

Land-Based Learning: considering the fundamentals

By: Andrea Barnes

As an Environmental Educator with Alberta Parks and a classroom teacher, one of the silver linings of this past 1.5 years has to be the dramatic uptake and motivation for teaching outdoors. As we move into another school year, hopefully, this energy and passion for getting kids outside continues. With this in mind, I've compiled what I think are the 5 fundamentals to connecting students to the land...but first, what *is* land-based learning and *why* is it important?

It is commonly understood that we take students outside for 4 main reasons: to enhance their physical and mental wellbeing, to connect them to nature, to engage them with their broader community, and of course, to teach the curriculum. Land-based learning incorporates all of these important reasons but with one important addition, it also lifts Indigenous knowledge of the land and ways of knowing.

Robin Wall Kimmerer states, “The land is the real teacher. All we need as students is mindfulness.”

So, how do we embrace Robin Wall Kimmerer's words and listen to the land while teaching? It does take a lot of trust and confidence on the part of the teacher to wait for the emergent curriculum to show itself. But it's not simply about finding these inspirational nature moments. Land-based learning also requires purposeful planning, crafting both structured and unstructured activities, and keeping these **five fundamental land-based learning practices** in mind.

1. Have Gratitude and Practice Reciprocity

This is where it all begins folks. Take the time to craft your meaningful approach to honour and acknowledge the land you're teaching and learning on. Practice giving gratitude for your time spent in nature and the learning gifts you're receiving. Make space for additional gratitude and reflection at the end of your time in nature and do this consistently. These rhythms help to build a relationship and appreciation that is fundamental for nurturing connections with the land.

As an Alberta Parks employee, I've been an advocate for stewardship my entire career. Over the years we've fixed, repaired, planted, pulled and cleaned-up many important natural areas but we rarely, if ever, considered this as part of a reciprocal relationship. Reciprocity is defined as the practice of exchanging things with others



Students contributing their good thoughts for the day into their 'wishing well'.

for mutual benefit. When we practice reciprocity, we may consider providing a gift to the land (i.e. tobacco, native plant seeds, a thoughtful wish) before we do our activity, program, or learning task. When we demonstrate this trusting approach we show that we believe nature will, in turn, provide us with the gift of rich learning experiences - which it inevitably does. For me, reciprocity is about building a relationship with the land and it's about doing small acts of kindness or filling nature's bucket.

2. Share Stories on and from the Land

Sharing stories is one of the most powerful approaches for making meaningful connections to the land. Stories on and from the land provide provocation, inspiration, knowledge, and help focus learning. Telling stories, orally, without the benefit of reading the words, is an even more powerful technique, even magical. Honing your own oral storytelling abilities will take some time and practice, but stick with it. Here are a few land-based story tips to consider:

- Build and nurture relationships with the Elders and/or knowledge keepers which have been identified for your area or school. This is, of course, most ideal and special.
- Learn what stories are sacred (to only be told by an Elder) and which are public stories (available for you to share as they are widely and commonly distributed).
- Spend time collecting appropriate land stories and compiling land-based story resources at your school and share them with your teaching team.
- Share your own stories! Model your connection with nature by telling and retelling your stories of experiences, sightings, awe and wonder.
- Create and tell your own tales about the wonder and drama unfolding on the land. Find inspiration from guide books or children's books and let the stories bubble out of you.



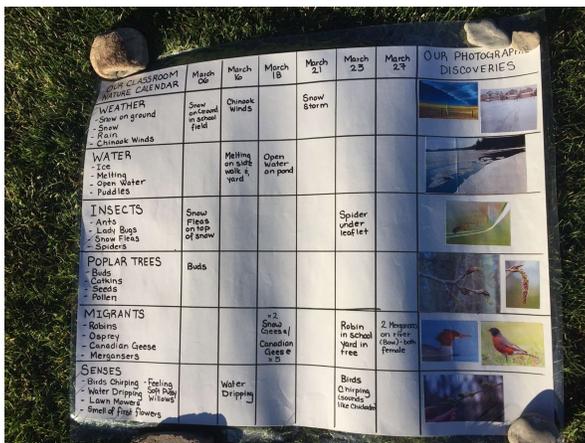
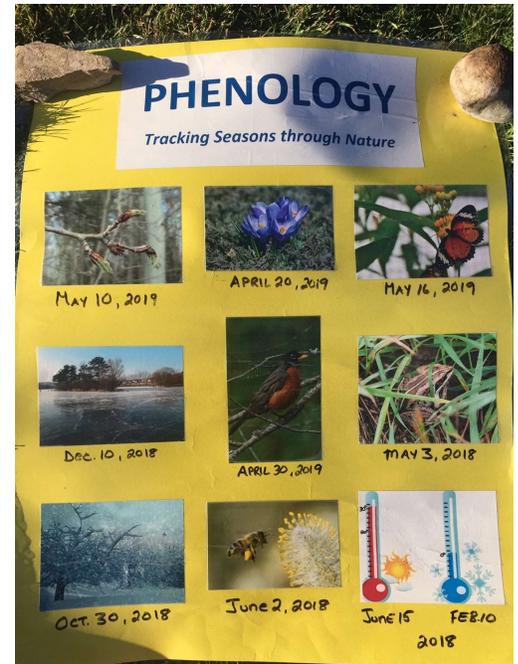
3. Learn to Observe and Record

Like friends and neighbours, greetings are more meaningful when we address individuals by their own name. The same goes for the natural world around us. For example, when we know the name of a plant, we might be more likely to notice changes in it (budding, flowering, leaves dropping, etc). Knowing its name helps us connect with the stories we might hear about it and perhaps even take more care with it. Model



identifying the flora and fauna in your area by name or learning them together.

