et al., 2018).

Healthy Start-Départ Santé focused solely on Westernized practices and resources. During implementation, it was apparent that no activities focused on Indigenous Ways of Knowing, Being and Doing. Through our work with Healthy Start-Départ Santé, early childhood educators caring for Indigenous children, particularly those located in rural First Nations communities, identified this gap in the existing Healthy Start-Départ Santé program. Thus, to address the gap voiced by Indigenous early childhood educators and uphold diverse Indigenous approaches to supporting early childhood wellness through intergenerational and land-based teachings the concept for the NWOW initiative was born.

The Nature's Way-Our Way Integrated Team.

Guided by relationships, reciprocity, and the goal of creating a comprehensive and nuanced picture, we felt that many ways of knowing, being, and doing should be represented, ensuring diversity and inclusivity including guidance from Elders and Knowledge Holders, Indigenous

and non-Indigenous scholars, educators, Indigenous children, and their families. As such, the NWOW core team is co-led by Amanda Froehlich Chow (PhD), a community-engaged and university-based scholar with expertise in co-developing culturally rooted child focused wellness initiatives, and Elder Kathy Wahpepah (Carry-The-Kettle Nakoda Nation [Cegakin] & Kickapoo tribe) cultural community leader and liaison. Elder Kathy works within the Saskatoon Public Schools, along with her husband Elder Tim (Carry-The-Kettle Nakoda Nation [Cegakin]) to promote wellness among Indigenous youth through cultural teachings (including arts- and land-based activities).

In addition to our team includes Erica Stevenson, a proud member of Muskoday First Nation (Plains Cree) and early childhood educator by training. Erica is a Manager of the Saskatoon Tribal Council (STC) Early Childhood Development Program with expertise in supporting wellness among First Nations children and their families. Prior to her managerial position at STC Erica was a member of the Healthy Start-Départ Santé implementation team and she has been a leader in both engaging Indigenous communities and weaving Indigenous knowledges and teachings into resources shared with Indigenous community partners.

Sharing Intergenerational Cultural Teachings Through Storytelling and Arts

The initial vision and establishment of the NWOW team evolved through a combination of community engagement with rural childcare centres in Saskatchewan and longstanding relationships between team members and the principal of a core neighbourhood public high school. The high school had a large percentage of Indigenous students and, for those who were parents, the school provided an in-house childcare center. To support the wellness of Indigenous students and their families, the principal embraced the vision of exploring Healthy Start-Départ Santé program by co-creating culturally rooted activities representing Indigenous communities in Saskatchewan. Drawing on her community relationships, the principal invited Elders Kathy and Tim to lead us in creating NWOW. To start this community partnership well, we began our work with a pipe ceremony led by Elder Tim and his grandson. All students, staff, and early childhood educators at Tammy's High School were invited to join our team in the ceremony.

Elder Kathy then led and created an initial draft of 10 culturally rooted physical literacy-focused activity cards based on traditional teachings and games. Drawing from both her Nakoda and Kikapoo roots, she infused the activities with lessons learned from her life experiences and stories shared by friends. In our work with Kathy, she shared personal stories and ancestral connections, enriching our project with lived experiences. Her insight was invaluable in ensuring critical aspects of traditional knowledge (i.e., stories, lessons, and history) were incorporated into the activities. She created lessons and training resources that support families and educators to develop physical literacy and physical activity participation through traditional Ways of Knowing, Being and Doing, which are inherently rooted in building bonds between children and their ancestors and are embedded with land-based learning (e.g., hunting, gathering, and medicine walks). As such, the NWOW initiative builds on the natural connections between Indigenous cultural practices and the wholistic approach to child development inherent within the concepts of physical literacy. Laying a strong foundation for early childhood development

