Land Based Education Success Pathway Thompson Community Circle



pawacikwanasis (December) 2015

Research Conducted through the Vital Outcome Indicators for Community Engagement Project ... the Land heals, feeds, protects, especially when you consider the people who lived here before the fancy buildings. The Land protected people before clothing stores. Students have to learn to survive, feed and heal from the Land.

Elder Stella Neff, Misipawistik Cree Nation, Chair UCN Council of Elders

... Land is a good teacher, Lessons come from the Land: Tell stories about the Land, breathe and experience nature.

Elder Emma Gossfeld, UCN Elder in Residence, Thompson

This report is part of the VOICE research project—A Community-University Research Alliance Project.

The VOICE research project is supported by the Social Sciences and Humanities Research Council of Canada and by Vale. Brandon University and the University College of the North are institutional partners for the VOICE research project. SDML also made significant in-kind contributions to this project.





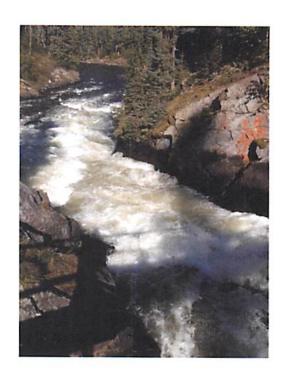






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Acronyms

CURA Community-University Research Alliance

LBE Land Based Education

OCAP The principles of research with Indigenous people: Ownership,

Control, Access, & Possession

SDML School District of Mystery Lake

SSHRC Social Sciences and Humanities Research Council

UCN University College of the North

VOICE Vital Outcome Indicators of Community Engagement

Foreword

Restoring relationships, repairing broken connections, reclaiming our history, culture, language and spirituality have to all be a part of reconciliation. Where would we start? On the land!! The land that has sustained us, fed us, healed us and clothed us has become lost to us. That which our Creator gave us has been ignored and almost forgotten. This is where we have to begin. We survived on this land for thousands of years. Our education was on the land: how to live; how to hunt; how to find food and medicine; and how to understand our world.

"Teach our history!" "Bring our languages back!" "Teach about our culture!" These were the calls from the communities in the North when UCN held consultations before UCN even started. "We will begin on the Land" was the cry. David Lathlin, Mosakahikan Cree Nation (Moose Lake) said, "We cannot keep teaching teachers the same way. It has not worked for our Native students. We must do something different." From that Kenanow, all of us together, was born, and we knew we had to begin by restoring relationship with the Land.

This report is important because it focusses attention on that relationship and a different way of teaching our students.

Elder Stella Neff, Misipawistik Cree Nation, Chair UCN Council of Elders

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Executive Summary

In 2012, Thompson became involved in a SSHRC-CURA community based participatory research project with Brandon University and the University College of the North. Through this collaboration, the Thompson Community Circle, which is made up of representatives from various stakeholder groups and members of the community at large, identified Land Based Education (LBE) as one of three Success Pathways because of its importance particularly to Aboriginal youth attending school in and around Thompson. The notion of LBE, in this context, is founded upon the traditional belief that the Land is our first teacher, and that a relationship with the Earth is necessary to the understanding of ourselves, others, and the world in which we live. The purpose of the Land Based Education Success Pathway was to discover in what ways this concept was already being practiced in local classrooms, develop and implement further curricula that integrates LBE with the Manitoba curriculum guidelines, provide workshops and other training opportunities for educators on LBE within the school district and community, engage students in LBE, gain an understanding of the effects of increased LBE opportunities on the engagement of students, and support knowledge mobilization of research findings.

The Thompson Aboriginal Education Advisory Committee, a School District of Mystery Lake (SDML) advisory group promoting Aboriginal education, and representatives of the community, assumed the responsibilities of the Thompson Community Circle. The research practices required by the Thompson Community Circle have been consistent with the principles of ownership, control, access, and possession (OCAP), developed by the First Nations Information Governance Centre.

Because of its connection to First Nation communities and the large Aboriginal population in the city of Thompson, SDML provides a variety of opportunities for LBE experiences to its students and teachers through the leadership of Loretta Dykun, Cultural Proficiency Consultant, and Ron Cook, Cultural Proficiency Consultant and Cree Language Coordinator. These opportunities formed the basis for enquiry into further possibilities and the importance of developing LBE curriculum connections that can be embedded within all aspects of learning for SDML students.

The purpose of this research report is to share research findings about SDML's practice of Land Based Education, as well as to document the increased focus on LBE at the University College of the North in their Kenanow teacher education program. The authors also provide conclusions about the LBE program as they pertain to the Success Indicators identified by the Thompson Community Circle, as well as recommendations for the future.

Situating the Research

SDML and the Thompson Campus of the University College of the North Kenanow Bachelor of Education program are situated in Thompson, on Treaty 5 Territory within the traditional Lands of the Nisichawayasihk Cree Nation. In 2012, through the VOICE research project, and under the direction of the Thompson Community Circle, these 2 institutions began a partnership to investigate and further the use of traditional Land Based Education within local classrooms and the teacher training program. This initiative, which is based upon the traditional belief that the Land is our first teacher, is ongoing and continues to develop as a deeper understanding of the implications of this belief is gained.

In this report, the authors will explain how the VOICE research project has been instrumental in funding this work, the traditional basis for such a belief, the specific involvement of pre-service teachers in developing curriculum material, and specific examples of how this research has taken place with the collaboration and co-operation of School District of Mystery Lake staff and administration. The authors and contributors will also provide anecdotal evidence of the change in their personal perception and approaches towards Land Based curriculum delivery.

VOICE Research Project

This research is part of the VOICE research project—a community-university research alliance project. The VOICE research project is supported by the Social Sciences and Humanities Research Council of Canada and by Vale. Brandon University and the University College of the North are institutional partners for the VOICE research project. The Vital Outcome Indicators for Community Engagement (VOICE) research project is a Community-University Research Alliance project, which is funded by the Social Sciences and Humanities Research Council of Canada from 2011 to 2016. The VOICE research project brought community partners, organizations, and university researchers together for the purpose of helping children and youth from first Nations, Métis, and Inuit in northern Manitoba achieve educational and career success. Brandon University and University College of the North were co-applicants.

As participating communities were identified, community circles with representation from as many partners as possible were formed. The task of these 'circles' was to identify specific "success pathways" or directions on which they wanted to focus their research attention throughout the project. In Thompson, Manitoba, Land Based Education was identified as one of the success pathways. The primary partnership formed to research this pathway was between SDML and the University College of the North, the Kenanow Bachelor of Education Program faculty, and pre-service teachers.

University College of the North Kenanow Faculty of Education

At the University College of the North (UCN), students that enrolled in the Bachelor of Education program receive a unique type of teacher education. Since the inception of this faculty, all aspects of instruction—including the program curricula, the instructional practices, text materials, and methods of teaching—have centered on what is identified as the Kenanow learning model. In short, this model exemplifies an education system that served Aboriginal people well for generations throughout time and history. In its purest form, the model is about identity, a place of belonging, community history, roles and responsibilities of generations of families and the process of handing down knowledge in a larger context, the community that supports and nourishes the heart, as well as mind, body and spirit.

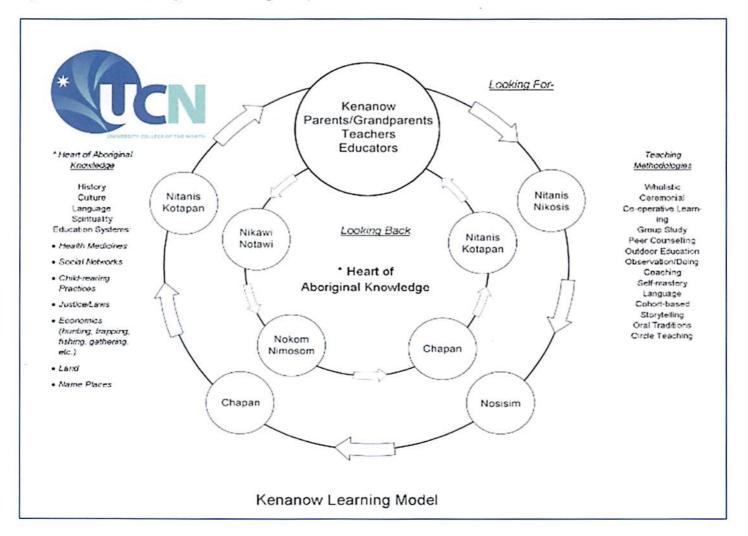
In 2003, when a group of Elders gathered to develop and design the emerging UCN, Kenanow Faculty of Education program, they had many ideas as to what that program might look like. What they knew was that for years, the public school system had failed to meet Aboriginal student educational needs in many areas, including the preparation of prospective teacher candidates in various teacher education programs. They knew that it was not enough to adopt the framework of existing faculties of education; something new had to be created that would meet the needs of Aboriginal students. After considering many designs, the idea of Kenanow was presented. It is a word drawn from the Cree language. Translated literally, it usually reads "all of us, all of us who are here", which includes all our relations. See Figure 1 below.

Through the Elders' vision of the Kenanow learning model, a new foundation for teacher education was created, one that looked to the past, present, and future for the education of northern and Aboriginal students. The notion of "all of us together" continues to be the link between western education perspectives and

Aboriginal perspectives in the transmission of knowledge. The notion that good pedagogy involves "all of us together" is based upon the understanding that every being has something to contribute: that we are all in the circle together and we learn from each other. And we acknowledge the Land as our first teacher.

From this perspective, it was a natural 'fit' when, under the design of the SSHRC sponsored VOICE research project, Land Based Education was identified by the Thompson Community Circle in the Fall of 2011 as being one of the success pathways they wanted to investigate.

Figure 1. Kenanow Learning Model as designed by UCN Elders.



Credits: Elders Stella Neff, Mabel Bignell, David Lathlin and Pat Lathlin, Esther Sanderson, & Doris Young, University College of the North June 2008.

School District of Mystery Lake

With six elementary schools and one secondary school serving over 3000 students, an estimated 55% of whom are Aboriginal, SDML in Thompson has been developing Land based learning initiatives for many years. Through the office of the Cree Language Co-ordinator, Ron Cook, and the Cultural Proficiency Consultant, Loretta Dykun, programs such as the following:

• Mini-Winter Festival: In March, each elementary school hosts two days of school-wide planned events in an effort to promote and learn about traditional Cree/Northern activities that take place during the winter season. During this time, students have an opportunity to learn traditional skills from local Elders and Land Experts such as: animal skinning, pemmican making, trapping techniques, jigging, moccasin making, and dog sledding. They also compete with one another at some of these traditional skills like snowshoeing, log sawing, moose calling, trap setting, snow snake toss, and beading to try to be King and Queen Trappers of their school. All of these activities are hands on and involve local experts from the community and the surrounding region to promote Northern and Aboriginal culture.

Figure 2. UCN Kenanow pre-service teachers Brodie Martin (L), and Ryan Barker (R), stand with a Grade 8 student from Wapanohk Community School behind the completed ice block igloo.



Grade 8 to Grade 9 Transition Camp: Many students tend to fall through the cracks and drop out when they move from their elementary schools to the high school. The District has attempted to address this problem in many different ways. One such effort is to take Grade 8 students from all six elementary schools and as well as some Grade 9 students (mentors) out on the Land (in the Spring close to year end) where they will have an opportunity to learn about traditional Cree and Northern culture, meet students from other schools in a natural setting where they have to interact in respectful ways and learn how to work together in a camp setting. This camp is set up as a two day event. The first day is for learning from the Elders and traditional teachers as well as participating in activities targeted to help get to know one another in a variety of ways on the Land. The second day focusses on what students need and want to know when they get to high school in order to be successful. This is done by small mini sessions with the high school principal, counsellors, Grade 9 teachers, and the mentor students. At this time, there is a plan made for students to connect with their mentors the following September so that they can stay connected and help one another.

Figure 3. Elder Frances Hall from Wabowden teaches the traditional skills of beading and leather mitten making to students at Transition Camp.



• sikwan mamawewin: This gathering takes place in conjunction with the buds coming out on the trees, which signifies the beginning of the new year (when the new life and growth on the earth is honoured through various traditional Cree ceremonies hosted by Northern and Aboriginal Elders Council). This is a week of various activities that meet the needs for many facets of the community. The R D Parker Six Seasons of the North LBE students are involved in the setup and preparations for camp. The week involves adult Cultural Awareness hands-on training, elementary and high school students learning about traditional teachings and ceremonies of the territory at this time of year from Elders, and community camps throughout the weekend with many ceremonies and traditional events hosted by local Elders. Everyone in the region is welcome to join in these events.

Figure 4. Students construct a sweat lodge during sikwan mamawewin under the guidance of Elders and traditional knowledge keepers.



Fall Culture Camp: This weeklong camp is co-hosted by SDML and the UCN
Kenanow Bachelor of Education Program. As a part of the UCN Kenanow
teaching program, the pre-service teachers go through the process of
learning how to set up and plan a traditional experiential learning camp for
kids. At the same time they camp themselves and experience hands-on
learning and teachings from various Elders in an effort to help them
become more effective and well-rounded teachers. The day camp is

targeted for Grade 5 students within the district to support the social studies curriculum learning outcomes.

Figure 5. Elder Caroline Sanoffsky teaches young students about traditional medicines and medicine picking during a warm Fall day at camp.



And, in the last five years, the introduction of a secondary school credit course Six Seasons of the North, has focused on Land Based Education and has been taught in a more traditional fashion by Elders and local experts, along with licensed teachers. These initiatives have introduced elementary and secondary students as well as teachers within the district to the notion that the Land is our teacher. Primary to that understanding is the belief that traditional teaching methods, such as storytelling, modeling, and observation, can be used to engage today's learner both inside and outside of the classroom, while still meeting the learning outcomes outlined in Manitoba curriculum documents.

The aim of the VOICE research was to deepen and clarify an understanding of how such programs can strengthen the engagement of students in the learning process, thus effecting the long term outcome of graduation rates for this student population.

Figure 6. Students from R D Parker Collegiate, enrolled in the Land Based Education program, learn how to cut up a caribou they have shot.



Through anecdotal documentation, photographs, student journals, interviews with pre-service teachers, classroom teachers, school district personnel, community members, students, as well as written reports received from participants in the programs, a picture was developed of how effective such programs are, and what possible steps might be taken in the future to further enhance that effectiveness. Some of this information was gathered through the efforts of pre-service teachers enrolled in an action research course specifically designed to focus on the possible integration of Land Based Education and the Manitoba Grade 7 curriculum in the four core areas of Language Arts, Math, Social Studies, and Science. Their experiences and findings have contributed substantially to the research recommendations.

What is Land Based Education?

For the purposes of this research we define the concept of Land Based Education as being rooted in the Aboriginal belief that the Land is our First Teacher, and that by observing, listening, experiencing, and valuing all that the earth has to offer, we can learn that which is necessary to sustain our lives. We acknowledge the traditional perspective that the Land encompasses all that is above, below, and around us, including the elements of air, weather, water, earth, and sky, extending to the cosmos.