Linked with identifying plants and animals is the creation of a nature, or phenological, calendar for your classroom. This is done by observing and recording the significant natural events happening in your area. Consider coming up with your own class 'watch' list. These may include animals on migration (last geese flying south or first robin in the spring), weather related (first frost or first thunderstorm), insect observations (first or last butterfly), or plant specific events (first spring crocus or goldenrod gone to seed). The best part about marking these moments in time is that inquiry questions are generated ("why are the geese later this year" or "when was the last time we had frost so early"), stories will unfold, and students will find themselves more motivated to be observant and present during their outdoor time.



By taking time to mark and celebrate the passing of time through keen observation skills, your students are practicing a deeper and more connected way of knowing and learning on the land. Understanding when and where natural phenomena are happening on the land will also help you relate and properly time the sharing of certain land-based stories.

4. Make time for Individual Reflection

For those that are experienced outdoor educators, the 'sit spot' is not a new idea for you, but this simple tool should not be overlooked, but rather enhanced. Creating meaningful time for reflection through this personal, reflective experience is a fundamental practice in land-based learning. I've heard these sit spots referred to as many things: special places, important spots, Muir sits, quiet connection, or tree sits. Whatever the name, these places quickly become places for students to sit quietly, be observant, engage their senses and be mindful. There are many ways to adapt and change these special spots; through the seasons, in diverse ecosystems, using various perspectives, or isolating certain senses. Consider bringing your students back from their solo spots by slowly beating a large hand drum or playing a melodic flute and encourage them to follow that rhythm, the rhythm of the land, as they return from their solitude.

5. Allow the Land to Teach and Inspire

Trusting that the emergent curriculum will materialize is tricky business. In order to capitalize on the events that inspire your students you need to have two teaching techniques at the ready: nature journals and a math toolkit. Literacy and numeracy on the land is everywhere, you just need to be ready to catch it.

7 Directions poem

Use adjectives and adverbs to describe what you see, hear, feel, or smell.

Use proper names of the things that you see.

To the North I see...
To the East I see...
To the South I see...
To the West I see...
Above me I see...
Below me I see...
Inside me I feel...

To go further with this poem, add some **personification** - describe what the things you see are doing, feeling, wondering, or hoping for.

Nature journals are not a new phenomenon but they are often underutilized. Set your journals up in September and paste resources in them for students to refer to: symbols for recording the weather, the 7 Directions poem, writing props, and scientific drawing guides. Take them with you, all the time. At any point during a nature outing, students should be able to settle in to draw, write and reflect on their experience. Model how when inspiration strikes and the land speaks to us we need to seize the day...and capture the moment.

Numeracy tasks outdoors require you to be ready for the inquisitive questions to emerge (either from you or your students). Along with all your

safety equipment, your backpack should be equipped with a math toolkit (see insert). With your toolkit in hand, you're ready to seize the math inspiration at any moment. Measuring items and spaces will inevitably become a staple for many math tasks outdoors, however, math manipulatives can also be collected anywhere, angles can be found, items can be weighed and compared, complex math equations are ready to be created and solved. The bonus is you also have those nature journals to capture all this great math land-based learning.

Math Tool Kit

- Large measuring tape (25 m)
- Multiple measuring tapes (1 m)
- Thermometers
- Spring scales
- Anemometer (wind meter)
- GPS
- Heart rate monitor (often a watch)
- Clinometer (slope meter)

Summary

Land-based learning is the new and improved environmental education. It has all the best qualities of our 'old' and favourite education practice but done with more intention and respect for the land itself. It provides us an opportunity to reconcile some of the negative impacts of colonialism in a small and meaningful way. When we consider the land as the first teacher and build relationships with it then we demonstrate that we value the knowledge and respect that Indigenous peoples have had with the land for generations. The five principles outlined here are simple but foundational in their intention. It is not an exhaustive list and obvious items are missing, such as outdoor nature games and unstructured **PLAY**. So don't forget to have fun on the land with your students this year. Enjoy your time outside and do so with gratitude, as the land is truly a teaching gift.



References:

Kimmerer, Robin Wall. 2015. **Braiding Sweetgrass**. Minneapolis, MN: Milkweed Editions.

Holland, Chris. 2009. **I Love my World**. Devon, England. Wholeland Press