and fostering wellness during these formative years requires a wholistic approach. This approach means recognizing the interconnectedness of physical, social, spiritual and mental well-being, and providing children with opportunities to thrive in all these areas. It is not just about going outside; it also about engaging in conversations about social interactions and what they mean. Children benefit from social opportunities to connect and move alongside caring adults who serve as role models. They explore their boundaries—like testing whether they can climb over a rock they could not manage last week—which builds confidence and emotional resilience. These experiences promote interaction and problem-solving, which address all domains of wellness. The ideal environment for childhood development offers rich opportunities for growth in each of these areas, aligning seamlessly with concepts of physical literacy and Indigenous ways of being, which consider the entirety of a child's experience. The team's physical literacy experts provided the Western perspective by incorporating cues and support for developing physical literacy and promoting physical activity among early years children. With Elder Kathy, we finalized the content of the activity cards. It was a collaborative effort that incorporated both Indigenous and Western ways of Knowing, Being and Doing. This collaboration resulted in the NWOW initiative, intended for use with Indigenous and non-Indigenous early years children and in multiple settings (childcare, home, and community) by adults (educators, parents/guardians, and Elders) who engage with the children.

Storytelling has been integral to many Indigenous cultures since time immemorial (Lawrence & Paige, 2016). Storytelling preserves culture, whether orally or visually (Lawrence & Paige, 2016). Moreover, storytelling serves as a wholistic teaching and learning tool that taps into the mind, body, heart, and spirit (Lawrence & Paige, 2016). Storytelling is a core part of NWOW resources that supports intergenerational teaching and ties the history of Indigenous cultures to the games and activities taught to children, parents/guardians/families, and educators. For example, "Tatanka, Tatanka, Cross the River" is one of the ten activities shared in the NWOW cards. As a precursor to this game, a story is told to show the learner how physical literacy is an essential part of their Way of Knowing, Being and Doing embedded within their culture and history:

First Nations people living on the prairies and plains were adept at travelling and navigating by the stars and landmarks. Their travels took them across rivers and mountain ranges along paths that were sometimes hard to travel and where the ability to be really good at jumping was essential.

Through this story, one can learn how some Indigenous ancestors developed knowledge and movement skills as a necessary part of their way of being, such as learning to jump as a requisite skill to safely cross the river (aligning with the knowledge and motivation components of physical literacy). Thus, through learning and engaging in the NWOW intergenerational teachings and games, it is clear that First Nations Ways of Knowing, Being and Doing naturally relied on and promoted the development of physical literacy (Nesdoly, 2019).

Using visual imagery on the NWOW activity cards is intentional, as it not only signifies another mode of Indigenous storytelling but also illustrates the activity to the teacher and the

learner to promote an understanding of the movement and thus promote competence. Visual imagery is an effective way of interacting and communicating with people. Visual imagery contains meaning in the form of individual values, thoughts, beliefs, and ideologies; by learning through observing visual imagery, an individual can achieve something (Yilmaz et al., 2019).



Figure 1. “Tatanka, Tatanka, Cross the River” (Visual Demonstration from Nature’s Way-Our Way Activity Cards). This figure is also available for viewing at foragingapathtogether.ca

To further nurture and support community partnerships, Elder Kathy worked closely with a teacher assistant/artist from the high school to create the images for each of the ten culturally rooted physical literacy cards. Sitting together, Elder Kathy orally shared the stories underpinning the teachings and games, and the artist created the images as Elder Kathy shared the stories. The culturally rooted stories and Indigenous art together form the heart of the NWOW activity cards. With Elder Kathy’s guidance, the physical literacy links and movement skills were respectfully woven into the activity cards.

Pilot Testing the Nature’s Way-Our-Way Initiative

Once the NWOW resources were created, we pilot tested the initiative at two childcare centres in Saskatchewan’s urban core neighbourhood high schools. The childcare centres served mostly Indigenous children and their families, where most parents attended the high school themselves. The NWOW implementation team invited the educators and parents attending the childcare centre with children to try the activity cards with Elder Kathy. The assessment was done through play to evaluate the resources in the same manner they are intended to be implemented, with the intention of receiving honest feedback. Through the pilot phase, Elder Kathy and school staff observed a new sense of belonging emerging for parents and their children in the school setting, primarily through the relationship-building aspect of the initiative. Elder Kathy’s wealth of knowledge and inclusion of culture facilitated this relationship-building process with parents, children, and school staff. Elder Kathy provided unique opportunities for school staff to learn through sharing games and teachings. Not only did the sharing of games and teachings provide a safe space for non-Indigenous school staff (including New Canadian educators) to learn and ask questions, but the session also fostered story sharing and in turn, relationship building between

Elder Kathy, staff, and parents. The results from this pilot testing showed that parents had increased confidence in supporting their children, especially as they moved into a physical activity setting. Parents felt happier and proud of what they and their children were accomplishing. Through Elder Kathy, participants established connections to culture and community.

