

Outdoor learning everyday!

Created by Children's Services Division, Early Learning
Training Specialist Team

Connections to How Does Learning Happen?

Opportunities to experience nature enhance children's sense of wonder and joy in the world around them, whether programs are located in large urban centres with small patches of green space, gardens, and trees or in vast fields and forests. A growing body of research suggests that connecting to the natural world contributes to children's mental, physical, emotional, and spiritual health and well-being. Providing daily opportunities to explore, care for, and interact with the natural world helps to strengthen these connections.

Table of Contents

Importance of outdoor learning	2
Benefits of outdoor learning	3
Importance of outdoor physical play	4
Natural loose parts	5
Natural playspaces	6
Ways to make a playspace natural	7
Indigenous outdoor education	8
Outdoor programming ideas	9
Professional resources	17
References	18



Why is outdoor learning important?

The benefits of outdoor play for children are endless. Research shows that children who engage in a minimum of one hour of active play each day have better academic scores, a stronger heart, stronger bones and muscles, improved self-esteem, and experience lower levels of stress (Public Health Agency of Canada, 2019). *How Does Learning Happen?* states that “children thrive in indoor and outdoor spaces that invite them to investigate, imagine, think, create, solve problems, and make meaning from their experiences – especially when the spaces contain interesting and complex open-ended materials that children can use in many ways” (pg. 20). Developing engaging outdoor environments can support children in creating meaningful play experiences that are beneficial to their overall development. Children’s development flourishes when they participate in energetic physical play within outdoor play spaces that provide reasonable levels of challenge and risk. Physical activity plays an important role in the health, well-being, and quality of life of all Canadians, and is particularly important for children and youth. Habits formed early can last a lifetime (Public Health Agency of Canada, 2019).

In the early years, children need time and space to explore unknown environments that allow them to engage in critical thinking to help them understand unfamiliar concepts. Outdoor environments allow children to explore animals and insects and investigate what they do in their natural habitats. It also allows children the opportunity to explore plants and trees to see how they grow. This is all part of understanding the scientific world around them. Outdoor play also promotes mathematical learning. Children can count rocks, sort leaves or identify numbers through a game of hopscotch. When playing outdoors, the possibilities for learning are endless!

Being creative and thinking outside of the box (or classroom in this case!) will help to create outdoor learning experiences all year long. Consider the children’s interests in the indoor environment and transfer them outside to help make the learning experiences more enticing—even when the weather is not warm and sunny.



Benefits of outdoor learning

1

Exercise: Children should be active for an hour every day, and going outside to play is one way to ensure that happens. While children certainly can exercise indoors, sending them outdoors - especially with something like a ball or a bike - encourages active play, which is the best exercise for children.

2

Executive function: These are the skills that help us plan, prioritize, troubleshoot, negotiate, and multitask; they are crucial for our success. Creativity falls in here as well as using our imagination to problem-solve. These are skills that must be learned and practiced and, to accomplish this, children need unstructured time. They need time to be alone and with other children, and to be allowed to make up their own games, figure things out and amuse themselves. Being outside gives them opportunities to practice these skills.

3

Risk-taking: Children need to take some risks. As educators, this makes us anxious; we want children to be safe. However if we keep them in bubbles and never let them take any risks, they will not know what they can do and they may not have the confidence and bravery to face life's inevitable risks.

4

Socialization: Children need to learn how to work together. They need to learn to make friends, how to share and cooperate, and how to treat other people. If they only interact in very structured settings, such as school or sports teams, they will not learn everything they need to know.

5

Appreciation of nature: So much of our world is changing and life can be very fast-paced. If a child grows up never walking in the woods, digging in the soil, seeing animals in their habitat, climbing a large hill or cliff, playing in a stream, or staring at a lake, they may never really understand what there is to be lost. The future of our planet depends on our children; as educators, we can guide them to appreciate the world around them.

6

Sunshine: We need sun exposure to make vitamin D, a vitamin that plays a crucial role in many body processes (from bone development to our immune system). Sun exposure also impacts healthy sleep and our mood. Our bodies work best when they get some sunshine every day. When the UV index is 3 or higher, wear protective clothing, a wide-brimmed hat, sunglasses, and sunscreen, even when it's cloudy. Follow the UV index readings each day to plan outdoor activities and seek shade between 11 a.m. and 3 p.m.

