

WORKSHOP #5: Land as First Teacher: Considering The Educator's Role in Land-Based Learning

Land-based learning offers profound benefits for children and families but also for educators, fostering deeper connections to nature, community, and Indigenous ways of knowing. This workshop will share insights from our ongoing work with a group of educators reflecting on their experiences with a Land-based approach. Participants will explore how engaging with the Land may serve to deepen their approach, develop connectivity, and foster a sense of well-being. Through discussion and hands-on activities, we will consider ways we may continue to integrate these approaches into the work of early childhood educators, create richer learning experiences, and appreciate Land as a first teacher.

Who are you and where are you?

What's in your community?

- Walking through a Toronto community:

<https://www.youtube.com/watch?v=ZGnlpZ1wlKY>

Community mapping - visualization exercise

- Consider your neighbourhood
- Take a slow **walk down the street, observing.**
- What do you see? What do you hear? What do you feel?

Identify

- Community assets – places that add value to the community
- Individual assets – evidence of skills and talents of community members
- Issue points – evidence of challenges, issues or problems

Create a quick sketch or make notes of what you noticed.

People

- * Places for school/work
- * Highlight major streets, bus routes, bike paths, or sidewalks
- * Libraries/community centers
- * Place of worship
- * Grocery stores/corner stores
- * Favorite Restaurants
- * Hospitals or health clinics
- * Shelters and food banks
- * Abandoned Buildings
- * Play Spaces

Animals

- * Animal sightings/species
- * Domestic animal use (dog parks, dog-friendly trails, etc.)
- * Animal shelters
- * Animal control facility
- * Animal hospitals
- * Animal sanctuaries
- * Zoos and aquariums

Environment

- * Wild and/or protected spaces
- * Bodies of water
- * Mountains, beaches, etc.
- * Recycling centers, landfill/waste management
- * Water facilities
- * Local parks
- * Green spaces (yards, tree boxes, etc.)
- * Vacant Lots
- * Power sources (coal, nuclear, wind, solar, and geothermal plants)
- * Environmental services (watershed, reservoirs, wetlands, etc.)

Community mapping exercise

Looking at your sketch or list:

- **Are there places that fit more than one category?**
- **What strikes you as needing action?**
- **Is your community meeting the basic needs of people? animals?**
- **What improvements could you make?**
- **Do you feel your community is sustainable?**

Adapted from: <https://www.rootsandshoots.org/wp-content/uploads/2020/07/Community-Mapping-101-Activity.pdf>

- Science-Engineering and Education -> Outdoor and Land-based Learning
- Exploring how knowledge is centered in pedagogical experiences and the diversification of participation in STEM/higher ed



Rationale

- Existing research corpus focused on, nature of STEM, goals, pedagogies:
 - STEM in formal settings (K-12, post-secondary, skills training)
 - STEM pipeline/pathway models, neoliberal and economic imperative
 - STEM in informal-OST programs; interests, careers, knowledge spans/gaps
 - STEM-STEAM etc comparisons
- Characterizations are divergent, variable, consequently problematic
- Few studies have sought to deeply understand the unique setting of university-based STEM outreach programs: programs that negotiate the border of informal and formal learning
- Need to more deeply understand this setting in context, why and how participants engage with the program, how these programs serve participants
- How can the outreach program be understood as part of the broader landscape in STEM education?

Activity Details

- Program activities represent a range of topics in science and engineering and different kinds of learning activities.
- The majority of these activities present three significant characteristics:
 1. They are hands-on. Campers are the ones ‘doing’ the science and engineering work. They take an active role in the learning, ascribing their own meanings and interpretations to the activities they participate in, and make a series of decisions along the way.
 2. Campers consistently engage in a design process or cycle in the activities of the program. Campers refine the challenges presented to them by Instructors, collaborate on plans and designs for possible solutions, work together to prototype and build their designs, and test these creations together.
 3. Campers use predominantly everyday materials to engage with the content.

Theoretical and Conceptual Framework

Hands-on, building,
testing, sharing,
physical
expressions of
problem solving and
conceptual change.