Keeping that perspective central to our work, we agree that our working definition of Land Based Education becomes that which can be learned from activities experienced while forming a relationship with the Land and coming to an understanding of Her teachings. These experiences also require the formation of respectful and caring relationships with every other type of created being, including animals, insects, plants, rocks, etc. We accept that through these shared activities and experiences we can learn those skills and understand that they are necessary to sustain our physical, mental, emotional, and spiritual lives as individuals and within a community. The extension of this belief is that what can be learned from the Land can be thoroughly integrated with provincial curriculum learning outcomes in all subjects taught in classrooms.

Research Questions

The research questions identified by the Thompson Community Circle for the Land Based Education success pathway were:

- 1. How do we integrate Land Based Education with the Manitoba Department of Education curriculum expectations within classrooms in Mystery Lake School District?
- 2. Does Land Based Education increase student success and change teachers' perspectives about the importance of learning from the Land and help develop an individual, local, and regional sense of identity?
- 3. What is the impact and pedagogical benefit of Land Based Education programs for teachers, parents, and students?
- 4. How will the research from Land Based Education impact the education system for lasting change in future policy and direction?
- 5. In conjunction with the Cultural Proficiency Pathway, through the lens of Mystery Lake School District, how does Land Based Education engage students, teachers, and community members, and foster our understanding and appreciation for Aboriginal ways of knowing and living?

Indicators of Success:

The indicators of success identified by the Thompson Community Circle for the Land Based Success Pathway are:

- Creation of support material for teachers to build connections between Land Based Education experiences and classroom teaching. Clear evidence of linkages between Land Based Education and Manitoba Ministry of Education curriculum expectations.
- 2. Measured and anecdotal evidence that teachers are using produced resources.
- 3. Measured increase in teacher engagement in Land Based Education activities. Increase in number of teachers per school using available Land based sites and resources.
- 4. Teachers experiencing a demonstrated perspective transformation through content delivered in their classrooms.
- 5. Students are more engaged in schools as will be evidenced by increased attendance, academic success, and sense of belonging. There will also be a decrease in disciplinary action.
- 6. A measureable increase in the use of Elders and local experts to advance student learning about the teachings of the Land while in classrooms and in the local area.
- 7. Increased opportunities for professional development for teachers and all school board staff regarding Land Based Education.
- 8. Land Based Education is supported in the district and the Thompson community as is evidenced by changes to policy, programs, finances, and community interest in available professional development.
- Increased community support for Land Based Education by volunteering to help setup, organise, prepare, endorse, and publicise such activities as Culture Camps, Transition Camps, Medicine Gardens, and the possible selection and development of a permanent Land Based Education site.

Related Literature

In their book "The Circle Unfolds", Battiste and Barman (1995) use the ancient Anishinabe medicine wheel to illustrate the four areas of human development and growth through which a child reaches maturity: (1) the body, (2) the mind, (3) the heart, and (4) the spirit. In this paradigm the four quadrants of the wheel reflect the physical, mental, emotional, and spiritual components of our lives. In order for us to live balanced lives, as with any wheel, each quadrant must be equal; one quadrant cannot outweigh another or balance is lost. But the four directions of the wheel, according to Battiste and Barman (1995), are not complete without an understanding of two more directions: (1) that, which is under (the earth) and (2) that, which is above (the cosmos). These two additional directions affect all others and provide the teaching needed to live healthy lives. We, and all that is within us, are at the centre of the wheel.

The late Ojibway writer, Basil Johnston (2003), gives a more detailed definition of the Land in the introduction to his book "Honour Earth Mother". He is frustrated by what he perceives to be the European definition of Land—that Land is merely something that covers the earth's surface. He describes Land as the "trees and shrubs, plants and flowers, insects, birds, animals and fish ... the rock carved into mountains, hills, valleys, scarps and meadows; the water falling as rain from above ..." and ends by stating, "The Land is everything" (p. xiv). For people who share this worldview, Mother Earth is not passive, but takes an active part in communicating with the human species. "Men and women watching the plants, insects, birds and animals will learn something ... it is the Earth telling them something they didn't know before" (Johnston, 2003, p. xiv). Although we have used the word Land, it is with this wider understanding of the term that we have interpreted the data collected in this research. Also, respecting the Indigenous worldview, we have chosen to use the feminine pronoun when referring to the Land.

York University professor Celia Haig-Brown focused upon the notion of the Land as teacher during a presentation entitled "Pedagogy of the Land", presented to the Eastern Ontario Regional Professional Learning Circle of Native Studies Teachers (October 2010). Also referring to the medicine wheel as a model of balance for human existence, she contended that Western education systems could learn a great deal from a close examination of the wheel and its teachings, especially in the area of learning from the Land. Using the wider definition of the word Land, quoted from Johnston (2003) previously, Haig-Brown (2010)

expanded on the idea that it is the Land that teaches and nurtures us physically, mentally, spiritually, and emotionally.

How do teachings from the Land encompass our physicality? Haig-Brown cited examples of both urban and rural dwellers whose lives were controlled by the variance in climate and the vagaries of weather. The city dweller whose commute to work is delayed by a snowstorm learns that the force of nature is great enough to send computerized transit schedules into chaos. The city dweller also learns to walk carefully on ice and to take sore muscles into account while shoveling through drifts. Those who live in rural areas understand the dangers to health posed by well pollution during spring run-off and the need for caution around overflowing rivers and streams. Haig-Brown notes that we have bodies made of matter and we interact with matter; thus, while we may not always be aware of the immediate and secondary effects the Land has on our physical selves, we cannot be immune to those effects or teachings. In Battiste and Barman's (1995) opinion, we are bound to the earth and only when that primal relationship is acknowledged will Western educators begin to understand the depth of teaching offered by the Land.

Perhaps the most difficult aspect of our lives, and those of our students, to define is that of spirituality—an aspect of humanity rarely considered in Western education. Battiste and Barman simplify the concept of spirituality by defining it as a relationship with all things, hearkening back to the traditional expression "All my relations" (Battiste and Barman, 1995, p.19), which refers to our connection to every other being with whom we share this planet and beyond. It is a huge concept. How does the Land teach this sense of connectedness? She teaches through exposure to and reflection on the magnitude of a sunset, the possibility contained in a seed, the reality of inter-species communication, the powerful forces of weather, and the development of an embryo in an egg. "The six directions are a way of thinking about existing in the universe" (Battiste and Barman, 1995, p. 16). They provide a way of thinking about the experiences of life with the Land as we consider the importance of Land Based Education as a vital component of teacher education and a pivotal concept for all our elementary and secondary students.

That living on the Land teaches thinking and decision-making skills is a theme that surfaces often in the writing of Aboriginal scholars. Aspects of this ancient notion of knowing about and learning from natural surroundings have received modern acclaim. It is the form of intelligence referred to by Harvard psychologist

Howard Gardner (1983), as "naturalistic intelligence." In an online interview with Kathy Chekley (1997), Gardner defines this form of intelligence as "the ability to recognize and classify plants, minerals, and animals, including rocks and grass and all variety of flora and fauna." In the same interview he asserts that "[Pattern recognition] is an ability we need to survive as human beings. We need, for example, to know which animals to hunt and which to run away from ... brain evidence supports the existence of the naturalist intelligence. There are certain parts of the brain particularly dedicated to the recognition and the naming of what are called "natural" things."

The evidence that a connection to the natural world is hard-wired into our very brain structure is an example of 21st century science supporting traditional knowledge.

Our ability to recognize patterns of natural phenomena could be expanded to include knowledge of weather patterns, star constellations, and recurring seasonal changes. Haig-Brown (2010) speaks of "not knowing what or how we know" and gives the example of someone who always knows the compass direction in which they are heading, but has no idea how they know that. People who know when weather is about to change, or who can tell the clay content of soil by gently rubbing it between their fingers, or who can tell the changing of the seasons by watching the behaviour of geese, are also exhibiting this way of knowing. It would be impossible for someone to isolate the time when they learned this particular knowledge, or who taught it to them.

According to Haig-Brown (2010), exposure, observation, sensual participation, instinct, and example are all possible factors in the development of this naturalistic form of intelligence. Johnston (2003) says, "Our ancestors learned what they knew directly from the plants, insects, birds, animals, the daily changes in weather, the motion of the wind and waters, and the complexion of the stars, the moon and the sun" (p.xii). This learning is still going on today. Our job as educators is to enable our students to recognise the knowledge they have and translate it into an understanding of other concepts such as mathematics and language arts.

Finally, there is a growing body of research literature that speaks to the need for children (and adults) to be in relationship with the Land in order to maintain their mental and emotional health. Child advocacy expert Richard Louv (2005) writes throughout his last book *Last Child in the Woods*, about what he calls "nature deficit disorder". After discussing various examples of how spending

time outside, in preferably unstructured activities, benefits children with attention difficulties and/or emotional struggles. Louv says "More time in nature, combined with less television and more stimulating play and educational settings, may go a long way towards reducing attention deficit in children, and, just as importantly, increasing their joy in life" (p. 107). His argument ends with this provocative thought, "If it's true that nature therapy reduces the symptoms of ADHD, then the converse may also be true: ADHD may be a set of symptoms aggravated by lack of exposure to nature" (p. 108). (Note: While Louv writes of 'nature', traditional people personalise that connection through relationship by recognising the Earth as Mother, and the Land as our first Teacher.)

Scientist David Suzuki (2015) has taken a firm stand on this emerging data by issuing his "30/30 Challenge", a program in which schools are challenged to get students outside and into nature for 30 minutes per day for 30 days. He has also made online teacher guides available for all elementary school Grades, entitled "Connecting with Nature" http://www.davidsuzuki.org/what-you-can-do/connecting-with-nature-education-guide/. The introduction to these guides asks the question, "Why teach outdoors?", and posits the answers to be:

- Time spent in nature enhances academic achievement
- Nature-based activities improve student behaviour and co-operation skills
- Outdoor learning promotes good communication
- Time outside helps students focus
- Students are happier, less stressed and physically healthier outdoors
- Time in nature has been shown to reduce some ADHD symptoms
- Spending time in nature helps with recall and memory, problem-solving and creativity

If we want our children to protect the Earth, we need to give them an appreciation for it and a sense that they are connected to it.

Research Methodology

Note: Staying true to the model for research developed by UCN elders, along with members of the UCN Ethics Review Board, meant continually referring back to the concepts held therein as a group. To further help decide on how to conduct this research we were committed to following Cree researcher, Shawn

Wilson's (2008, p.77) guidelines. Expressing criticism of the forms of study normally used by non-indigenous, predominantly Caucasian, researchers, he asserts that research must be relational in order to present truth. He insists that any researcher(s) must ask the following questions before a study is undertaken, if the data is to adhere to relational accountability:

- How do my methods help build a respectful relationship between the topic I am studying and myself as researcher (on multiple levels)?
- How do my methods help build respectful relationships between myself and other research participants?
- How can I relate respectfully to the other participants involved in this research, so that together we can form a stronger relationship with the idea that we will share?
- What is my role as a researcher in this relationship, and what are my responsibilities?
- Am I being responsible in fulfilling my role and obligations to the other participants, to the topics and to all my relations?
- What am I contributing or giving back to the relationship? Is the sharing, growth, and learning that is taking place reciprocal?

Theoretical Framework

Transformative learning theory states that the process of "perspective transformation" has three dimensions: (1) psychological (changes in understanding of the self), (2) convictional (revision of belief systems), (3) and behavioral (changes in lifestyle). Transformative learning is the expansion of understanding through the transformation of one's basic worldview and a change in the specific capacities of the self; transformative learning can be facilitated through consciously directed processes such as integrated coursework.

During two years of teacher training at UCN in Thompson, Manitoba, pre-service teachers are exposed to the belief that it is possible to engage both Aboriginal and non-Aboriginal elementary and secondary school students in Land based activities connected to the provincial curriculum documents. It is further believed that this connection will strengthen their scholastic achievement by linking these provincial learning outcomes to specific traditional Northern and Aboriginal cultural

practices. For some teacher candidates this is their first introduction to the idea that students can learn from the Land in this way; for others it is a chance to build on knowledge passed on to them through family and community.

Within SDML there have been many opportunities presented for teachers and staff to observe Land Based Education in practice, and to work on the integration of these practices with their classroom curriculum. Teachers and staff are encouraged to participate in all proffered activities and to experience firsthand the learning that can be gained from such involvement.

As with the UCN Kenanow pre-service teachers, for some SDML teachers and staff this is an introduction into a new way of thinking, while for others it is the coming together of what they already know to be true with their teaching practice. In all cases it is hoped that transformation will occur as understanding and learning are achieved. A similar transformation in thinking and awareness is the goal for student learners.

Connection to Cultural Proficiency

Another Success Pathway identified by the Thompson Community Circle was Cultural Proficiency. Within SDML, since 2011, there has been a formal and expanding commitment that administration, teachers and all other staff be exposed to Cultural Proficiency training through professional development opportunities. In Thompson, Cultural Proficiency training includes the valuing of all cultures, but there has been a special focus on understanding Aboriginal and Northern cultures since the demographics of the School District indicate that over 60% of students are of Aboriginal ancestry. From a Land based perspective it is right to focus on the culture of the people upon whose traditional territory the City of Thompson, UCN, and SDML are situated.

These two pathways, Land Based Education and Cultural Proficiency overlap in many areas because acknowledging the Land as teacher is fundamental within the traditional Aboriginal worldview. It is hoped that teachers who are exposed to the traditional teachings regarding the Land as teacher will experience both a personal and professional transformative process.

Action Research Methodology

Action Research methodology most closely complied with the UCN research principles referred to above, Wilson's (2008) principles, and the principles prescribed in the OCAP document "Research with Aboriginal Peoples". (In this regard, we refer back to the demographics of the school district and acknowledge that our research will primarily be dealing with Aboriginal students. In the absence of a specific Chief and Council to consult and to whom to be accountable, the Thompson Community Circle agreed to take the place of that body. Therefore, all aspects of this research project were presented to them for approval prior to commencement of activity.)

Data Collection Methods

Due to the personal nature of transformational experience, and the limited accuracy of quantitative research tools such as scales and graphs in capturing the essence of transformation, we have relied heavily on personal reflections, anecdotes, open-ended responses, journal responses, and recorded conversations in our data collection. This research practice is in keeping with the traditional value placed on stories and oral communication, and thus appears appropriate for reporting research on the Land Based Education success pathway.

Consistent with Wilson's principles, and those of action research, the researchers are part of the community and are in a continuing relationship with all participants to one degree or another. They have also developed deepening personal relationships throughout the research with each other. Researchers participated in all activities documented in this report, experiencing firsthand the teachings and other components of those activities. The personal nature of this research can be noted in the emergent nature of data collection methods. In many instances conversations and dialogue with partners led to the asking of further questions regarding a particular aspect of this success pathway. These rich questions then evolved into further study. For example, in a conversation between researchers it was 'wondered' how graduates from Kenanow found themselves able to continue the practice of Land Based Education, and what, if any, barriers they encountered. For example, this 'wondering' led to the inclusion of that question when graduates were interviewed by current students as part of their action research project in the winter of 2015.

Note: In compliance with UCN's research ethics board stipulations, both student and faculty researchers also obtained certification from the Canadian Tri-Council

Panel on Research Ethics—Ethics Governing Research Training with Human Subjects, with particular emphasis on the section regarding research in Aboriginal communities. This stipulation is new to UCN and has been a welcome incorporation into the Kenanow pre-teacher training program. It is hoped that graduates from this program will use this training in their future practice as they continue to assess and re-assess their teaching methods and the engagement of their students.