In addition, feedback was gathered from parents and early childhood educators; for example, one educator of Métis ancestry suggested the term courageous play in place of risky/adventurous play, as they felt this was more aligned with the Seven Sacred teachings, and drawing on the Bear, which in their culture is a symbol of courage. As such, we will herein refer to risky and adventurous play as “risky/courageous play.” To date, the team has successfully piloted and tested the NWOW initiative with approximately 30 children and 20 families. Learnings from the pilot testing were incorporated to inform NWOW’s final development and implementation.

A Culturally Grounded Delivery and Evaluation Plan for Nature’s Way-Our Way

We have now come to the place in our journey where we feel the NWOW initiative is ready to be shared and spread more widely and expanded to better represent diverse First Nations communities within Saskatchewan. Our goal in sharing NWOW is to support early childhood educators in promoting physical literacy development and risky/courageous play through diverse land- and nature-based teachings and games. By sharing intergenerational teachings, we also intend to increase the inclusivity of NWOW. We have engaged children’s families and cultural community leaders in developing new activities representative of each community’s diverse cultural ways and worldviews, which fosters and strengthens bonds among children, their families, and communities. To achieve these goals, the following objectives will be addressed through the culturally rooted delivery plan proposed by the NWOW initiative:

1. Share the NWOW Initiative with nine (six rural and three urban) childcare settings serving primarily Indigenous (approximately 85%) children within Saskatchewan.
2. Expand the NWOW activity card set by collaborating with Indigenous educators, families, and community Elders/Knowledge Holders to co-create new physical literacy and risky/courageous play-focused games, and stories representative of the diverse First Nations communities partnering with the initiative.

At present, no data has been provided by the educators involved, as the focus is solely on establishing and developing relationships with partnering communities.

Methodology and Design

Just as NWOW is rooted in *etuaptmumk* (Two-Eyes Seeing), every aspect of the project will be guided by *etuaptmumk* (Bartlett et al., 2012, Marshall et al., 2015). As such, we will braid Indigenous Ways of Knowing, Being, and Doing about land and nature-based games/stories with Western knowledge of physical literacy development and the promotion of risky/courageous play. Underpinning our project will be the Seventh Generation Principle, an Indigenous philosophy asserting that today’s decisions, actions, and behaviours will have

permeating impacts for seven generations to come (Courchene, 2021). Our time in communities has allowed us to witness and experience first-hand the devastating intergenerational impacts of colonization and residential schools on the overall wellness of Indigenous children, their families, and communities. The disruption of the teachings of Indigenous Ways of Knowing, Being and Doing and the breaking of family bonds caused by residential schools has been catastrophic in many of the communities we have visited.

Weaving the Seventh Generation Principle into our project is essential for ensuring our work upholds the wellness of Indigenous children today; in turn contributing to the development of health promoting behaviours among Indigenous children for generations to come through the revitalization of cultural connections and intergenerational teachings among diverse First Nations communities. The Seventh Generation Principle will also guide our ethical engagement and governance with Indigenous and non-Indigenous community partners and contribute to building relationships that will thrive and grow in the coming generations. Indigenous and non-Indigenous partnerships will be further honoured and interwoven into all aspects of the proposed project by incorporating Ethical Space. Indigenous scholar and Elder Willie Ermine's (2007) concept of Ethical Space encourages coming together in humility and finding common ground of respect among Indigenous and Western cultures and among diverse Indigenous cultures, which can be Nation/community specific. This will be essential for our project as we seek to not only braid Indigenous ways with Western knowledge but to develop inclusive programming and resources that are representative of the diverse teachings from the First Nations and Métis communities across Saskatchewan (Nêhiyawak [Plains Cree], Nahkawiniwak [Saulteaux], Nakota [Assiniboine], Dakota and Lakota [Sioux], and Denesuline [Dene/Chipewyan]).