**Constructionist
Approaches**

**Engineering
Design Process**

Centrality of
design;
engineering as
content, context,
and pedagogy.

*Privileging funds of knowledge in
university STEM outreach experiences*

The hybrid nature of this
setting; leveraging funds
of knowledge; the
creation of a third space.

Third Space

What kind of third space?

Moje et al (2004) situate three different conceptions of a third space:

- *a bridge* between “knowledges and Discourses often marginalized in school settings to the learning of conventional academic knowledges and Discourses” (p.44),
- “as a *navigational* space, a way of crossing and succeeding in different discourse communities” which includes the act of crossing the boundaries that separate these communities (p. 44).
- “as a space of *cultural, social, and epistemological* change in which the competing knowledges and Discourses of different spaces are brought into “conversation” to challenge and reshape both academic content literacy practices and the knowledges and Discourses of youths’ everyday lives” (p. 44).

Context

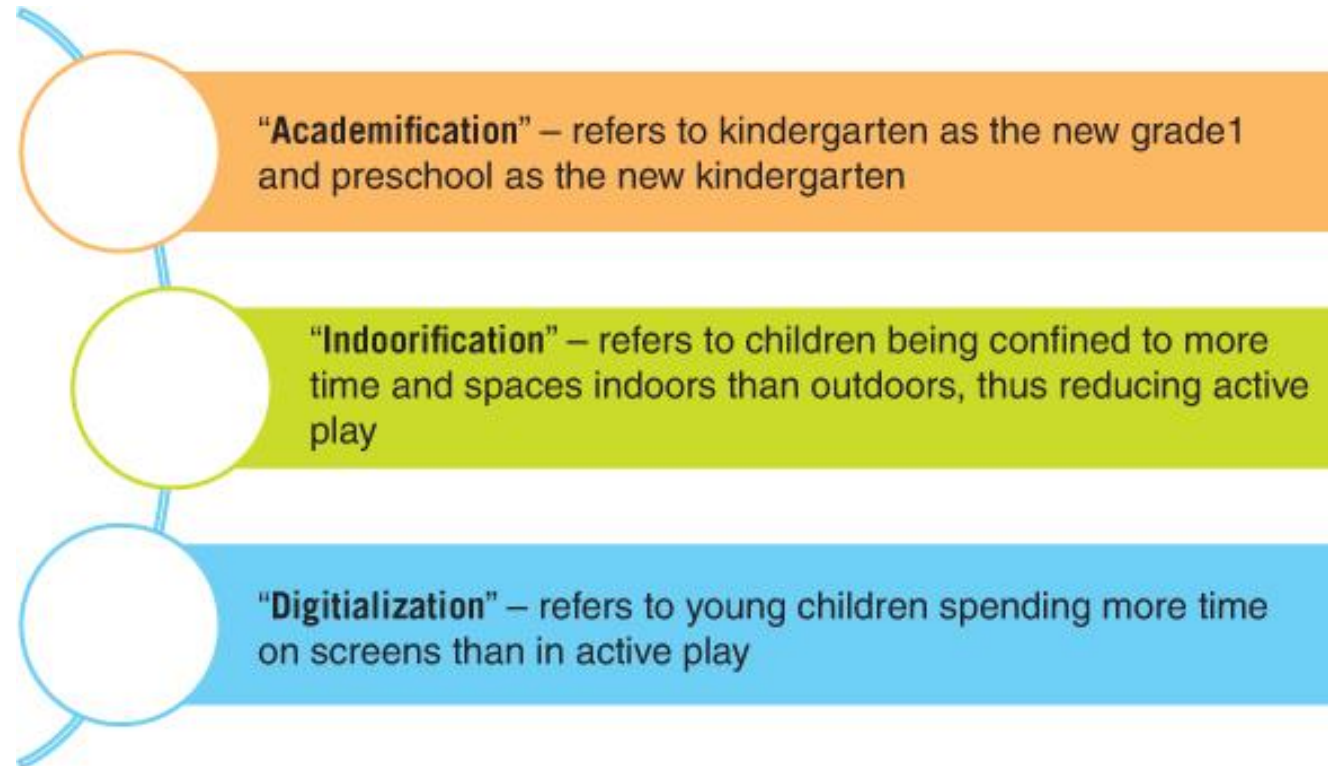
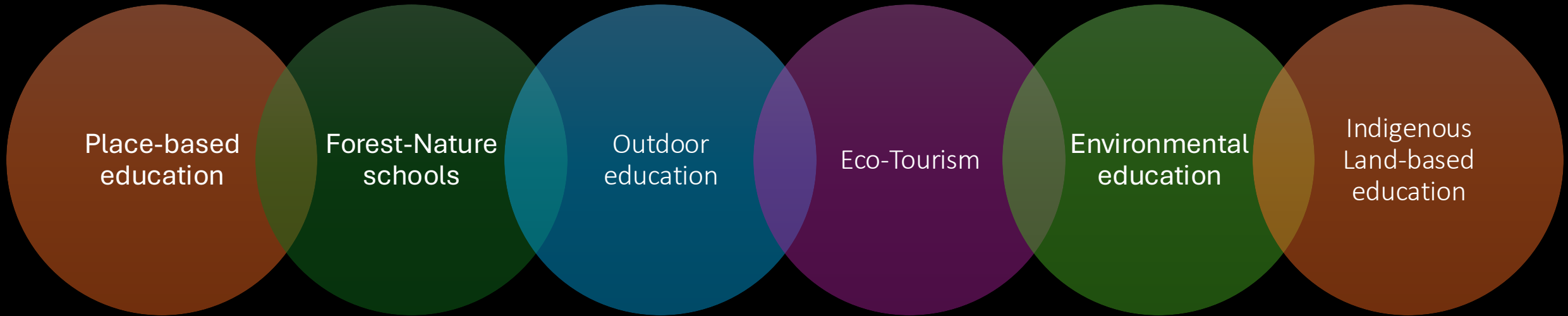