Situating Ourselves as University College of the North and School District of Mystery Lake researchers

Ron

As a young boy, my parents would take us out on the Land every summer as a family. We would spend the time enjoying the many different areas around my home community, developing an appreciation for the natural environment. My father was a hunter, trapper, fisherman who spent most of his life on the Land. I would accompany him as a young boy, learning to respect the Land and the life it sustained.

When Manitoba Hydro built a generating station in Grand Rapids in my teens, I wrongly assumed that my parents' way of life was gone and that I had to adapt to the new ways that came into the community. It was not until I was in my mid-twenties that I realized a life on the Land was still an option for me and I followed my father's example. I became a fisherman and a hunter; I realized early in life that I could not be a trapper. My wife and I lived a traditional fisherman, hunter lifestyle and we took our daughters out on the Land, as my parents had done for us.

My interest in my first language, Cree, led me to a career as a Native language teacher. As a teacher of Cree, I came to realize that I had to teach from the world view of the Inino. I could not translate Western concepts and subjects into Cree and expect to teach our children to speak and understand Cree. The Elders told me I had to truly understand our language which meant taking words apart and finding the true meaning of the words instead of just translating them into English. When I began doing this, and I admit I am only in the beginning stages, I began to see how deep the connection is to the Land. I was also told by the Elders that our children were having a hard time in school because they were losing their connection to the Land. They have to be reconnected to the Land, to see it as their home which provides them with all they need for a good life, "mino pimatisiwin."

Loretta

Having grown up a minority Ukrainian in a northern Cree community, I have had many unique experiences that involve learning from the Land and the people. This has helped shape my personality and my philosophy of education. With my parents, originally from a small farming community in southern Manitoba moved to northern Manitoba to teach and this has given me a perspective of the Land and its value in all aspects of our lives and in our relationships with one another.

Our family has always engaged in activities that involve being out on the Land. Some of these endeavors include; camping, fishing, and making skating rinks on the lake, hunting, snowshoeing, snowmobiling trips, boating trips, and building a log cabin to share with others. Ever since I can remember our family has always spent quality time together with one another and others on the Land which has contributed to our rich life experiences that I have brought with me into my adulthood and also into my career in Education.

Living in Cross Lake I learned to read and write in Cree before English, while my parents were fluent in Ukrainian. My parents encouraged myself and my 2 siblings to learn this language and the cultural teachings and values that were entrenched within it. This may seem weird but it was this type of language learning that has helped shape my understanding of the importance of our connections to the Land and one another.

Growing up in the way that I have and meeting the many people that I have along the way has helped guide the way that I teach students and work with other Educators throughout my career. We have a great deal to learn from the Land and its many cultures of people that will help us figure out who we are. Students need to see themselves as a part of the Land and as educators we need to engage them in making those connections through a variety of Land based experiences both in and out of the classroom.

This research project has been exciting to work on and I have witnessed the positive changes that these LBE activities have had on the adults and children who have been involved. The research team members have been a pleasure to work with, I am confident that this project has impacted positive change within our school district and throughout the community.

Brenda

I first became connected with the importance and value of Land-based education while teaching in remote Aboriginal communities. I eventually engaged in a process of actively letting go of my need to be a teacher expert and actively embracing the concept of learning facilitator. I learned to provide the space for Aboriginal knowledge and epistemologies to impact both the students and myself. I came to understand that the learnings and the knowledge have arisen from the Land over countless generations and that each new generation needs the time and space to listen to and be with the Land as it speaks. I came to see that, with repeated opportunities to listen, it is possible to begin internalizing the teachings of respect, relationships, reverence, and responsibility.

I came to believe that possibilities for a transformed education can come alive as the community of individuals (students, Elders, parents, and teachers) bring this sense of living, this different way of being, into the school and that, if the school can embrace the vital energy of the Land, a connection can be forged that draws the school towards the sense of place that helps define and nurture the community. With these new understandings, I look constantly for opportunities and responsive 'learner facilitator' actions within specific context situations—thinking 'outside of the box' for what might be possible and acting on those thoughts. I also ensure that I review the Land-based experiences and related classroom-based activities to connect with both general and specific knowledge, skill, and attitude outcomes in the curricula.

Jennifer

Through forty plus years of teaching in elementary, secondary and tertiary education classrooms I have become increasingly aware of the need to engage students through pedagogical practices that are relevant to their lives. But, it is as a grandmother that I have found my deepest commitment to working to change the aspects of Western education that ignore our connection to "all our relations". For the sake of my grandchildren I have a compelling desire to bring into the classroom the sense of awe that, as a lifelong part-time farmer, I experience on a daily basis in the field and in the barn. A deepening understanding of traditional Aboriginal teachings regarding the Land as being our primary teacher has brought me to a place where I cannot continue to separate what I teach in the classroom from my experiences on and with the Land.

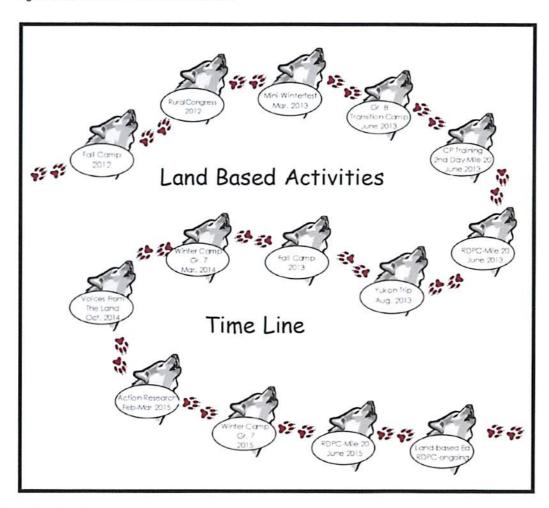
I attempt to move them out of the classroom and into the natural world as often as possible. Classes taken outside on school property and walks through adjacent fields and trails are within our scope of activities and we are able to discuss our human connections while sitting on grass and watching birds fly high. I am grateful for those moments of teaching. I am especially grateful for being able to design UCN Kenanow courses that take us completely out of the classroom. For example, in our Teaching Sport and Wellness course we are able to be on the Land for most classes and to experience together what She teaches. This has also been our experience at Fall Camp when we come together as faculty and students at Mile 20, a sacred camping place north of Thompson and live with the Land for five days.

When I look a back I see both the richness of those opportunities taken to learn on and from the Land, and those times when I could have planned to be out of the inside classroom even more often. It was later in my career that I realised the Land Based Education did not mean a field trip to somewhere else, but the awareness that we learn from the Land as She immediately surrounds us. If I had understood this concept sooner I would have spent more time outside with my students and intentionally introduced them earlier to the sense of connection with earth and sky; soil and water; animals and birds; and I would have modelled that awareness of connection by speaking more freely of my own experiences.

Data Analysis

The Events We Researched in Chronological Order, and Data Obtained

Figure 7. Land Based Activities Time Line



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Fall Camp at Mile 20, 2012

The UCN Kenanow B.Ed. program in Thompson and SDML have co-sponsored fall camps at Mile 20 since September 2009. The first such camp included in this research was the one that took place in September 2012. The pattern of activities for the week has remained essentially the same since the beginning, although over the years this event has grown in scope and diversity of activity. Recent changes will be commented upon in the appropriate years.

With the expectation that most Kenanow students, faculty, and SDML personnel would be staying overnight at the site, Monday of the week was devoted to setting up the teaching tipi, prospector tents, a lean-to kitchen, fire pit, and to doing other jobs necessary to create a good outdoor environment. Seven teaching sites were set up in preparation for the following day when Elders and local teachers would arrive. The teachings at these sites during the rest of the week would include: bannock making, outdoor survival, medicine picking, rock painting, tipi teachings, drumming, and medicine wheel teachings. At night all participants would gather around the fire to hear stories from Elders Martha Jonasson and Stella Neff.

Figure 8. Kenanow instructor, Merv MacKay completing tipi set-up with pre-service teachers, from front to back, Ryan Barker, Gurpreet Kaur, Unnati Patel, Ursula Ellis, Terri-Leigh Mowat, Stefan Hudson, and Athlene Ashton.



On Tuesday, Wednesday, and Thursday mornings the Kenanow students, after gathering for breakfast, walked out to the highway to meet busloads of Grade 5 classes from SDML, 2-3 classes per day, and to guide them back to a large medicine wheel setting where they were welcomed and told a little of the history of Mile 20, along with some expectations for the day. Students arrived with tobacco ties they had made to give in appreciation for lessons learned or kindness shown, they were also given memory bags in which they could put material given to them by Elders and teachers, or other keepsakes from the day.

The Grade 5 students were divided into small groups each with a Kenanow student for a leader, with whom they progressed through the series of teaching sites throughout the day. Classroom teachers from the Grade 5 classes were free to join various groups and to enjoy learning during the sessions. At 3:30 everyone was called again to the medicine wheel and invited to reflect on the day before the buses came to transport the Grade 5 students back to Thompson.

On Friday, the camp was dismantled by UCN Kenanow pre-service teachers,

School District of Mystery Lake staff, and other helpers. Team work was needed to get the job done efficiently and, while working, researchers observed a growing camaraderie among those present. During this time traditional lessons, such as the reason not to step over the tipi poles, and the acknowledgement of whose territory the camp was on, continued to be taught and learned.

In conversation with each other, researchers remarked that each day the spoken reflections of the Grade 5 participants were very moving. Student after student spoke of what they had learned during the sessions and how great a day it had been. As researchers, we were surprised at the extent of knowledge retention among the Grade 5's, and some of the connections they had made. Of particular note was that during

In the thoughtful words of some Grade 5's from 2012:

"At Mile 20 I felt very respected throughout the entire day."

"I would have liked it if we could have heard more about the medicine wheel."

"If they could improve on anything I think they should have more handson activities like in the medicine wheel."

"At the start of the day I didn't care much about going, I just didn't want to go to school ... the ceremony was neat. Once we started activities it was interesting at some of them. It was fun. Nuff said."

"I felt everything, the earth around me. It felt strange going inside after being outdoors for so long. the week two students who had been identified by their teachers as special needs pupils were among the first to speak up and thank Elders and teachers for a wonderful day. The teacher of one of these pupils commented, "I have never seen him so well behaved. He was teaching others in his group what he knew about things". A principal remarked that she had had some fears about bringing out this group of Grade 5's prior to coming, but that she was amazed at how well everything went and how engaged students were while doing the activities.

A follow-up activity was done by teachers in several of the Grade 5 classrooms and the results shared with School District of Mystery Lake board personnel. Of twenty reflections received 19 stated that the experience had been a success, with adjectives such as "awesome", "educational", "really fun", "great", and "amazing" being used to describe the day as a whole. (The one dissenting voice was cross because s/he was not able to be with friends who were back at school.) Not surprisingly, bannock making was the favourite activity of over 60% of the young students, but drumming and the tipi teachings were spoken of as being favourite activities as well.

Some students had suggestions to make the day even better:

- More hands-on activity
- More time in each session
- More explanation of activities before doing them.

Note: One student remarked that s/he felt the cultural emphasis was too strong and that s/he was being asked to believe things other than what s/he had been taught, but this was not commented upon by anyone else.

Following observations made at this 2012 Fall Camp, UCN faculty decided to incorporate even more Land based teaching into their course curriculum for preservice teachers and to endeavour to bring out to Mile 20 not only those who were enrolled in the "after degree" program (having completed an initial Bachelor of Arts degree), but also those who were enrolled in the "integrated studies" program (pursuing both a Bachelor of Arts and a Bachelor of Education simultaneously). It was acknowledged that this initiative would take more planning and a bigger investment from the faculty for transportation, but it was deemed worthwhile as this involvement would further connect integrated studies students to the program and underscore the significance placed upon Land based learning and teaching.

Mini Winter Fest 2013

As described earlier in this document, each spring a Mini Winter Fest is held in SDML's elementary schools. It is a time of fun and learning for all students.

In the Spring of 2013, following the decision made by UCN Kenanow faculty to further emphasize the inclusion of Land based curriculum in their course content, second year pre-service teachers were asked to prepare activities for the Mini Winter Fest that would both teach a skill for living with and on the Land, and relate to an aspect of core curriculum studies at the middle years level. From this course directive several engaging activities were developed:

An igloo was built using water frozen in used juice containers. Prior to construction, a Grade 8 class was asked to estimate the number of containers necessary based upon diameter and height of the proposed igloo. During construction circles were inscribed upon the ground snow and angles drawn to ascertain the correct placement of the frozen water blocks. Once the structure was complete, a lesson in stages of water was taught while candling the inside, and then the teaching turned to weight bearing as one by one the Grade 8 students stood on the roof of the igloo until the entire class was there ... and the igloo did not collapse! This activity was then replicated in various other classrooms using sugar cubes and measurements, etc.

Figure 9.Two students from Wapanohk Community School create an igloo out of sugar cubes after estimating the number of sugar cubes needed and deciding on the angle at which each row should be placed in order to ensure the best outcome of construction.



Another Kenanow student prepared a lesson for her groups to make bannock and compare the ingredients with basic bread from other cultures, such as naan bread,

perogies, and tea biscuits. She demonstrated how similar recipes were with slight variations in measurements, or the replacement of yeast with baking powder. Students learned how flour is made and how yeast and sugar interact. They also learned why bannock (and other breads) expands faster over an open flame than in the oven, and why eating these breads can sustain you for a period of time.

Lessons in traditional game playing were taught by another Kenanow pre-service teacher who related activities such as the Snow Snake game to such science topics as speed, resistance, velocity, and form. While playing a traditional stalking game, he taught students about the history of such techniques and their importance to indigenous culture.

These examples, and others, were an exercise in creating classroom material that would integrate Land based activities into day-to-day teaching that resulted in the required learning outcomes from provincial curriculum documents. Following this activity, the pre-service teachers reported their own satisfaction in having developed lessons that engaged their students. They expressed surprise at how much fun they had while teaching these lessons and commented that it was much easier to teach concepts such as math values when the students could readily see the reason for learning such facts. Every pre-service teacher who participated in this activity reported that they would definitely do the lesson again, and would look for other ways to expand the teachings possible in the process.

Teachers from the elementary schools were later asked to anonymously fill in a survey regarding how much preparation they had done with their classes prior to participation in Mini Winter Fest activities as well as how they had followed up those activities. From 49 surveys received it became apparent that there was a large discrepancy between the amount of preparation and follow-up done in classrooms. The anonymous responses ranged from "I told (students) to wear warm clothes" as preparation to "I went over all the activities and made sure (students) understood what they would be seeing and doing. I explained to them why we did Mini Winter Fest and how it was important to know the things that would be presented".

When it came to follow-up activities the same divergence was obvious. "We continued to talk about what (students) had seen for several weeks. It came up in Science a lot, as well as in Social Studies" was one response, while, "I asked if they had enjoyed the day" was another. Most said that they really enjoyed the day outside, while 5 said that sessions were too long, and it was too cold. This variation was probably caused by weather rather than interest level. Only one

teacher reported not enjoying the day at all and not understanding how it could be connected to curriculum.