“

“Children are a laboratory for the senses with each sense activating other senses... As a result, the child's environment cannot be seen just as a context for learning or a passive setting for activities; it is an integral part of learning and helps define their identity”

Think, Feel, Act, pg. 12



The importance of outdoor physical play

The terms outdoor play and physical play are often interchanged, however, there is a difference between these two types of play. Outdoor play involves playing with materials or engaging in play while outdoors. It can be any type of play: sedentary, imaginative, social, cognitive, etc.

Physical play relates directly to the act of being physical. Being physical involves children learning how to use their large muscle groups to explore the different ways their bodies work. Physical play benefits our muscles as well as our cardiovascular system. It gets our blood flowing and our heart pumping.

As highlighted in *How Does Learning Happen?*, "through active play and physical exploration, children gain increasing levels of independence, learn to persevere and practice self-control, and develop a sense of physical, emotional, and intellectual mastery and competence." As educators, we must be offering children the time and tools to be physically active. Children are more likely to engage in physical play when they have access to developmentally appropriate physical play equipment. Also, when educators engage in physical play as co-learners, they are modeling positive ways to keep our bodies healthy for children.



Children are 10 times more active when they are outdoors rather than indoors in child care settings.

Tucker and Vanderloo, 2019

Developmentally appropriate physical play materials:

Infant and toddler:

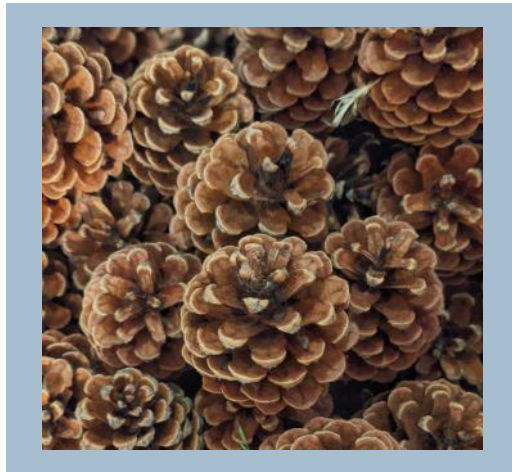
- Tunnels
- Ball pit
- Stepping stones
- Push/pull toys
- Balls
- Large soft blocks
- Shovels or scoops

Preschool:

- Balance pads/beams
- Tetherball
- Velcro mitt and balls
- Scoops and ball set
- Hula hoops
- Hockey sticks and ball
- Badminton rackets and birdie
- Parachute

Before and After School Programs:

- Balance beams
- Soccer ball
- Velcro mitt and balls
- Scoops and ball set
- Hula hoops or Skip-It
- Hockey sticks and ball
- Football
- Basketball
- Badminton rackets and birdie



Learning outside: Natural loose parts

Natural loose parts can be found all around us; they come from the earth and can change from season to season. Children love to get dirty and to create, providing them space and opportunity to do so creates many learning opportunities. Finding natural loose parts can be an experience all on its own. Educators can encourage children and families to gather items such as pinecones, leaves, rocks, and shells that can then be used in outdoor spaces. Once you have your collection started, adding things like water, earth/soil, sand, gravel, and mud can greatly enhance loose parts play outdoors. Having access to water will allow children to add new dimensions to the materials as well, so that they are able to carry out their ideas and wonderings.



Different types of natural loose parts:

- Rocks
- Pinecones
- Twigs and sticks
- Shells
- Flowers
- Leaves
- Acorns
- Corn and corn husks
- Citrus peels
- Fruit and vegetable seeds
- Dried beans
- Fresh herbs
- Spices such as nutmeg, cinnamon sticks, anise
- Wood chips and discs
- Moss
- Pumpkins and squash



Natural playspaces

Elements from nature:

Consists of elements and textures from the earth such as tree logs, tree stumps, boulders, plants, drainage paths, etc. instead of a traditional playground structure. Natural landscapes provide opportunities for children to play, explore, imagine, and be challenged by the natural elements. Natural playgrounds allow children to move freely around the environment, encouraging them to explore, run, jump, climb, crawl, feel, smell, and more.