Figure 2.1 Trends contributing to the erosion of children's play.



“When children spend time outdoors, they are more likely to develop an environmental ethic or a sense of stewardship for the earth... which contributes to *ecoliteracy*” (Munroe & MacLellan-Mansell, 2013, p. 26).



Building Capacity to Support Outdoor Play in Early Childhood Education

¹Beverlie Dietze, PhD, ²Diane Kashin, EdD

¹Kelowna, BC, Canada, ²Richmond Hill, Ottawa, Ontario, Canada

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Introduction

Children’s play experiences in outdoor environments are increasingly recognized as essential for their healthy development and well-being.^{1,2,3,4} Universal system reviews indicate that outdoor play contributes to children’s physical, and social-emotional development, mental health, emotional regulation. cognition and level of curiosity required for later academic learning.^{4,5,6} However, children today are spending less time engaged in outdoor play compared to children in the 1970s.^{7,8} Findings from a 2016 global survey suggest that more than 56% of children play less than an hour a day outdoors.⁸ Increased use of technology, disruptions and changes to children’s daily lives since COVID 19, and societal attitudes toward favouring indoor environments contribute to the reduction of children playing outdoors.⁹ Reversing this indoor trend is important to children and for society.^{6,9,10,11,12}

Governments responsible for early learning programs have a variety of policies, funding levels, regulatory structures, workforce competencies, and expectations including curriculum frameworks intended to support quality play-based programs for children and families.^{6,9,13} Curriculum frameworks offer pedagogical approaches^{1,2,6,10,14} that guide the design and execution of experiences to build upon children’s curiosity, exploration, thinking, and learning in indoor and outdoor environments. However, this does not mean that outdoor play is explicit in policies and frameworks. Early learning teachers do not focus enough on outdoor play, due in part, to a lack of training in outdoor pedagogy during post-secondary education and professional development options.^{9,10,15,16,17}