In the section of the questionnaire that addressed reasons for preparation and/or follow-up, most respondents who did not do either stressed that they did not know HOW to connect the Mini Winter Fest activities to their specific, Grade appropriate curriculum. They asked for more guidance in lesson development with some even asking for lesson plans to be developed by someone else and distributed prior to the event. A lack of time for curriculum development in general was cited on several questionnaires, as was a lack of familiarity with some of the cultural activities presented.

Those teachers who did both preparatory and follow-up activities wrote that they had found curriculum connections in bannock making, traditional games, carving, and drumming especially. The lessons that appeared to have been most often connected to Land Based Education were in the subject areas of Science, Math, Language Arts, and Social Studies.

Connection with Yukon Education Authority and Traditional Camp Learning 2013

In the Spring of 2013, Loretta Dykun, Lorie Henderson (SDML Superintendent), Chris Brown (Cultural Proficiency Researcher from Brandon University), and Jennifer Davis, travelled to Saskatoon, Saskatchewan, to give a presentation on Cultural Proficiency at the annual National Congress on Rural Education Conference. While there, Loretta and Jennifer met a woman named Kerri Ceretzke and a number of other educators from the Yukon Education Authority who were presenting on an extensive Land based curriculum that they had developed and were using both in their schools and at an annually held residential two week Land based camp held at Old Crow. These people described exactly the type of setting and Land based curriculum activities that we were interested in learning about and hoped to develop in Thompson. Subsequent to the conference, we were able to establish a connection through the exchange of emails and they generously shared with us their unpublished culturally adapted curriculum guides covering all core subject areas for the elementary Grades. We were able, through VOICE funding, to use these curriculum guides as models for material appropriate to the Aboriginal and Northern culture of the Thompson area. These resources are now available to local teachers and provide many

examples of how core Manitoba curriculum can be taught through the use of Land based experiences.

A further outcome of our ongoing relationship with Kerri and the team of Yukon educators was an invitation for two people from Thompson to join them in attending a one week workshop held in Teslin on the traditional Land of the Teslin InLand Tlingit First Nation. In August 2013, Jennifer Davis and J.J. Bujold, Physical Education teacher at Wapanohk Community School and lead teacher of R.D. Parker's Land Based Education program—supported by VOICE funds—travelled to this workshop where traditional skills such as the construction of fish traps, making of birch bark baskets, porcupine quilling, beading, and cradle board construction were taught by 14 Elders representing 10 First Nations from the Yukon Territory. Each skill was accompanied with an explanation of how it could be related to school curriculum and how appropriate lesson plans could be

developed. Participants were challenged to document all the steps in a particular activity and think about how each individual procedure could relate to core subjects, and how it could bring about core learning objectives. For example, the careful cutting and fitting of the bottom of a birch bark basket became a lesson in Math, while the covering of stitches with spruce gum to make the basket become waterproof, became a lesson in Science. It became apparent that traditional survival had depended on this knowledge and detailed practice.

This notion of intentionally deconstructing the process of creating traditional tools, utensils, instruments, artwork, as well as



Figure 10. Birchbark basket with handdyed quill work made by Jennifer Davis during the week of learning in Teslin.

those skills needed to fish, trap and hunt, successfully has been followed by J.J. in his role as lead teacher for the high school Land Based Education program and by Jennifer in her teaching of Kenanow pre-service teachers. It is a method for ongoing examination and building an understanding of the rich teachings available from Land Based Education, as well as an appreciation of the range of knowledge needed to survive on the Land.

sikwan mamawewin & Transition Camp June 2013

As described earlier, SDML initiated a transition camp in June of 2013 at the Mile 20 site, which would bring together graduating Grade 8 students from the local elementary schools and their R.D. Parker Grade 9 counterparts in a Land based setting. This first camp was planned to precede sikwan mamawewin, Spring Gathering activities.

During Tuesday and Wednesday of this week, Grade 8 and 9 students and teachers had the opportunity to learn from Elders, gather around the fire at night for drumming and singing, visit "In a classroom we have so many behaviour problems, it can be difficult to teach the curriculum because you are so often the behaviour teacher. But when we are out on the Land it's so nice because you don't have to. You don't have to deal with behaviours, you are just dealing with kids."

Teacher Katy Jarvis

with each other, and generally enjoy being on the Land together. Grade 8 teacher, Sheri Porth says, "We got to mix with high school students and with students from down south. It was a mixed group, and we moved to different presenters. We did beading, we did rock painting, and we talked about traditional medicines that we can find outside. We did the tipi teachings ... all sorts of really cool activities." She goes on to report how engaged all her students were in those activities.

Another teacher, Katy Jarvis, is enthusiastic about the experience as well, "The camp experience did so much for my kids. They felt so much better, it was amazing. The high school kids came here and talked a bunch of times, but to have them on the Land, all together in that environment, it was wonderful. I was very apprehensive about bringing them there in the first place, but once we were there the kids loved it. They were so happy."

Vice Principal Dana Mader found the whole experience not only good for his students, but personally renewing. "When I went out to Mile 20 (for Transition Camp), on a personal basis I could feel the stress coming off me. I enjoyed sleeping in a tent with the fire burning. I enjoyed sitting around the campfire with all the students drumming". He goes on to say, "We had over 40 students there and there was not one disagreement amongst any of them as far as I know. No-one broke any rules, any curfews. It was all very good". Once again it became clear that the Land provides an atmosphere in which students can learn and teachers can teach while enjoying the process.

One teacher from Teulon, Manitoba, whose superintendent became interested in knowing more about this Land based activity, and the history of the Cree people in this area, was invited to join the camp, along with five students and one parent. Their trip to Thompson and to the camp was partially financed through monies from the Treaty Relations Commission after Commissioner Jamie Wilson became aware of SDML's activities. He had been working with the group of Teulon students and supported their involvement in this event.

On Thursday of this week SDML held a day of Cultural Proficiency training for SDML and UCN staff along with other community partners. Then, on Friday, the day that marked the beginning of sikwan mamawewin, students from R D Parker Collegiate came out to help do some set-up as well as being taught by the Elders, and listening to stories. The group from Teulon were able to participate in the whole week.

Note: Transition Camps have continued in subsequent years, with similar informally reported positive results. In order to accommodate the large number of Grade 8's and 9's needing to attend Transition Camps, a secondary camp was established at Liz Lake Boy Scout Camp in subsequent years. At this time both sites are used annually. Only teachers participating in the first one were interviewed for this VOICE project.

Fall Camp at Mile 20, September, 2013

In September of 2013, the program for Mile 20 Fall Camp was essentially the same as described for 2012 with the incorporation of more Kenanow students from the integrated studies programme and the addition of visits to the Grade 5 classrooms by pre-service teachers to let the students know what activities would be presented during their day at camp. Cards with Cree vocabulary for Land-related terms were made up by Ron Cook to be given to the Grade 5 students upon their arrival at Mile 20, and were used during the day whenever possible in order to strengthen the connections between Cultural Proficiency (in an introduction to the Cree language) and Land Based Education.

A variation from previous years came about through an invitation extended to the City of Thompson, VALE personnel, and UCN instructors to attend the camp on Thursday, rather than having another day for Grade 5 students. This change was partially due to the expressed need for Cultural Proficiency training in the community (a need being met by SDML through offering various training days), and the understanding that learning from the Land in such a setting was not

something only to be experienced by children and youth. On this day the teaching sites were different than those given on Tuesday and Wednesday; they included an adult sweat lodge, a presentation by the Treaty Commissioner, as well as a more in depth medicine walk and a time with the Elders present to speak about residential school experiences. UCN Kenanow pre-service teachers were encouraged to participate in all sessions.

Following this Fall Camp in 2013, 10 pre-service teachers were interviewed and asked simply to explain their reactions to the whole Mile 20 experience. While 100% of those interviewed reported having a positive experience while at Mile 20, the comments that specifically related to what effect the teachings given would have on their future teaching philosophy and/or practice were of particular significance to the researchers.

The highlight of her Mile 20 experience for Ursula Ellis, a Dene Kenanow student at the time, was her time spent with the Elders, learning from them in many

different ways. She says, "Getting to spend time with (Elder) Wellington Spence in a sharing circle was probably one of the most memorable things for me. And it wasn't even what he was saying so much as his presence and just being around him and feeling his vibe, his calmness, his good nature and his ability to listen to others and to truly hear what they were saying really stood out for me". She also commented that taking part in a women's sweat lodge ceremony with an Elder was a very meaningful time. The

"... (Ron Cook)
talked about
hearing the drum,
and that is our
Mother's
heartbeat."

drumming at night, with singing and teasing eased any apprehension she had of staying out overnight. As a pre-service teacher she looked forward to one day taking her classes out to enjoy the same type of experience and being able to teach them such skills as medicine picking and Math on the Land.

For Jenn Williams, a Cree woman from Piponapiwin (South Indian Lake), the days spent at Mile 20 brought back memories and validated for her the importance of her early experiences:

Some of us Aboriginal students found a sense of belonging (at Mile 20). The construction of the tipi. I remember my relatives when we first arrived at our camps it was the first thing we looked after... we never used to drum, but just hearing the drum, and hearing the teachings of Ron Cook when he talked about hearing the drum and that is our Mother's heartbeat. And when you

are sitting in the tipi and hearing the drum and you are sitting on the Land you are sitting so close to the earth.

Jenn went on to comment about the specific teachings of the tipi poles, medicine, as well as the fun to be had from traditional practices such as jigging. Referring to her future students, she said:

With Elders I want to be teaching them about traditional ways of being and knowing ... especially to Aboriginal students who need that sense of identity so that we can, as educators, instill that sense of pride that they need so desperately because there are so many factors that are turning them away from their culture...

Charity Cooper, a young Cree mother and Kenanow student from Pimicikamak (Cross Lake), talks about reliving her culture through various Land based activities in the Kenanow program, beginning with Mile 20, 2013 Camp. "When I was growing up I was mostly around my grandparents, and I learned a lot from them ... now I am taking those teachings into my classroom when I am on practicum." When referring to the students who came out to Mile 20, Charity remarked how well behaved they were, and how engaged in all the activities every student became. "I was so nervous at first, but they loved learning what was being taught there."

For all three of these Kenanow pre-service teachers, the experience at Mile 20 increased and strengthened their belief in and respect for their own cultural teachings through learning on and from the Land. For others, the experience was one that introduced them to new teachings. Amanda Stillie reported feeling very welcomed by the Elders. The first night as she sat around the fire in the tipi sharing circle, she heard about the continuing effects of Residential Schools for the first time. "That first day ended with me bawling my eyes out in front of all the Elders, and the Elders comforting me. It gave me chance to learn so much about our history and our connections." The other aspect of camp that amazed Amanda was the behaviour of the Grade 5 students who attended. Having been an Educational Assistant in the area prior to attending the Kenanow program, she knew some of the special needs children and was convinced that being on the Land changed their behaviour dramatically.

Brodie Martin and Ryan Barker found that being at Mile 20 and taking part in drumming and singing, as well as all the other teaching sessions, was a way to connect to both the Grade 5 students and their own peers. Meeting the

community members who came out and hearing their stories, enabled both of these Kenanow pre-service teachers to see the Cree culture in action. Hearing children talk about what their 'grannies' had taught them, and expressing pride in that knowledge, was remarkable to both these young men, especially when one Grade 5 student was a child whose behaviour in the classroom had been questionable. Playing games and having fun with students meant a lot to both Ryan and Brodie, and they both stated their intention to routinely include such activities in their future teaching. Heather Saskowski, having been brought up in the North and understanding the importance of learning life skills through games, echoed that thought as she said:

(At Mile 20) I think one of the biggest things I've learned is where these teachings come from and why they are important. We never actually sat down with the Elders and talked about where these traditions came from, or where and why it happened in history. I've learned a lot ... it will help me in the future to give a background to everything.

For those Kenanow students from countries other than Canada, Mile 20 provided a surprisingly familiar setting. Athlene Ashton, from Jamaica, and Maria Regero from the Philippines, and Unnati Patel from India all reported being instantly 'at home' when they arrived at the site. Cooking outdoors, and living communally were very well known activities for these women, and they remarked several times throughout their interviews the sense of belonging being at Mile 20 gave to them. For these pre-service teachers, recent immigrants to Canada, the notion of Land based teaching was a unifying concept. We ALL live on the Land in one way or another, and these women were able to see clearly how they could incorporate similar cultural experiences and traditions into their classroom teaching. Maria was particularly proud of having learned about the tipi, "Some students were asking if I was able to see a tipi ever. So right now I can say yes because I have experienced doing it. I already know now what a tipi is, and what is inside, and how full it is ... I can also make bannock."

Note: Each of the Kenanow pre-service teachers interviewed is currently employed as a full time teacher with classrooms of their own.

At the same time as these pre-service teachers were interviewed, seven teachers and two administrators from SDML, who had been at Fall Camp at Mile 20 in 2013, were also interviewed. They were asked simply to reflect on their experience while in that place, and their observations of the Grade 5 students who attended.

Interestingly, every teacher and administrator interviewed commented on the significant changes in the behaviour of students they had predicted would have problems concentrating during sessions, and/or being out on the Land in general. Jaynie Burnell admitted that when she first saw the schedule for the day her thoughts were that the material of the presentations was too complicated for many of her students.

We took three of our L3 students, and I also had concerns about that. I figured for sure by noon I would be in my car and on my way back. But, they lasted the whole day... I saw more growth in them in one day out there than what I feel I have seen in the classroom over weeks. They were little troupers. One of our little boys had the best questions for the story teller.

This observation of behaviour change was echoed by Melissa Fay, who said her students particularly enjoyed rock painting and carving, "It was remarkable to see how long their focus and concentration could last for, and how excited they were to be doing that ... I ended up taking what we learned further into the classroom". She was surprised that there were no 'issues' with her students while at Mile 20, saying, "this was remarkable to see as there are definitely some issues in the classroom".

Interaction with rocks came up several times during the interviews. Alex White recalled that one of his students did not want to leave Mile 20 and get back on the bus until she had found exactly the right "grandfather rock" that spoke to her and would remind her of the day. Alex expressed some surprise that this would have been so important to this student, but helped her find the right one, thus helping to build a relationship with her that lasted into classroom activity. He also found that his students remembered a lot of what they had learned during a session on medicinal plants. This learning came into play later in the semester when the class was talking about plant species and his students were able to recall more information than he had expected.

Principal Bonnie Rempel had heard a lot about Mile 20 Fall Camp from teachers and students, but had not experienced it for herself until 2013. Her words sum up what we heard in informal conversations with many of those who spoke about being there "I loved it. It was absolutely beautiful; I think all teachers need to go there instead of sitting in a classroom learning through a book or a power point ... I cried and I laughed. I had such a peaceful feeling."

SDML also received reports from the Grade 5 teachers about follow-up activities done in the classroom after returning from Mile 20. The children were asked about their favourite session, what they had learned, and to whom they gave their tobacco ties as thank-you gifts. All sessions rated highly for almost every student, with one group making special mention of putting up the tipi. Once again, teachers, administration, and researchers were surprised with the amount and extent of knowledge retained by students from the day. "I learned how to make medicine out of plants that will help get rid of diabetes and sore muscles and diaper rash and chapped lips," wrote one student. While another concentrated on her tipi building experience, "Some of the poles were hard because they were heavy and big. I got to take off the tent part with someone and it was easier. I had such a fun time and I will always remember".