Childcare Settings and Community Engagement

Our team has been working to share details and garner interest for NWOW through various relationships among team members. For example, following the initial piloting of the original 10 activity cards in two centres, details of the NWOW initiative were shared at an annual early childhood educator conference hosted by one Saskatchewan tribal council that serves numerous First Nations communities. We aimed to expand the cards and share our work with Kathy to gauge interest from the centers. To our delight, they expressed enthusiasm and indicated they would like to incorporate these cards into their programming. Additionally, they were eager to share their own stories and experiences, which could be incorporated into new activity cards. The centers in attendance received our team's contact information and were encouraged to reach out if they wanted to collaborate on tailoring the resources for their communities and developing their own. Additionally, we shared a project sign-up sheet, and those who signed up were contacted for follow-up visits to their communities. As a result of reaching out to various childcare settings and communities through relational connections, we have extended nine invitations to childcare settings (licensed centres and Head Start programs). Three childcare centres in urban communities serving Indigenous and non-Indigenous children and six rural First Nations childcare settings (four licensed childcare centres and two Head Start programs) have accepted an invitation to engage in and explore the NWOW project. As we are working

with nine centers, a phased implementation process will be used: three childcare settings per year, over three years, will implement the program. We are taking our lead on this initiative from the communities who expressed an interest in NWOW and invited us into their community; iterative adaptations and tailoring to the initiative will respond to community needs.

In turn, the childcare settings that agree to participate will provide families with informational pamphlets and hang posters on the centres' walls. These materials will explain the initiative to prospective participants (parents/ guardians and children) with contact information for the research team. Families of children attending the childcare centres interested in the initiative will be invited to join the family nights and data collection sessions. The childcare centres and the participating families will receive, share, and give their feedback on the resources.

Community will be involved in various components of the project. Elder Kathy emphasized the importance of discussing intergenerational teachings, particularly the Seven Generation Principle, which highlights the deep intergenerational connections within Indigenous cultures (Courchene, 2021). We are in the initial phase of this journey, and while we recognize the significance of these teachings, we are not yet actively discussing them at this stage. In one community, many teachers may not feel strongly connected to their cultural teachings, but that does not mean they lack valuable insights to share. They are in the process of learning and reconnecting with their heritage. We aim to meet them where they are and encourage the sharing of diverse stories. The communities have expressed interest in participating, and their willingness to engage reflects their comfort with our approach.

Culturally Rooted Delivery and Evaluation Plan for the Nature's Way-Our Way Initiative ***Phase I: Sharing Nature's-Our Way Initiative (Objective 1)***

We are collaborating with communities that have expressed a desire to work with us and we are sharing what we have developed with Elders Kathy and Tim. Communities can adapt these resources as they see fit and create their own versions. Our approach represents diverse backgrounds: we are working with centres in urban communities reflecting various Métis, First Nations, and newcomer backgrounds—alongside rural Cree and Salteaux communities.

The NWOW team will hold an initial three-hour training session where they will share program details and associated delivery plans. This training includes discussing the underpinning philosophy of NWOW and sharing knowledge about the role of physical literacy and risky/courageous play in supporting child development. Additionally, the team will work with educators at each centre to understand how the unique Ways of Being within their First Nations community are reflected in land and nature-based play and weave in aspects of physical literacy and risky/courageous play. In addition, during the first 12-week delivery of Phase I, early childhood educators will receive approximately ten hours of professional development using the ten original NWOW activity cards. These sessions are intended to develop educator competence and confidence in movement situations, focusing on educator self-efficacy to engage in and model physical activities while also developing physical literacy among children. This professional development will also provide opportunities to discuss how the activity cards promote social and cultural connectedness, risky/courageous play, and differentiated learning for children to develop physical literacy. To foster positive role modelling, educators will be

encouraged to improve their physical literacy and, thus, have the opportunity to participate in personal goal-setting activities. Following the professional development, the NWOW team will spend two hours per day for five days over 12 weeks, assisting the educators in delivering culturally rooted physical literacy resources to the children. Each participating educator at each center will receive all 10 NWOW activity cards and the necessary equipment needed to deliver the activities in the childcare centre. Educators will then be asked to continue incorporating the initiative activities into the daily activities at the centre for 12 weeks by teaching a new card each week and then reviewing the cards for the final two weeks.