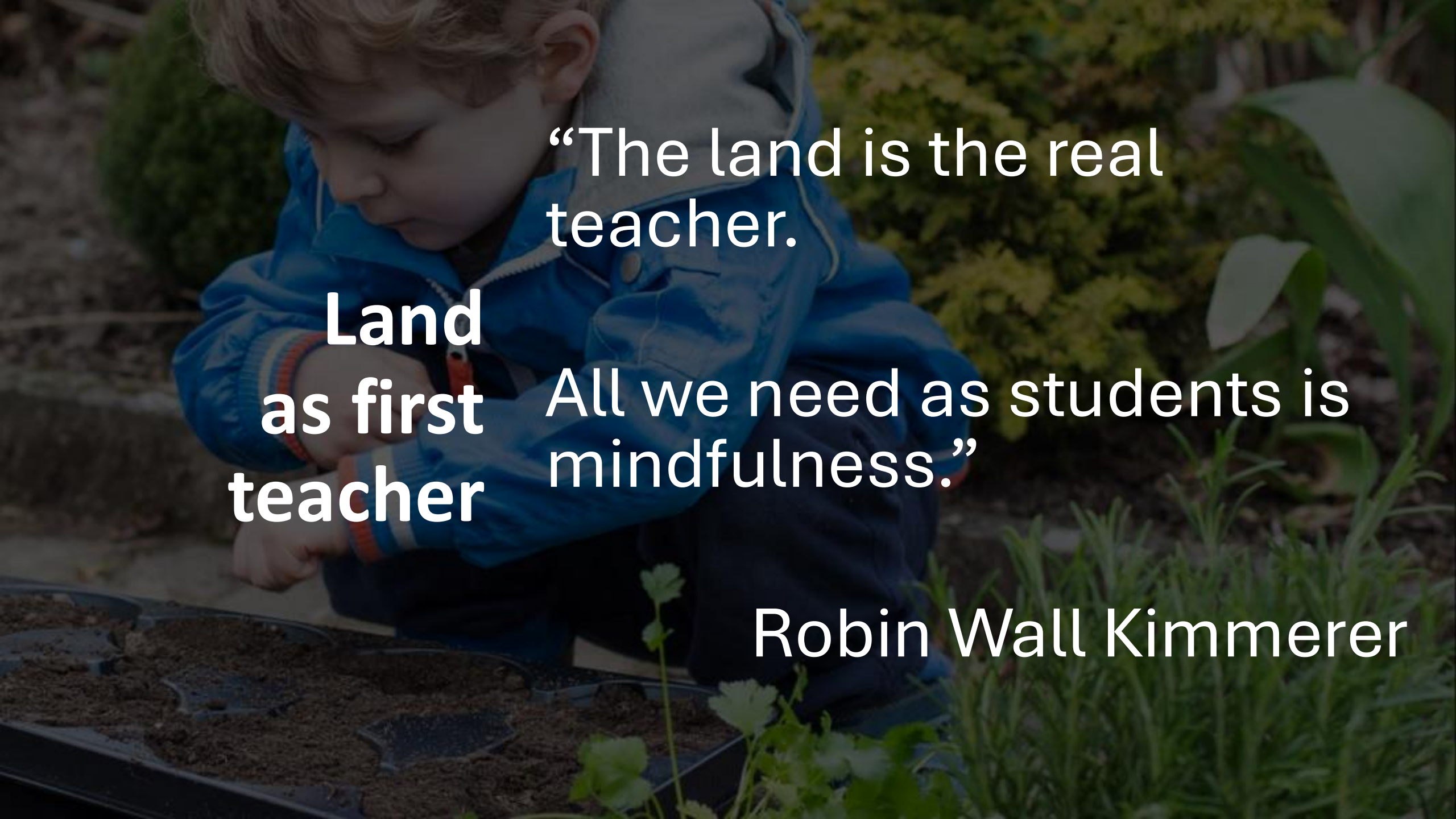
Researchers such as Pacini-Ketchabaw & Nxumalo¹⁸ and Shanker¹⁹ identify a correlation between children’s outdoor play experiences during their early years with later academic performance. Others outline the relationship between outdoor play and speech, language and communication skills⁴ and the connection between outdoor play and the development of environmental stewardship.^{1,12,13} These findings suggest an urgent need to emphasize outdoor play in policies and competencies in early learning teacher preparation and in post-secondary programs.^{9,10,15,16,17} Curriculum frameworks and in turn government policies,²⁰ funding levels, regulatory structures, workforce

<https://www.child-encyclopedia.com/outdoor-play/according-experts/building-capacity-support-outdoor-play-early-childhood-education>

4 reasons for children to go outside:

1. Promoting their physical and mental wellbeing,
2. Learning to respect the outdoors
3. Engage with their broader community
4. Learning about the curriculum

To lift, integrate, and learn Indigenous knowledge of the Land and ways of knowing.