Several Grade 5 students mentioned drumming as being their favourite workshop, commenting that they still remembered the songs and the way to sing them in Cree, while others loved the soap carving and knowing that they could repeat this skill at home. Perhaps the most telling comment came from this young lad who was identified by his teacher as having ADHD, "The story teller was fun. I was getting tired and uncomfortable, but it was an amazing story. (Elder Martha) was a great story teller". He was able to focus and engage despite being tired and uncomfortable. And, of course, EVERYONE loved making and eating bannock on a stick and cooking it over the fire!

Reflective Exercise on Becoming a Land Based Teacher (January 2014)

In the Spring of 2014, four second year Kenanow pre-service teachers, enrolled in an Action Research course, and engaged in preparing Land based learning lesson plans, were asked to reflect on their learning within the program regarding the practice of integrating Land Based Education into their daily teaching while on their practicum placements. This component of the research was vital as it spoke to the first five indicators of success identified by the Thompson Community Circle. Through personal reflection and report, these Kenanow students were answering the questions regarding linkages between Land Based Education and Manitoba curriculum; the use of material already developed and provided; teacher engagement in Land Based Education activities; and personal perspective transformation. Their reflections are included in this report as evidence of the personal and professional growth that was seen amongst participants in this research, in particular that of the Kenanow

pre-service teachers as the program offered expanded opportunities to experience and practice Land based learning and teaching.

Charity

Land Based Education was a component of my learning during the Kenanow program. We were expected to include it during our practicum placements. During my first four week placement with the Grade 5 class, my observations were based highly on mainstream content, and no cultural or Land based approaches or methods were applied until I began my teaching aspect of the practicum. In my first lesson of teaching, I introduced the Seven Grandfather teachings.

During my second practicum, my first lesson was based on the Seven Grandfather teachings. I was asked to conduct a Science unit in sound. Within this unit, I connected the cultural aspect of an experiment on instruments that make sound. I planned to make a moose call as one of the instruments, and explained how the sound vibrations are called to the moose for hunting. In addition, in my social studies unit, I taught sustainability and stewardship. Within these topics, I explained how Aboriginal people of long ago practiced to live off the Land, kept it clean, and respected all living things. I also informed my students how, when the Aboriginal people hunted, they took only what they needed and gave thanks to the Creator for what they took from Mother Earth.

During my third practicum, again, my first lesson was on the Seven Grandfather teachings again. In Science I taught a lesson on viscosity by using PowerPoint slides, with pictures of trees on which spruce gum had grown. As an artifact, I brought the salve in that Aboriginal people have used for medicine for the students to see how it smells and how it looks and feels.

Heather

During my first practicum I was in a Grade 5 class. The class went out to Fall Camp at Mile 20 and experienced a full day with UCN students and Elders in a variety of different sessions. Throughout my practicum, the students completed an ELA unit on fractured fairy tales. Looking back, it could have been beneficial to incorporate local stories and legends into the unit, rather than simply fairy tales. In the end students had to create their own fractured fairy tales—a version of the traditional tale, and many incorporated local

aspects into their own personal stories, i.e., one student wrote about the three little beavers and the big bad wolf. Additionally, math questions could have been altered to include local examples that were relevant to the students, rather than the examples found in the textbook or provided from my cooperating teacher. In health class as party of the 'Healthy Living' unit, the entire class went to an introductory Tae Kwon Do class. Though this was a fun and new experience for most, it would have been neat to expose the students to Cree drumming, dancing, etc.

My second practicum was spent in Grades 7 and 8. Thinking back, I really did not incorporate much of any Land-based learning into the lessons. The majority of my practicum time was spent teaching a unit on the Maya, Aztec, Inca, and I could have linked those groups of people more specifically to local Aboriginal nations. I also taught a poetry unit, and if I were to do that again I would most definitely take my class outside much more than we did to gain some inspiration. I would also try to find more local examples of poetic writing to share with the class and do my best to engage all students into the writing process.

My third practicum was where I really started to develop my own teaching style and produced the lessons all on my own. I would often read northern and local stories to my kindergarten class and developed an entire unit of Math, ELA, and Science based on local animals. The students were so engaged and loved going on our daily 'animal adventure 'and were quick to share stories of their personal experiences with these animals. If the weather had cooperated more I would have loved to take the students on an animal scavenger hunt outside, so the students could first-hand see how they lived and perhaps what they looked like. In Grade 2 I taught an entire unit on the Cree people, so it was much easier to incorporate Land-based learning. We made miniature tipis, and baked bannock, and had a daily 'show and tell' for all of the students who wished to bring in something from home. Students were eager to talk about how local people may have done things hundreds of years ago and how these techniques have changed. Local Elder, Ron Cook also wrote out each of their names in Cree, and it amazed me how proud all of the students were of these names; many even practiced them until they had mastered it. I brought in many materials when going through the unit, i.e., snowshoes, books, traditional medicines etc., but in retrospect, I should have brought in a local guest speaker, Elder, or even a parent to come and share their knowledge with the students.

Jamie

As a young child I was taught how to hunt and fish by my father and my uncle. My father taught me how to set up goose and duck decoys on the ice and water. He explained to me that geese and duck hunting season is at the beginning in the spring. Every year, my father and uncle would go to our trap line where to this day we still go. He taught me how to aim and shoot when the geese Landed near our blind. Every kill we had, my father taught me how that we were given this animal for us to survive, and that we shall give thanks by giving something back to Land.

I also learned how to hunt moose in the fall season. I killed my first moose at the age of thirteen. My first kill, my father again told me that we should give thanks and give something back to the Land. After we kill a moose, we say a short prayer and always give something back such as simply feeding the animals that are around such as the birds. I developed a lot of skills from my own experience.

In the wintertime, my father and I set fish nets. We catch various fish species that we can survive on. We often do well on our fish nets by catching at least one hundred fish. My father has always taught me that it is important not to be greedy. We must offer our wild foods to our families and other people in the community. We usually distribute our meat and fish to people that want it. Growing up I developed a lot of Land based teachings from my father and uncle. To this day, I practice my teachings that were given to me from when I was a child. I learned that we must always give thanks and always be there for family. We must respect one another and give thanks that we are still on this Earth. This is something that will always be part of my life as I continue to practice my teachings my father has given me that were passed down from his grandfather and father.

I have used these teachings in my pre-service teaching. After completing each of my practicums within the past two years, I have reflected on my teaching practices as to what went well, and what I could have done differently. I tried my best to incorporate Land based teachings within the units that I covered. I also tried to include Aboriginal perspectives with most of lessons in each core subjects. I tried to give examples to my students that were based on Aboriginal content.

In a Grade 5 classroom, I was teaching regrouping numbers to my students. The majority of my students were Aboriginal. Reflecting back on all my practicums, I notice that Aboriginal students are visual thinkers where as non-Aboriginal students did not need as many visuals. My own perspective of this is based on our ancestors. The Elders long ago taught their children visually of how to live, work, and respect the Land and I think this is repetitive part to Aboriginal people. For my math lesson, I would let students go outside and count a variety of things and regroup them. For example, students can count the trees that are in a particular part and do the same in another area. Their numbers that they calculated based on the amount of trees, they can use those numbers and begin to regroup them.

In a Grade 5 English Language Arts lesson that deals with reading and writing I would give students a visual of what outcome I wanted them to learn. I would read to students a short story that has the idea of Land based teachings. Even if I were to teach grammar I would give my students a short story that has multiple mistakes. We would read it together on the overhead and I would call out students and have them point out a mistake in the story. Also, I would get them to point out what were the Land based teachings that were within the story. This practice can spark up many things. Children can either be interested or not, but as a teacher I think trying to get them more motivated will get them more interested and engaged. Motivation can come from energizers, or a small activity such as the grammar lesson.

In my Grade 6 practicum placement I covered the unit on treaties in Social Studies. I taught a variety of lessons that were based on treaties in Canada. I taught First Nations and Metis Northern resistance, history about Manitoba and about Louis Riel and how famous he still is within Manitoba. I taught students the locations of each treaty and what it means when people say "we are all treaty people."

There were a lot of other teaching practices that I used with this unit. I showed students large maps of Manitoba and Canada and located where the treaties are. I had students research a treaty and create an information poster. Once students created their information posters on large sheets of paper, I displayed them all around the classroom and in the hallway where they can walk around and view them. Their task was to go around the room and compare and contrast the treaty they researched to another treaty. Students were very engaged and interactive in the lesson and they seemed to

get the idea of treaty territory. By learning the treaties this way, they identified the Land treaties. I taught a lot about the treaty territory where we are located (Treaty 5). I gave students a lot of visuals of where treaty five is located. Since I showed students a lot of maps, I thought it would be a great idea for them to create their own maps of the community we live in and to identify the types of things you can do on the Land and what the Land has to offer.

In my split Grade class of Grade 3 and 4 students, I taught them a variety of units in Science, Social Studies and English Language Arts. In Science, I taught the unit sound. I did a lot of hands-on activities with my students where they were interacting with each other and getting along well. We did a lot of group work since we had actual experiments that dealt with hands-on activities. What I originally had planned was to make moose calls. The material that we needed for this activity was things directly from the Land. However, it was a bad timing (right in the middle of winter) because the birch bark would not have been tough enough and long enough for it to dry. That was the Land base teaching I wanted to do with my students, which I will use one day in my own classroom, instead I had my students construct either a drum or a guitar.

For ELA, I did a non-fiction novel where we did reading responses for each chapter—ten chapters in total. The book is titled "Stone Fox" by John Reynolds. It is based on a boy trying to save his farm. This book relates to Land based teachings. I had students compare and contrast Land based teachings from the book and the teachings that they know of, if any. Not only compare and contrast, but get them to reflect what is actually happening in the story.

For Social Studies I covered the unit 'communities around the world'. In this unit, teachers are required to specifically teach two other communities around the world. I chose to teach my students about Italy and Australia. I taught students what the Land resources each place offered, how they are different and the same from where we live, what types of animals are there, where towns are located, etc. This dealt with Land based teachings as well, reflecting on our own Land based teachings that are around us in our community so that students could be aware that they are there for them to use. This was a very interesting unit for me as well as I tried my best to incorporate a lot of technology into my units. This was one way of getting my students motivated.

Stefan

My first practicum went very well overall, but aside from reading an Aboriginal themed novel in ELA I do not feel like I incorporated cultural/Land based teachings very well into my schedule. I only taught about half the day and the major subjects I focused on were Science, English, and Math. I was still hesitant to apply Land based teachings and was not confident that I could effectively incorporate Land based/cultural teachings into these topics. especially since we were experiencing cold winter climates and I did not know all the protocols for taking students outside. In retrospect, I wish I would have done more lessons geared towards cultural/Land based teachings. However, one example I found worked particularly well was a lesson I did which revolved around a charity the students and my co-operating teacher had been fundraising for the majority of the year. They were planning a large bake sale which would be held just before the Christmas break. I thought it would be a good idea seeing how we were already learning about multiplication and division using decimals that as a class we could determine what we should sell each of our goodies for and calculate how much money we could earn for our charity. Not only did this make the math they were doing real and practical, it also got them excited about how much money they could possibly earn if our charitable bake sale was a success. Although this example doesn't incorporate cultural/Land based teaching, it does employ community based and practical action based learning which are both elements of what I feel makes cultural/Land based teachings so effective.

My next placement was a Grade 5/6 split. This class had a lot of cultural diversity and I found out early on that the hands-on activities were much more effective than traditional academic procedures and lessons. During this practicum I feel like I made much better use of Land based teaching. This term I was teaching Grade 5-6 social studies, which in a sense was a 'gimme' because it is one of the rare times in the curriculum where Aboriginal topics are addressed. We learned about treaties, Land claims residential schools, the royal proclamation, etc., but I did my best to incorporate what I had learned during my experiences at Mile 20 and other cultural teaching I had been learning during my education at UCN and truly show the students what these traditions are rather than tell them or have them write notes.

But the Land based learning was not limited to Social Studies class, I also incorporated Land based/cultural teachings into all of my other subjects I was

teaching. I especially found these Land based teachings effective during my science units. As a review class I took my Grade 5 science class out to the playground to find examples of the simple machines we had been discussing. Their objective was to locate and to demonstrate how each of the machines reduced labour. This was done in numerous ways. For example, the students pointed out that the see-saw was a lever. I agreed and asked questions such as "Which class of lever is it?" "How can a see-saw reduce the amount required to lift something" and "What would happen if you put someone/thing heavier than you closer to the fulcrum?" We continued this process for each of the different simple machine examples we could find on the playground. I was particularly impressed when the students developed a race to demonstrate if it would be easier to climb up a ramp (incline plane) onto the jungle gym or to pull you up without using a ramp and compared results. For each of the examples of simple machines I made it my goal to have them see each of the simple machines in actions so they would get a clear understanding of how working with each of machines helps reduce effort compared to working without them.

In my Grade 6 flight science unit for a final assignment I had them design an airplane in which they would have to apply the knowledge they learned over the course of the unit. Their objective was to make an airplane with the materials and design in which they thought would retain flight the longest. Once everyone had completed their project and described to me why they made the choices they did, we had our own competition as if we were the early pioneers of flight. We assembled at the highest point on the jungle gym and one by one we tested each of their flying machines and calculated their flight duration. After each attempt I inquired about why the planes design was a success or why it wasn't so successful. In the end we all had a lot of fun mechanics of flights.

My last practicum was in high-school Art class where I taught Grades 9, 10 and 11 classes. I found it a little challenging to wrap my head around how I would go about incorporating Land based/cultural teachings because all art is so culturally driven that it was hard to separate something already so immersed in culture without trivializing or morphing it. I tried to make all my projects very open-ended where the students could choose which images they wanted to reference or any other ideas that they wanted to portray. I find this to be a good practice in most subjects as this freedom not only gives them more agency, but they also will feel a greater sense of ownership for

their piece(s). I always hated when someone else told me what to draw or what to write, so this decision was clear to me from the beginning. Allowing such freedom gives each student the opportunity to express his/herself and his/her own particular culture and gives personality to each of the pieces. During my practicum I was happy to see such a wide variety of ideas and cultures being expressed in each student's art which went far beyond simply an Aboriginal person drawing an eagle.

A few of my students decided they wanted to make their mandala themed towards their own culture. Two especially note-worthy pieces were a Haida Gwaii themed mandala filled with animals and characters relating to the stories of that culture and a Korean inspired mandala with intricate patterns and details all with their own separate meanings. The mandalas were all so varied and, as this was the first project I facilitated, I could tell most of the students took great pride in their piece.

If I had more time I planned on doing a print making project in my Grade 11 class with a mythology theme. Each student could pick a story or myth from any culture of their choice and express the story or myth in their prints. Printmaking blends well with many traditional art styles such as East Indian, Aboriginal, and ancient mythologies.

It is obvious through these reflections that by the winter of 2014, the increased emphasis on Land Based Education in UCN's Kenanow program had resulted in pre-service teachers becoming increasingly aware of their own practices. Their growing commitment to including Land based and culturally appropriate material in the teaching of all subject areas is clearly demonstrated through their stories.

Action Research Project UCN Pre-Service Teachers & Juniper Grade 7 Classes 2014

The pre-service teachers whose reflections are included above, began a two part action research project in one of their second year Kenanow classes in January of 2014 (Note: Some funding for this research came from the larger VOICE project). This research was designed to include both their class and the one that would take place in January 2015.