Types of equipment:

Outdoor playspaces come in different shapes and sizes. Natural playgrounds will not have large plastic or steel play structures. Instead they include items such as tree slices or a log tunnel. Tree slices can be used to play games of hopscotch. Planters full of plants can be used for children to water, touch, and smell. Incorporating wood playhouses and stages allows for pretend and social play. Grass or natural play surfacing allows children to run, jump, and play games.

Benefits:

Natural playgrounds have shown to better stimulate children's imaginations, boost their energy levels, and increase the amount of time they want to spend in play. Children also learn to care for the environment. Engaging with nature allows children to learn how to care for and protect the environment and land.

Key components of a natural playspace:

- Natural materials and textures found on trees, rocks, sand, and other landscaping.
- Open space to roam and explore freely.
- Unstructured play where children create their own outcomes by following their own cues and interests.
- Walkways or bridges to practice balance.
- Planters or a garden for the children to tend.
- Elimination of time limits.
- Naturally shaded areas.



Ways to make your playground more natural



Incorporating nature in typical playgrounds can provide the same benefits for children as natural playspaces. Research has proven that children who engage in play are happier, healthier, more intelligent and curious, and reap a whole host of other benefits that improve both their physical and mental well-being.

SAND

Sand play has many benefits. It supports the development of motor skills, such as balance and coordination. Sand also provides tactile sensory input that builds fine-motor skills.

GRASS

Grassy or open areas allow children the space to move their bodies freely during play. The space allows them to use their imagination and thinking to create games and/or engage in social interactive play. It is also a great space to take a rest.

WATER

Water play benefits children's learning through the practice of math and science. Mathematical concepts are easily incorporated into water play, as well as scientific learning and thinking.

ROCKS

Rocks offer endless possibilities. They can be used for building, counting and art. Large rocks and boulders also allow for children to take risks and test their bodies through jumping and climbing.

GARDENS

Gardening provides children with the perfect combination of skills and tasks to address many stages of development. It incorporates gross and fine-motor learning. It can also support social interactions and is a great sensory experience.



TREES

Trees create natural shade but also have many other benefits. Birds and wildlife visit trees, which exposes children to natural habitats. Tree bark and leaves also create great sensory experiences.



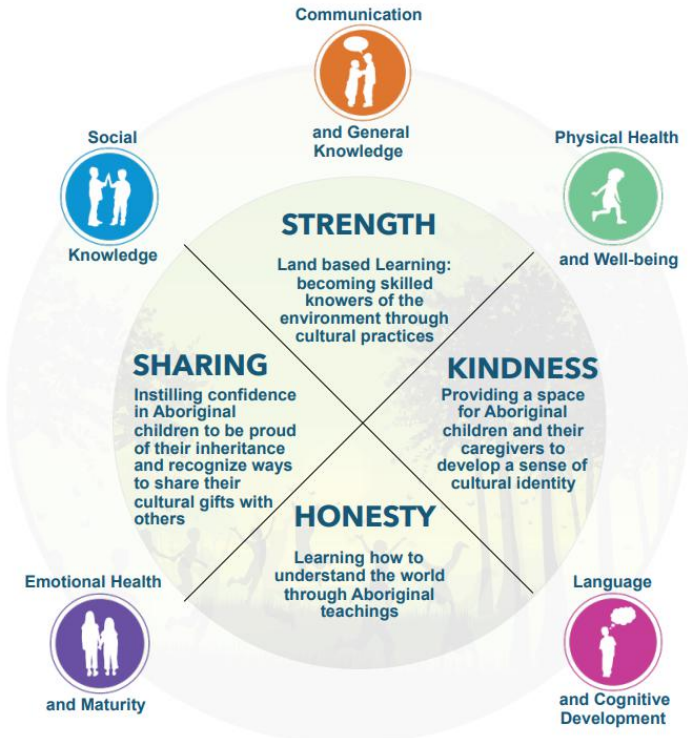


Indigenous outdoor education

Land-based learning is the process of regular interaction with the land and all that it provides naturally. The focus is to offer opportunities for children to interact with – and become skilled knowers of – their environment. This will help children to develop a relationship with mother earth and gain environmental knowledge and respect. This interaction enhances children’s mental, physical, emotional, and spiritual well-being by promoting a sense of connection and belonging.