Phase II: Community-led Expansion of the Nature's Way-Our Way activity card set (Objective 2)

Educators, families, and community Elders/ Knowledge Holders at each participating center will be invited to attend story-sharing and collaboration sessions. At these sessions, attendees will engage in rich story sharing of games and teachings from their culture that they have participated in, while also working together to co-create three to five new activities that are representative of their unique First Nations and Métis cultural Ways of Knowing, Being and Doing. We aim to increase the inclusivity of the NWOW initiative and collaborate with the community to co-create 40-45 new physical literacy-enriched activity cards rooted in diverse First Nations and Métis teachings and games. In line with etuaptmumk (Bartlett et al., 2012, Marshall et al., 2015), the research team will identify the components of physical literacy from a Western lens and explore the domains being targeted in the Indigenous teachings and games through a wholistic and Indigenous lens. Cues for developing physical literacy, including adaptations for various skill levels, will be created. Opportunities for risky/courageous play will also be identified, and cues for encouraging this form of play will be incorporated. Information supports and cues for encouraging discussions of cultural diversity and inclusivity will be incorporated into the teaching lessons as per feedback from educators, families, and Elders/Knowledge Holders.

The educators at each site will be asked to pilot test the new activity cards over an additional 12-week period while also continuing to use the original set of 10 NWOW activity cards. At the end of the 12-week pilot testing, the NWOW team will ask early childhood educators to share stories and feedback about delivering the activities in their childcare settings, including sharing suggested adaptations to activities. An Indigenous artist will then be hired to create illustrations for the final drafts of the new activity cards, and an Indigenous graphic design artist will digitize the illustrations and content to create the finalized activity cards. At the end of the project, our goal is that the NWOW activity card resource will contain a set of physical literacy enriched culturally rooted land and nature-based activities (10 original activity cards, plus three to five new cards from each of the partnering childcare settings). Each card will clearly identify the individuals who created the activities. Our approach is intended to actively engage with individuals who shared personal stories from their childhood that expressed their ancestry and community ties. The participating childcare settings and rural First Nations communities will share ownership of NWOW resources. In addition, the activity cards will also be available on the NWOW website as a free resource to anyone interested.

Impact and Outcomes

Through co-creating the programming and resources, we seek to collectively acknowledge the communal nature and interconnectedness between culture and wholistic wellness. The NWOW team will share the expanded resources with all participating Indigenous and non-Indigenous childcare centres, families, and communities. All educators and families participating in the initiative will be given physical literacy activity kits containing ideas for the equipment needed for the culturally rooted games and teachings incorporated into the NWOW initiative. It is essential that all activities and associated materials will be tailored for each First Nations and Métis community. For example, through our community engagement, we have learned that some First Nations communities would not use ribbons as materials to encourage dance and play among their children, as these are a sacred part of ceremony. As such, ribbons would be replaced with scarves. NWOW is not a one-size-fits-all resource – each participating community is unique, with individual cultures and community identities.

At the end of our journey, the NWOW initiative will contain 40-45 co-created culturally rooted activity cards rich in diverse Indigenous intergenerational teachings that foster physical literacy and risky/courageous play. Along with enhanced activity kits, training supports containing ideas and activities for early childhood educators, families, and communities from diverse Indigenous and non-Indigenous urban and rural areas. We sincerely hope that we will successfully create an inclusive, culturally diverse initiative in which all participating childcare settings and broader communities can take great pride and ownership—increasing the long-term sustainability and impact of the NWOW initiative on early years children's wholistic wellness. In the future, our team aspires to work outside of Saskatchewan and include resources developed by and for Indigenous nations across Canada.

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Conflict of Interest: The authors declare no conflict of interest.

Informed Consent: Consent (and assent) was sought and obtained from all participants within this research. This research has received ethical approval from the University of Saskatchewan Research Ethics Board (REB-2771).

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