Figure 11. Juniper students relax after an orienteering exercise on snowshoes at Liz Lake.



In keeping with the goals of the Land based success pathway, the main focus of this segment of the research was to take Manitoba curriculum documents in 4 core areas—English Language Arts, Math, Science, and Social Studies—and design lessons using Land based skills to teach those core subjects. The components of the research project were:

- A thorough review of Manitoba Grade 7 curriculum documents pertaining to English Language Arts, Math, Science, and Social Studies with particular concentration on where Land based skills could be easily integrated.
- The choosing of two Land based skills on which to concentrate: snowshoeing and trapping were eventually chosen.
- Design and delivery of lesson plans over an eight week period in January and February, twice per week, to Grade 7 students at Juniper Elementary School.
- The planning and preparation for two overnight camps with the Grade 7 students at Liz Lake Boy Scout Camp in March. This camp would include: hands-on instruction and experience with snowshoeing and trapping, but would also be expanded to include workshops on quinsy building, bannock making, constellation recognition, and survival skills.

- The design of a camp booklet based on the material shared with us by the Yukon Educational Authority.
- An assessment of skills learned and retained by the Grade 7's throughout this process.

On the final day of camp, Grade 7 students were formally reminded of the classroom instruction they had received. They were then challenged to consider how connections between the other activities of camp, such as building shelters, astronomy, and carving, might be made with curriculum. "We came into your classes and showed you how trapping and snowshoeing connect to the core

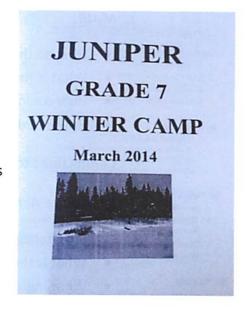


Figure 12. Each student was given a notebook in which to record their observations and activities during camp.

subjects, now you tell us how the activities you have done here over the past two days might be connected" were the instructions. Kenanow pre-service teachers were surprised at the depth of understanding to which some of the young people had come. Responses given by the Grade 7 students included the following:

Connections to Astronomy

Language Arts:

- Wawatay: The Northern Lights sing. What is their song?
- What are the stories behind the Cree names for stars?

Social Studies:

- Where did the Western names for constellations come from?
- Where did the Cree names come from?

- All about the solar system and how it started.
- Where are the galaxies? Planets? Nebula?
- How would life live there?

- How do the planets revolve? What is their circumference?
- What is the best angle for the telescope?
- How could we know the distance between the stars?
- How could we know how far they are from Earth?

Connections to fire starting

Language Arts:

- Storytelling around the fire.
- What is the story behind fire coming to Earth?
- What ingredients do you need to build a fire?
- How do these ingredients compare to those for cooking?
- What are fire safety plans?
- Could we tell a story using smoke signals?
- Safety Manual
- Seeing pictures in the fire
- Write a step by step instruction for starting fire with a rock and a knife.

Social Studies:

- Seasons: When is it safest to build a fire outside?
- What can be done to make it safer during other times, like when it is dry?
- How do fires tell about people in the past?
- How did different people use fire?
- What big fires have happened in the past?
- What happens to the ground after a forest fire?

- Three things you need for a fire.
- What causes combustion?
- What is the role of oxygen in fire building? Why?
- What is magnesium?
- What woods burn best?
- What is flint?
- What materials outdoors burn the best?

- How many strokes of flint does it take to light the fire?
- How high are the flames?
- What temperature are the coals? How would we measure that?
- What temperature does combustion occur at?
- Is it different outdoors than indoors?
- How much does wood weigh before it burns and how much does it weigh afterwards?

Connections to bannock making

Language Arts:

- Read recipe, or listen to how to make it from a teacher
- You could write a poem about bannock
- Stories about where bannock came from
- Write recipe out

Social Studies:

- Scotland is where bannock came from. How did they make it?
- How can you make bannock outside?
- Are there traditional breads from other countries that are the same as bannock?
- How did bread get started?

- How nutritious is bannock? How many calories?
- How do liquids turn into solids when they are cooked?
- What does baking soda do?
- What kind of mixture is this when it is done?
- Is the heat from an oven the same as the heat from fire?
- Why does bannock rise when heated? Why does it not need yeast?

- Liquid and solid measurement
- Litres and grams
- What is the density/weight of bannock?
- Fractions of ingredients and multiplying recipes.
- · Conversion of measurements
- Size of bannock

Connections to shelter building

Language Arts:

- Stories about times when it is necessary to build a shelter
- Write a list of instructions
- Where did the word quinsy come from?
- How did you feel in the quinsy?
- Instructions written in the right order, or told in the right order.
- Acrostic poem that builds on the theme of survival.
- A play about survival
- Vocabulary list

Social Studies:

- Do explorers use quinsies still?
- Did anyone ever really live in a quinsy?
- Is a quinsy like an igloo?
- Are there teachings for a quinsy like a tipi?



Figure 13. Grade 7 students inside a quinsy they have just built during Liz Lake Winter Camp.

- How much snow is needed for a quinsy?
- How long does it take to harden?
- Why do you go over the inside of a quinsy with fire? What happens to that snow?

- What is the temperature in a quinsy at the top? At the bottom? Why?
- Do you lose or gain body heat in a quinsy?
- What is snow?
- How cold does it have to be outside to build a quinsy? What kind of snow?
- Which way should the entrance face? Why?
- Why does snow crystallize?
- What are wind patterns like close to the ground?

- What is the circumference of your quinsy?
- How big a quinsy do you need to keep warm?
- Measuring degrees of heat in a quinsy
- How much weight can a quinsy have on its roof before it collapses?
- How well can you estimate how much snow you need?
- What is the best shape for a quinsy?
- What is the volume of space in a quinsy?
- How big are you in relation to a quinsy?
- How much energy does it take to build a quinsy?

As with the other Land based activities included in this report, the two Grade 7 teachers involved in this segment of the research expressed amazement at the behaviour demonstrated by their students while at Liz Lake Camp. Both



Figure 14. The evenings at Liz Lake ended with marshmallows and stories around a bonfire.

Ursula Ellis (now teaching for SDML) and Adela Foley had expected that there would be some behavioural issues with some of their students, and were further convinced of the effect of being on the Land when the most serious thing we had to deal with was settling students down at

night: the students wanted to keep chatting and singing despite knowing that there was an early

morning ahead. Principal Lucy Mayor remarked how pleased she was with everything that had taken place, including the invitation to parents to come and visit the camp at any time. Several parents took up that invitation and

joined in an evening of moonlight sliding on the snow and ice with marshmallows and hot chocolate around a bonfire, and then drumming and singing inside.

Voices from the Land Workshop with Monarch Teachers Network 2014

In October of 2014, using VOICE funds, the Monarch Teachers Network was invited to present their two day "Voices from the Land" (Aboriginal focus) workshop in Thompson. Three members from that organization came to Liz Lake Boy Scout Camp to work with Grade 8 teachers and some administrators from SDML and Kenanow pre-service teachers on the first day, and then with two classes of Grade 8's from Juniper School, their teachers and Kenanow pre-service teachers again on the second day.

Elder Eileen (Sam) Conroy from Madoc, Ontario, a member of the Monarch Teachers Network team, focused the days' activities on traditional teachings regarding the sacredness of the Land. She worked with Ron Cook to introduce both teachers and students to the practice of giving thanks and the smudging ceremony at the beginning of each day. Following that, team members Eric Mollenhaur and Cathy Shalik took groups of workshop participants through the steps of collaboratively creating art, poetry and drama from natural elements. Central to each step was the responsibility of every group member to participate equally in the creation of various art forms: there were to be no 'experts' who drove the creative process.

The first activity was to create a 'picture' from natural materials, take care that nothing was harmed in the process, and with group consensus as to the placing of each object. The second exercise was to write a poem representing the central theme of the picture, and again, every group member was to contribute a word, or a full line. The final activity was the creation of a short dramatic skit that captured the essence of the creative work done, with each member having a role. At the end of each section a 'Gallery Walk' allowed each group to explain their creation and the process through which they had gone, and also to see what others had created, and to provide positive suggestions and comments to each other.

Figure 15: An example of Land art created by teachers while at Monarch Teachers' Network PD.



Throughout the day both adult and youth participants marveled at the abundant variation in art forms found on the Land. Colours, shapes, sizes, patterns, variegations, and styles that had never before been noticed were found and appreciated for their apparently endless variety. Comments from teachers reflected their changing attitudes after this experience; "I always wanted to incorporate Land Based Education into my classes, but was never sure how. This day has given me ideas that I am comfortable with doing", wrote one person, while another said, "This is such a gentle way to bring students out on to the Land and have them appreciate what they see. Not only that, but it introduces poetry to them in a very easy way".

At the end of the second day the community was invited out to the camp for a feast and the night ended with drumming and singing with some story telling. This time was also when Ron Cook explained to those gathered that the drumbeat is the heart of our Mother Earth, and that the root of the Cree word for singing (nikamo) translates as "my Mother is speaking ... nikawi ayamiw" (Mother being the Earth). The care and reverence with which drums were passed around the circle was evidence that his words had meaning to those gathered. Once again, as at Mile 20 and in other similar settings, the young students were closely attentive and engaged.

The observations of the UCN Kenanow students who attended this workshop on the second day were that it took some time for the Grade 8's to become comfortable with the idea of shared responsibility. It seemed that they were used to someone in the group taking the lead while the rest either did as they were told or did very little. It was not until the poetry writing sessions that the idea of collaboration seemed to begin to permeate their thinking. During the drama exercises each group had developed this idea much more fully, and in a comparatively short time almost 100% participation was reached.

Similarly, it was apparent that many of the younger students were not used to being gentle with natural objects and in their treatment of the Land. It took several gentle reminders from leaders before these young people understood that we were there to appreciate the beauty and variety of the Land in this place. Once the reminders were heard, a more respectful attitude was observed, the breaking of branches and destruction of foliage stopped. (In an interesting follow-up to this change of behaviour, a few weeks later some of those same Grade 8 students were visiting the UCN campus and were observed sliding across an ice patch with friends. Some of the friends were grabbing at saplings in order to steady themselves, and the saplings were breaking under their weight. When one of the Grade 8 students, who had been at Liz Lake, spotted one of the researchers walking into the building, he shouted out, "Hey, Miss! Come and tell these guys why they shouldn't break these trees! Tell them about what you told us ... about them being our relations.")

During the days spent at the Monarch Teachers Network workshops, SDML teachers and Kenanow pre-service teachers learned new ways in which we can introduce students to learning from the Land. Our vision was expanded to see further opportunities for engaging reluctant students in collaborative processes. We came to understand again that we need to model the behaviour and attitudes we are trying to nourish, and to take time to listen and observe what the Land has to offer. We also left with the understanding that the lessons taught and learned at Liz Lake could just as easily have been delivered in the school yard or on the playground ... that the secret was simply in connecting with the possibilities available to us when we focused on the Land around us.

Note: Ryan Barker, School District of Mystery Lake Teacher and Community Connector for the classes that participated in this workshop, moved on with the group to teach them in Secondary School in the fall of 2015. Impressed from the beginning with the potential for creativity and group collaboration evident in the

Voices from the Land workshop, he invited UCN Kenanow students, enrolled in their first year English Language Arts Methods course with Jennifer Davis, to come into his Grade 9 English classes and be group leaders, as his students repeat the exercises learned while at Liz Lake in a different setting. This is an example of UCN Kenanow program and SDML partnering to use the resources gained during participation in the VOICE project. In this case, the former Grade 8 students taught the UCN Kenanow students about Voices from the Land activities, while, in turn, the UCN Kenanow students helped the former Grade 8's build on their poetry and drama in curriculum connected ways.

Action Research Project Winter 2015

Following up from 2014, in the winter of 2015, Land Based Education research was the focus of a course offered to second year pre-service teachers. Five UCN Kenanow B.Ed. students were a part of this action research class. Their research project was designed, in part, to follow-up the research done in 2014 by previous students, but with the added elements of further consultation with Elders and the community. The components of their research differed from those of the 2014 class, but were complementary to the shared goal of reviewing how Land Based Education and the Manitoba curriculum guidelines could be connected in classrooms. The components were:

Interviews with UCN and local Elders asking the following questions:

- 1. What topics would you like to see covered in a Land Based Education course for elementary school students?
- 2. What kinds of things can young students learn from the Land herself?
- 3. How do you see Land Based Education being brought into the current education system?
- 4. What would you like to see UCN Kenanow pre-service teachers learn about teaching Land Based Education?
- 5. Do you have any stories you would like to tell us about what you have personally learned from the Land?

Interviews with practicing Kenanow graduates asking the following questions:

- 1. What subjects in the curriculum you teach do you see as having the most obvious connections to Land Based Education?
- 2. Have you been able to integrate LBE into these areas? If yes, what kinds of activities have you used/planned?
- 3. Are there problems integrating LBE into these curriculum areas? If so, what are they?
- 4. Are there areas of the curriculum where it is difficult to teach using LBE? If so, what are they?
- 5. How has your teacher training in the Kenanow program prepared you to use LBE in the classroom? Can you suggest areas where the Kenanow program could do more to prepare you to teach this way?
- 6. What further resources would you like to have in the area of LBE in order to further integrate it into the curriculum you teach?

Classroom teaching:

Going into two Grade 7 classes at Juniper Elementary School in Thompson twice a week for eight weeks to teach specific Land based content for 60-75 minute periods, and linking this content to the core subjects of Science, Social Studies, Math, and English Language Arts. In contrast to the previous year, these lessons began with the Land based activity, rather than the core subject, and connections to curriculum were made after the topics had been chosen, but before the lessons had been designed. The intent was to discover if there was a significant difference in the level of engagement for students when the stated focus was, for example, learning about snowshoeing, as opposed to learning how snowshoeing could be related to Language Arts.

Experience on the Land:

At the end of the eight week period, taking the Grade 7 students out to Liz Lake Boy Scout Camp near Thompson, where content that was learned in the classroom setting was demonstrated and experienced through hands-on learning. The Kenanow pre-service teachers recorded their observations of student engagement and participation levels during both classroom and on the

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Land teaching, as well as the incidence of behavioural issues arising among classes through photographs and reflective note-taking.

Follow-up classroom visits:

A follow-up visit to the Grade 7 classrooms the week following this camp experience with the Grade 7 students being asked to tell of their experience and to recall connections to curriculum that they had learned through the Land based teaching.

What the Elders Said

In keeping with respect for traditional wisdom and following the guidelines for Kenanow research, these eight acknowledged Elders from UCN and the community were consulted and their opinions sought as to what Land Based Education for elementary students should look like: Marie Ballantyne, Ron Cook. Emma Gossfeld, Martha Jonasson, Stella Neff, Esther Sanderson, Albert Tait, and Doris Young. These conversations were rich and full of encouragement for the project the pre-service teachers had undertaken. The Elders were generous with their time and wisdom. Their stories reflected personal relationships with the Land and the recognition of what had been learned from the Land. The consensus from these Elder consultations was that—most importantly—all students (indeed, all people) need to develop a relational perspective on their surroundings: an understanding that they are part of a whole and that the Land is our primary teacher, our Mother to whom we listen and from whom we learn. The earth needs to be taken care of and be respected for the gifts given. In return, the Elders stressed, the earth will sustain and nurture us to an extent to which we are not even consciously aware.