A young child with light hair, wearing a blue jacket, is crouched outdoors, focused on planting seeds into a black seed tray filled with soil. The background shows green foliage and plants, suggesting a garden or natural setting. The image has a soft, slightly desaturated tone.

“The land is the real teacher.

**Land
as first
teacher**

All we need as students is
mindfulness.”

Robin Wall Kimmerer

Activity: Empathy Map

How do you think educators connect with Land-based learning?

Activity 2

Educator Testimonies + Empathy Mapping

Goal: Understand emotional and professional shifts in educators engaged in Land-based learning.

Instructions:

- Participants use an **Empathy Map** to capture:
 - What educators *feel, think, say, and do* as a result of this practice.
- Discuss in small groups: What challenges and transformations are present?
- **Why it works as a tool:** It cultivates empathy and insight into how practice shapes educator identity, well-being, and values.

A work in progress

- [4 seasons of Indigenous learning](#)
- Speakers have included Richard VanCamp, Robin Wall Kimmerer, Christi Belcourt
- Debrief sessions for discussion, reflection, unpacking practice
- Sharing resources, readings, ideas
- Circulated newsletter as a part of a broader researcher-led effort (McGlynn-Stewart) to share practice over the years; exploring [seasonal pedagogy](#)
- In conjunction with creation of sustainability-minded centre at Mary's Place

What we've learned

- Considered language; words for life around us
- Where I am from; developing personal connections/relationships
- Community mapping

What we've learned

Reported:

- "Appreciation of the land and environment we are living on"
- "Respect for all living creatures"
- "An understanding of our Canadian history"
- "Indigenous perspectives"
- "What Land-based can look like; what it can include"
- "A little Anishnaabemowin"
- "Respect for our better than human relatives"
- "Ideas for the classroom"

Ongoing – more to come...

How does engaging in Land-based learning impact our teams, our colleagues, our sector?

1. Enhanced Learning & Engagement

- **Real-world connections**

Outdoor learning provides opportunities to connect classroom subjects to the natural world, making learning more relevant and meaningful.

- **Active learning**

Experiential learning outdoors fosters active participation and engagement, leading to deeper understanding and retention.

- **Increased focus and attention**

Studies show that students are often more focused and engaged when learning outdoors, leading to better academic outcomes down the line.

2. Fostering Personal and Social Growth

- **Development of social skills**

Outdoor activities encourage teamwork, communication, and cooperation, fostering essential social skills.

- **Increased confidence and self-esteem**

Experiential learning can build confidence and self-esteem as students explore their abilities and overcome challenges.

- **Enhanced well-being**

Exposure to nature and physical activity reduces stress, improves mood, and promotes overall well-being for both children and educators.

3. Enriched Teaching Practices

- **Diverse learning environments**

Outdoor learning offers a change of pace and a different learning environment, catering to diverse interests, backgrounds, preferences.

- **Increased creativity and innovation**

Outdoor spaces can inspire creative teaching methods and provide rich learning opportunities.

- **Improved student-teacher relationships**

Outdoor experiences can strengthen relationships between children and educators, fostering a more positive and supportive learning environment.

4. Benefits for the Workforce

- **Reduced burnout**

Outdoor learning can be a refreshing alternative to traditional classroom settings, helping teachers combat burnout and improve job satisfaction.

- **Professional development**

Outdoor education can offer valuable professional development opportunities for teachers, enhancing their skills and knowledge in areas like environmental education and experiential learning.

- **Community engagement**

Outdoor learning initiatives can connect schools with local communities, fostering collaboration and promoting environmental stewardship.

...More?