On a very practical level, the Elders also stressed that students needed to learn about survival on the Land. Skills such fire-making, fishing, recognizing edible and medicinal plants, interpreting weather signs, and orienteering were mentioned as necessary learning if young people are to feel at home and confident when away from buildings and urban communities. There was also mention of children learning to play on the Land: learning to experience the fun of improvised games and exploration rather than relying on technology for entertainment.

What the Practicing Kenanow Graduates Said

Interviews were also conducted with 14 practicing teachers who had graduated from the UCN Kenanow B.Ed. program in order to ascertain how they viewed their ability to continue teaching from a Land based and culturally proficient perspective when employed by a school board. While time constraints and required paperwork were mentioned by many as being energy consuming in the planning of some outdoor activities, everyone interviewed reported being able to integrate Land Based learning into many areas of the curriculum. "I combined Art and Language Arts by having my students construct a tipi, and then write about the history of tipis. I also used rock painting and, in Math we weighed the rocks. I also used tipis as a geometric shape" (Unnati Patel, Grade 7 and 8 teacher). Terri Leigh Mowat, Grade 8 teacher from Norway House responded, "I teach ELA and Social Studies and I have found that I can connect both to Land based learning. For example, we cook traditional foods and find traditional medicines, and then write about them".

Seasonal activities were often cited as being prime 'teaching moments'. Taking classes outside the school building to witness flocks of geese migrating, leaves falling, snow accumulating, and many similar phenomena have become routine for these teachers. Comments as to how much their students enjoy being away from the classroom arose often in the conversations, as did the reflection that working these activities into the curriculum became easier as time went by. Jennifer Williams, High School Grade 9-12 teacher, summed up what many others thought when she said, "I wish we had more time to spend outside. I would like to be out with my students for a whole week, or more, and teach them from there".

These teachers recognize the benefits gained by students from being on the Land and learning. They also are willing to work hard at making connections between Land Based Education and curriculum documents. What they identified as being necessary to the deepening of this pedagogical process was time to reflect on this process and a networking process with which to share the developing of appropriate resources.

What the Grade 7 Students Said (both by their Behaviour and in Speech)

From the reported perspective of Grade 7 students and the journal notations of Kenanow pre-service teachers, there was overwhelming evidence that although Grade 7 students were interested and reasonably attentive to the lessons presented in class, they learned best when they were on the Land. Congruent with

Louv's (2005) hypothesis, engagement and participation increased dramatically as students took part in experiential learning on the Land, and behavioural issues disappeared. In every case, the Grade 7 students were better able to remember what was presented to them during their time outside than they were able to recall what was presented in the classroom. Equally dramatic were the pre-service teachers' observations that there was little to no need for classroom management strategies to be employed while teaching on the Land. The unanimous conclusion reached by the pre-service teachers was that while Land Based Education material is more interesting and engaging to students than textbook study inside a classroom, the indices of engagement and participation sky rocket when outside, experiential learning takes place.

Consistent with what the Elders said, the pre-service teachers also noted that students performed better at tasks that required some risk in learning once a relationship had been formed with both the Land, through initial exploration and conversation, and with each other. Several commented that it was good to play with the students and be on the Land together. This appeared to form a bond which is hard to capture in words, but which allowed for collaborative discovery and experimentation, such as investigating the dissected carcass of a beaver together and asking questions without being prompted of the trappers present. A willingness to try new skills was also apparent, and to test hypotheses by doing, i.e., plotting a new orienteering course.

During the follow-up visit made to each class approximately one week after the camp experience, it was evident that the Grade 7 students had retained much of the information they had gained through experience during their day on the Land. Answering curriculum related questions was one part of the conversation, and they did that very well, but perhaps the most telling responses came when they were told that all of what we had done would be written up and put into a report to encourage the practice of Land Based Education. Several students asked if they could write letters to be included in that report. Here is what one child, who has been identified as having behavioural issues in school, wrote:

Dear People

We should get out more. Kids should know these things like what we did out there. And it's fun. I like it a lot. It is not good being cooped up in a classroom all day. We should learn this stuff more often, but at the same time we should be learning and having fun. School would be fun if we could do these things more often.

Please change something.

When it came to the question of whether students became more engaged with the material in the classroom if it was presented as a lesson on snowshoeing, or the other Land based activities, rather than a lesson on one of the core subjects of English Language Arts, Social Studies, Science, and Math, no significant difference was noted. In both years the Grade 7 students were most engaged while out on the Land learning skills and applications. The surroundings rather than the material appeared to be the dominant factor in promoting engagement in the learning, as evidenced by questions asked, comments made, and level of participation in the activities provided.

R.D. Parker Students at sikwan mamawewin 2015

The final Land Based Education event from which data was gathered was when students enrolled in a Native Studies class at R.D. Parker Secondary School attended sikwan mamawewin (Spring Gathering) at Mile 20 in May of 2015. As with other events, the students were able to choose from various activities, including participating in a sweat lodge ceremony if they wanted to do so, and painting on the canvas tipi. At this particular gathering there were more Elders, and students responded to their presence in a very moving way.

All 13 students who attended talked about the wonderful experience they had:

Let their words speak for themselves:

"I was the fire keeper for the sweat lodge and it was a great experience...I want to go another time. Mile 20 is really sacred Land."

"I had a wonderful day over at Mile 20. My favourite highlight was when Jason Lucas showed me that it is more than just painting, but to visualize what you think should show on the outside of any project."

"I learned how the life cycle went on the Medicine Wheel." "Tree fungus can be mosquito repellant ... who knew?"

"My first time in a sweat and it was a really good experience." "I honestly didn't know the place existed, but when we got there I felt at peace."

"My day was amazing ... I liked shaking hands with everyone in the beginning. I loved being with (Elder) Stella. Overall words cannot describe how much I enjoyed it out there. I loved the drum playing."

"I really enjoyed painting the canvas (tent)... my trip to Mile 20 was awesome."

"I enjoyed the company of the Elders and the teachings they had to give us. It's like everyone got to be brother and sister, and shared their knowledge with one another."

"It was just the best experience I have had in forever."

"The highlight of my day at Mile 20 was the sweat lodge ... I learned to give thanks to the trees. I got to purify myself and pray for others ... I would like to go back and show my family."

"We all shared in the circle what we thought of the day. I thought it was amazing. I even took turns frying bannock."

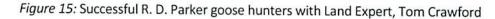
Note: Although these Land Based Education events take place annually within SDML, those that have been described are the particular ones from which we chose to collect data for the VOICE research project.

Already Implemented Changes to UCN Kenanow Course Material and Evaluation of Pre-Service Teacher Practicum Placements

Throughout the last three years, as this research has taken shape, there have been resulting changes in UCN Kenanow program delivery. These changes are ongoing and reflect the involvement of the VOICE researchers in faculty decision making and course design. The following changes have been implemented:

1. For the last 3 years a Kenanow pre-service teacher has been placed in an alternate practicum setting with the Land based program, Six Seasons of the North, offered through R.D. Parker Secondary School. This placement has been supervised by a certified teacher, but has allowed the Kenanow student to participate in all Land based activities such as snowmobiling, hunting, snaring, tracking, canoeing, and many others. The Kenanow student has been responsible to teach various aspects of the course depending on his/her particular skills. For the last two years, the Kenanow students placed with this program have been Cree women who have brought their traditional teachings into the setting. The practice of placing a pre-service teacher in this class is hoped to continue, perhaps even expand to include more than one person if the course enrollment grows in the future.

Those placed in this Land Based Education course have reported a very high level of engagement of students when they are involved in handson activities such as snowmobiling, goose camp, and snaring. The Kenanow pre-service teachers have observed that it is harder to engage these same students in pen and paper assignments unless the assignment is directly pertaining to practical need, such as working out grocery lists, or scheduling rifle practice.





- 2. For Kenanow pre-service teachers who are placed in more general classroom settings, the teacher observation form/rubric has been altered to reflect an emphasis on cultural and Land based teaching. One section of the form/rubric asks for comment on how cultural content has been included in the lesson observed, and what part of the lesson could have been done outside. Pre-service teachers on practicum are encouraged to take their students outside of the classroom as often as possible: to use the schoolyard and Land surrounding the building as a place for students to learn in any subject.
- 3. Most recently—at a meeting on August 26th, 2015— it was determined that Land Based Education would be a component of every Kenanow Bachelor of Education and Early Childhood Education course offered in both The Pas and Thompson as part of UCN's strategic plan for the next five years. Built into this decision is an assessment and evaluation process to take place initially in the spring of 2016, and every six months thereafter, through which progress towards this goal will be measured.

For many, the threatened devastation of our natural environment is evidence enough that the Western world needs to heed the teachings of Aboriginal Elders and give honour to the Land as the source of all life and our primary teacher. As the truth that we need help in navigating our way back to global health becomes apparent, the call is going out for educators to examine their current practices. We are being asked to provide guidance to our children by leading them back to a respect for the natural world and for the wisdom of the people who have kept faith with that sacred covenant since before time. It is a big task; one that requires us to reflect honestly upon how we have conducted business in classrooms; one that requires us to be willing to look at our pedagogical practice through a different lens; one that requires us to listen, co-operate and collaborate; one that requires us to humbly accept that wisdom often supersedes knowledge.

Scientist David Suzuki has taken a firm stand on the emerging data concerning the need for children to be connected to the Earth by issuing his "30/30 Challenge", a program in which schools are challenged to get students outside and into nature for 30 minutes per day for 30 days (retrieved at: http://30x30.davidsuzuki.org/). He has also made online teacher guides available for all elementary school grades, entitled "Connecting with Nature" (retrieved at: http://www.davidsuzuki.org/what-you-can-do/connecting-with-nature-education-guide/). The introduction to these guides asks the question, "Why teach outdoors?", and posits the answers to be:

- Time spent in nature enhances academic achievement.
- Nature-based activities improve student behaviour and co-operation skills.
- Outdoor learning promotes good communication.
- Time outside helps students to focus.
- Students are happier, less stressed, and physically healthier outdoors.
- Time in nature has been shown to reduce some ADHD symptoms.
- Spending time in nature helps with recall and memory, problem-solving, and creativity.

• If we want our children to protect the Earth, we need to give them an appreciation for it and a sense that they are connected to it.

The Assembly of First Nations, in their Cultural Competency Report (2012), outline the necessity of transforming the Canadian education system if Indigenous students are to successfully learn. Despite "The acknowledgement that long term processes of colonisation have set the foundation for disempowerment of traditional Indigenous systems of knowledge, Land-based living, suppressed Indigenous languages, cultures and spiritual traditions ..." (p.12), they find hope in the Joint Declaration of Provincial and Territorial Ministers of Education which states, "... the objective is to eliminate gaps in academic achievement and graduation rates between Aboriginal and non-Aboriginal students across Canada" (quoted from Cultural Competency Report p.12). Throughout this report the Assembly of First Nations give specific details for how that transformation can occur, including the training of educators in culturally appropriate teaching styles, and the involvement of community members, such as Elders and traditional knowledge keepers, in local classrooms.

By looking at the original Success Indicators identified by the Thompson Community Circle for the Land Based Education Success Pathway, we can come to some assessment as to whether the initiatives undertaken by SDML, both prior to and during the research project, are achieving the desired results.

- 1. Creation of support material for teachers to build connections between Land Based Education experiences and classroom teaching. Clear evidence of linkages between the Land Based Education and Manitoba Department of Education curriculum expectations.
 - The research projects done by Kenanow Bachelor of Education students modelled for classroom teachers how material that connected Land Based Education and the Manitoba curriculum could be designed and delivered. These lesson plans are available for distribution.
 - The material shared by the Yukon Education Authority has been localised and Manitoba learning outcomes added to the document.
 - Lessons derived from Mini Winter Fest activities have been modelled and are available for use by elementary school teachers.

- A repository of various Land Based Education resources including kits, novels, maps, etc., has been set up in Ron Cook's office and teachers are invited to come and borrow anything they can use.
- 2. Measured and anecdotal evidence that teachers are using produced resources.
 - As per the interviews, teachers who have been directly exposed to this
 material are reporting that they are using it in their classrooms. Teachers
 who have attended Mile 20 Fall Camp, etc., are reporting that they are
 finding ways to incorporate those experiences into their classroom
 teaching.
 - Former Kenanow pre-service teachers, now employed by SDML and other local school boards, are saying that they can find many ways to incorporate their teacher training regarding Land Based Education into their day to day practice. According to self-reports, they are also taking students out of the classroom often. These new teachers may eventually have an effect on the practices of their peers.
 - While many teachers said they used examples from mini-winter fest
 activities as a basis for later assignments, several were still indicating that
 they would like to have more guidance in this process. A shortage of time
 for curriculum development appears to be the most often stated reason
 for this response.
 - Teachers are more readily accessing both human and printed resources available through the Cultural Co-ordinator's office i.e. asking for direction in inviting Elders into their classrooms.
- 3. Measured increase in teacher engagement in Land Based Education activities. Increase in number of teachers per school using available Land based sites and resources.
 - More teachers are participating in Land based activities per year as shown by the expanding number of classes coming out to each event that is held.
 - In the last year Grade 8 classes from two schools have asked to use equipment for overnight canoe trips.

- The observation form for Kenanow pre-service teachers now includes the question as to what part of the lesson could have been taught outdoors.
- For the last 2 years there have been two transition camps held as opposed to one previously. This has allowed every Grade 8 student to participate.
- As described in the interviews, teachers are becoming more comfortable and experimenting with Land based activities as they are exposed to them themselves.
- Canoe trips are now a regular component of Physical Education studies at several elementary schools.
- 4. Teachers experiencing a demonstrated perspective transformation through content delivered in their classrooms.
 - Interviews and reflections speak to this point. Teachers who have been involved in Land based activities often report having a personal perspective transformation as they come to understand more about culture and tradition, as well as feeling more comfortable on the Land themselves.
 - Previous Kenanow pre-service teachers now employed in the district speak about being supported in their own growth by each other.
 - This perspective transformation will become more evident over years as teachers discuss their practice within collegial settings.
- 5. Students are more engaged in schools as will be evidenced by increased attendance, academic success, and sense of belonging. There will also be a decrease in disciplinary action.
 - The most common observation made by all those involved in the Land Based Education activities documented was the change in behaviour of students. This observation was made not only of classes in general, but of specific students who had been noted to cause some problems in classrooms throughout the school year.
 - In several instances it was reported that there was no need for disciplinary action whatsoever while students were involved in Land Based Education activities.

- Students themselves reported an increased sense of belonging when they were involved in Land Based Education activities.
- A heightened level of student engagement was also observed throughout all the Land Based Education activities investigated, as evidenced in the post event interviews.
- Academic success and attendance patterns will need to be investigated over time as definitive changes cannot be seen over 3 years.
- 6. A measureable increase in the use of Elders and local experts to advance student learning about the teachings of the Land while in classrooms and in the local area.
 - Elders and local experts were included in the teaching for every event included in this report. As noted, there were more Elders at Transition Camp than in previous years, and the number of workshops offered by local experts had increased.
 - Kenanow pre-service teachers are encouraged to design lesson plans that involve Elders. As well, there has been consultation with Elders regarding the design of research activities and course development within the Kenanow program.
 - A stone carving workshop was conducted at Wapanohk School and a class set of stone carving tools purchased for future use.
 - Beading classes were taught by an Elder to Grade 8 classes at Juniper School.
 - Ron Cook leads weekly drumming classes in three local elementary schools.
 - Further encouragement of teachers to invite Elders and local experts into classrooms, and an explanation of the protocol that goes with these invitations would result in extended use of their knowledge.
- 7. Increased opportunities for professional development for teachers and all school board staff regarding Land Based Education.
 - Voices from the Land, the workshop conducted by the Monarch Teachers' Network, was attended by all district Grade 8 teachers.

- In the fall of 2015, all School Board of Mystery Lake support staff was given the opportunity to attend Mile 20 for a full day of Land based activities.
- Each year different Grade 5 teachers attend Mile 20 Fall Camp with their classes; this is also true of teachers attending Transition Camp.
- J.J. Bujold, the teacher responsible for R D Parker Land Based Education course, attended the skills camp in Teslin, Yukon Territories.
- SDML is committed to supporting further PD opportunities as they arise.
- 8. Land Based Education is supported in the District and in the Thompson community as is evidenced by changes to policy, programs, finances, and community interest in available professional development.
 - SDML has developed a smudging policy and there are designated locations to do so at every school, including the School Board Office.
 - Land Based programs within the district have become entrenched into the District and school year plans. For example District Mini-Winter Festivals at elementary schools, grade 11 Six Seasons of the North Course, annual canoe trips for grade 7 classes as expanded to include more schools, Annual fall Camp week for grade 5 students, annual sikwan mamawewin activities for high school students, annual transition camps for grade 8-9 students, and more teachers/schools are using the Land Based curriculum resources in their classrooms.
 - Allocated budgets and financial commitments have been put in place to support the delivery the above noted Land Based Education programs/initiatives.
 - SDML and UCN Kenanow Bachelor of Education faculty have created a
 partnership (which includes financial and human resource commitments)
 to co deliver the Aboriginal Perspectives Fall Camp Week activities which
 has become an annual week-long event.
 - SDML and the sikwan mamawewin committee have created a partnership to work together during the annual Spring Gathering and events leading up to it at Mile 20.

- At the request of various community partnerships including City of Thompson HR Dept., Aboriginal Accord Members, and UCN Early Childhood Education Faculty, SDML has expanded its Aboriginal Cultural Awareness and Traditional Knowledge PD offered at Mile 20 site to be inclusive of these partners.
- At the request of TUAS steering committee SDML and UCN have been asked create a comprehensive PD model similar to the one currently offered on Cultural awareness and traditional knowledge to be utilized by organizations for staff development to be coordinated out of UCN.
- 9. Increased community support for Land Based Education by volunteering to help set-up, organise, prepare, endorse, and publicise such activities as Culture Camps, Transition Camps, Medicine Gardens, and the possible selection and development of a permanent Land Based Education site.
 - Nisichiwayasihk (Nelson House) welcomes students and all other participants in various activities to their Land at Mile 20, often providing help to set up tents, workshop sites, food, and other necessary items.
 - Manitoba Hydro continues to provide manpower, firewood, and equipment for many events as needed.
 - Parents and community members at Wapanohk School tended the gardens that were planted there last spring over the summer. There is a commitment to extend these gardens, planting more medicines and including an outdoor learning space.
 - Community members have provided labour for setting up camp facilities prior to student arrival.
 - The Boy Scouts of Canada rent their Liz Lake Camp to SDML at a below cost rate.
 - The local members of the provincial Department of Natural Resources regularly give firearm, fishing, trapping, and hunting instruction to Land Based Education course students at R.D. Parker.
 - There is an ongoing commitment to find a permanent site for Land Based Education activities within the district.

• Community members are involved regularly in providing various kinds of instruction for the Land Based Education course at R.D. Parker.

Recommendations for the Future

The outcomes cited above point to definite directions through which the practice of Land Based Education will grow in the future. These dreams, or items on a Land Based Education 'wish list' can be divided into 3 categories:

Initiatives to further enhance student involvement and engagement in Land Based Education opportunities, including UCN Kenanow pre-service teachers.

Initiatives that will further encourage teachers to use Land Based Education resources in their classrooms and to take part in Land Based Education focussed professional development.

Initiatives that will increase the involvement of Elders and the endorsement by community members in the practice of Land Based Education.

- 1. Initiatives to further enhance student involvement and engagement in Land Based Education opportunities, including UCN Kenanow pre-service teachers:
 - Continued expansion of opportunities available for all students to
 participate in Land Based Education activities is needed, with particular
 emphasis on seeking out 'at risk' students as these young people seem to
 benefit most significantly from Land based experiences. Students in L2 and
 L3 classes, as well as those in Student Success programmes should be
 specifically invited to attend.
 - Extension of the Kenanow teacher education program to further embrace the goals outlined in the Accord on Indigenous Education, which was signed in 2010 by the Association of Canadian Deans of Education is necessary. These goals mirror the vision of UCN Elders by stating the Deans' intent to "... challenge existing curriculum frameworks and structures in order that they may engage learners in experiencing the Indigenous world and Indigenous knowledge in a wholistic way" and "... include Indigenous wisdom-keepers and knowledge-holders in curriculum development and renewal activities". One step towards the realisation of these two goals would be the formal acceptance of Elders regularly

teaching in the faculty on an equal basis with other faculty members. The work begun within the Faculty regarding this initiative needs to be supported by senior management and furthered through diligent consultation with UCN Council of Elders. A timeline for achieving the goal of Elders regularly teaching in UCN classrooms should be set at the earliest possible time and adhered to while working within the Strategic Plan.

- The expansion of Cree language instruction programs in order to familiarize all students with the Land based aspects of the language.
- The planting of gardens and the development of outdoor learning spaces in every local schoolyard such as the one envisioned for Wapanohk Community School.
- Senior management of both SDML and UCN will be called upon to take leadership and responsibility in the further development of LBE. It will require collaborative effort to eliminate some of the obstacles encountered by educators in both systems who are working to implement more LBE in classroom teaching.

Figure 16. A section of the garden planted by students, staff, and parents at Wapanohk Community School.



- 2. Initiatives that will further encourage teachers to use Land Based Education resources in their classrooms and to take part in Land Based Education focused professional development:
 - While the resources that are currently available from the District's Aboriginal Perspective/Cultural Proficiency Co-ordinator's office are excellent, continued expansion and focussed systematic further purchasing of current material will add to the material available for distribution.
 - Future Professional Development days should contain Land Based components to ensure that more teachers regularly become reminded and familiar with what resources are available.
 - With the numbers of teachers in each school who have been exposed to Land Based Education opportunities expanding, the establishment of a district committee to seek out and/or develop teacher friendly Land Based Education lesson plans will help those teachers who are still not sure how to include this concept in the curriculum. Such programs as "David Suzuki's 30/30 challenge" can be encouraged as a 'jumping off' point for teachers whose experience with Land Based Education is still limited. These programs cannot take the place of culturally based Land Based activity, but they can provide current research into the concept of Land Based Education, which might convince reluctant educators to experiment. This idea of research promoting a change in classroom practice may be particularly significant in the area of classroom management, i.e. the supported claims of significant behaviour, attention, and achievement improvement for students who experience LBE made by Richard Louv and others.
 - Administrators and staff of both SDML and UCN need to become familiar
 with and address the recommendations put forth by both the Assembly of
 First Nations Chiefs (Assembly of First Nations Education, Jurisdiction and
 Governance Cultural Competency Report) and the Association of Canadian
 Deans (Accord on Indigenous Education).
 - Regular monitoring of the UCN Kenanow B.Ed. programme to ensure that Land Based Education forms a significant component of every course will confirm that the aims of the 5 year strategic plan are achieved.

 Within the Kenanow teacher education program the further development of courses that focus teaching on Land Based Education will provide graduating students with a 'bank' of lesson plans to take into their future classes.

Figure 17. While she was a pre-service teacher, Charity Cooper (r) developed Land based science curriculum lessons. She is now using that experience and those lessons in her classroom.



- 3. Initiatives that will increase the involvement of Elders and the endorsement by community members in the practice of Land Based Education:
 - Regular feasts and celebrations that promote community understanding of Land Based Education could deepen the commitment of community members to support such activities.
 - Within UCN Kenanow program the development of protocol for Elders to teach within the program on a regular basis must be developed in order to ensure the integrity of a Land Based program.
 - Distribution to principals and staff of information noting local Elders who
 are available to come into classrooms, as well as the protocols involved in
 inviting these Elders, would help to increase the willingness of teachers to
 issue invitations. It is true that sometimes teachers are reluctant to contact
 Elders because they do not know how to do so.
 - The Thompson community and surrounding area need to become aware of all that is taking place with respect to Land Based education to further the

learning and engagement of local students. Within SDML and the Kenanow teacher education program, great things are happening with Land Based Education. The events and activities that are happening should be showcased in local media through the District newsletter, press releases, pictures, interviews, etc.

 The administrations of UCN and SDML have a responsibility to review the progress of Land Based education within their respective organisations and to include it in both strategic and operational future planning.



Ekosi!

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Appendices

Appendix 1: Reflective Questionnaire (for Teachers)

Last fall your class travelled out to Mile 20 to spend the day learning from Elders and other teachers. We would like you to take a few minutes and answer the following questions as you reflect on that experience now, some seven months later.

What learning did you see happening for your students during that day? Please give examples where possible.

Where has that learning reappeared throughout the past months in their classroom assignments or discussions? Examples?

What were the aspects of the day spent at camp that you were able to bring back into your classroom teaching? Examples?

What types of resources would be valuable for you to have before going to camp and following that experience?

Appendix 2: Mini Winter Fest Questionnaire

April, 2013

Our annual Mini Winter Fests have just finished and we know that SDML students and staff had a great time during these days. Thanks to everyone who contributed to the success of this activity in every school. Your enthusiasm and energy are what makes these mini festivals work every year.

To help us with planning for next year, we are asking staff members to answer the following questions. Please answer in as much detail as you can.

Questionnaires are anonymous unless you choose to add you name at the end.

1. Which of the MWF activities related directly to curriculum covered in your classroom? Please be specific when describing the relationship and list as many as apply.

2. How did you prepare your students for the activities in which they would engage during MWF?

3.	, and the second of the second
	specific.
4.	What would help you incorporate more of what students learn during MWF
	activities into your classroom teaching?
E	If you would like to further discuss MWF activities and planning, please give us
<i>J</i> .	your name and we will contact you.

Appendix 3: Teachers' Suggestions For Mile 20 Future

2013

(In no particular order)

- Different sessions for students i.e., fish filleting, goose plucking (Make differentiation between types of camps clear)
- Hold earlier in September whenever possible
- Limited amounts of tea/coffee/sugar for students. Prefer hot chocolate, water or juice
- Longer time than regular school day
- Permanent site is needed for teaching and more frequent visitation
- Build shelter from inclement weather out by road if buses are to be used (Tarp at bus area?)
- Investigate overnight possibility for students at camp
- Memory bags: maybe do personal memory bag activity first, then one for Mile 20
- Bring ALL students from district
- Arrange a day for teachers ONLY (to learn cultural aspects)
- Meet together for debrief sooner
- Have a photographer/ documenter for whole week
- Share pictures
- Memory bags need clearer instructions re: what can be picked and taken away from Land??
- Pre-teaching of memory bags and stories
- Keep floater position
- Shorten tour time
- Group Potluck Feast with teachers, Elders, pre-service teachers, Land experts, volunteers after the event. Debrief. Planning for next camp.
- Have teachers stay for debrief
- PD for teachers at Mile 20 in the same format as planned. Teachers want to learn this information too.
- Teacher PD Retreat at Mile 20. Camping overnight experience. Perhaps invite spouse. Build community.

Appendix 4: Suggestions from Mile 20 Debrief

2013

- List of supplies needed for camping handed out ahead of time
- Better chairs for Elders
- Hand over food book for next year's camp. Write down how much was bought; what was left over
- Give a survey to find out what people like for breakfast/supper
- Shorten the time of the tour
- Give tour at the end of the day instead of beginning (?)
- Martha could do her teaching in tipi right after Medicine Wheel
- Have kids arrive earlier (Could bus arrive earlier?)
- Give tour to UCN students on Monday so they are aware of where everything is
- Give kids their tobacco ties ahead of time
- Dry wood supply rather than seasoned
- Need a change room. Build or design something or bring an extra tent for that purpose
- More tarps with no holes
- ****Different design of roof in kitchen with ONE large tarp and peaked roof ****
- Have a map of whole site by dining tent so kids know where they are going
- A specific place for kids to leave their backpacks ... another tent??
- Mixed messages about what kids can pick up and put in socks and what they cannot touch
- Have every presenter have something to hand out. I.e., cards with bannock recipe already printed
- More Cree cards and more encouragement for kids to speak Cree while at Mile 20
- Bigger pail for food waste
- Stoves need dampers
- Develop a community newsletter to say what happens during that week.
 Or a year book? On SDML website?

- Take lots of pictures ... someone's job to be photographer
- Tell Creation stories
- Rock painting?
- PowWow Teaching?
- Traditional regalia?
- *** No smoking around children ... shouldn't do it. We need to tell all presenters that ahead of time and then adhere to policy. ***
- Meal preparation for those staying over assigned ahead of time so the same people do not always do it.



curriculum you teach?

OPEN ENDED QUESTIONS FOR KENANOW GRADUATES CURRENTLY

V

TEACHING REGARDING the INTEGRATION of LAND BASED EDUCATION into CLASSROOM CURRICULUM	
Name:	
Grade levels taught:	
As a graduate of the Kenanow Bachelor of Education program, we would like to hear your thoughts about the integration of Land Based Education into classroom curriculum. Would you please share with us what you think and/or have experienced about the following:	
What subjects in the curriculum you teach do you see as having the most obvious connections to Land Based Education?	
Have you been able to integrate LBE into these areas? If yes, what kinds of activities have you used/planned?	
Are there problems integrating LBE into these curriculum areas? If so, what are they?	
Are there areas of the curriculum where it is difficult to teach using LBE? If so, what are they?	
How has your teacher training in the Kenanow program prepared you to use LBE in the classroom? Can you suggest areas where the Kenanow program could do more to prepare you to teach this way?	
What further resources would you like to have in the area of LBE in order to further integrate it into the	

Appendix 6: Open Ended Questions for UCN Elders Regarding Land Based Education

As a UCN Elder who is involved with the Kenanow Bachelor of Education program, we would like to hear your thoughts about Land Based Education. Would you please share with us what you think about the following:

- 1. What topics would you like to see covered in a Land Based Education course for elementary school students?
- 2. What kinds of things can young students learn from the Land herself?
- 3. How do you see Land Based Education being brought into the current education system?
- 4. What would you like to see UCN Kenanow pre-service teachers learn about teaching Land Based Education?
- 5. Do you have any stories you would like to tell us about what you have personally learned from the Land?

Appendix 7: Presentations Given on Land Based Education Success Pathway Research

MERN Conference, The Pas, March 2014

Lighting the Fire, MFNERC Conference, Winnipeg, May 2014

Canadian Society for Studies in Education, Brock University, Niagara Falls, June 2014

MERN Conference, Thompson, March 2015

Lighting the Fire, MFNERC Conference, Winnipeg, 2015

Canadian Society for Studies in Education, Ottawa University, Ottawa, June 2015