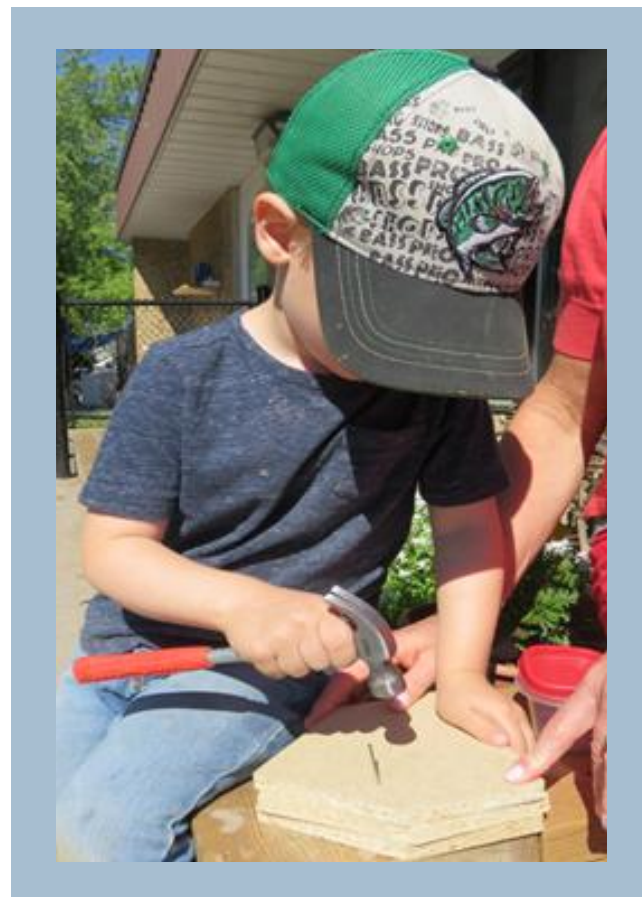
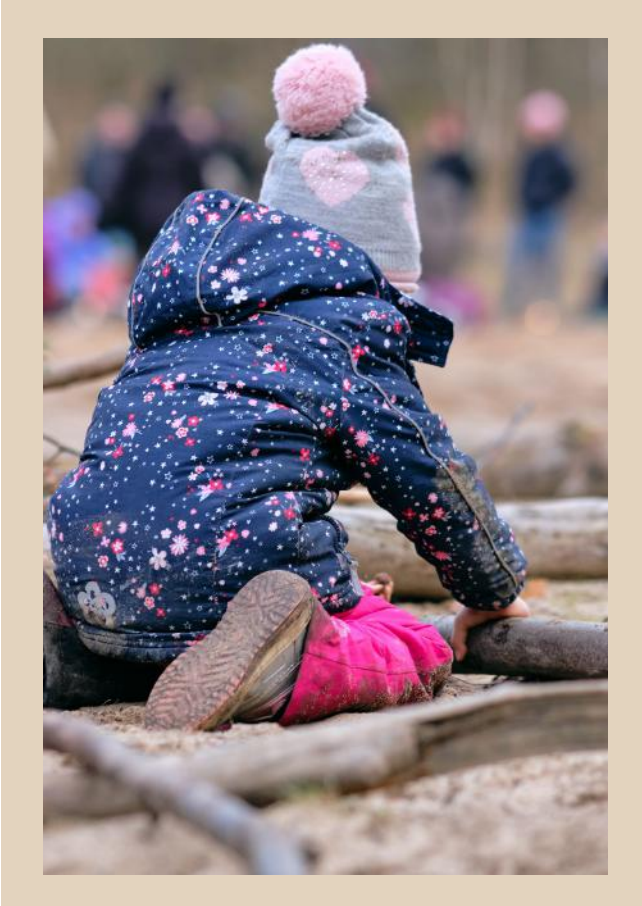
As educators, our role is to act as a guide for children as they explore nature; to share Indigenous teachings and stories about mother earth and the living organisms around us; and point out discoveries and make a connection to any natural objects (such as trees, stick, rocks, ants, etc.). Including Indigenous knowledge or ‘ways of living’ to encourage connections of the educator and child. Share Indigenous knowledge to encourage connections between the educator and child, and include community elders and knowledge keepers in the learning spaces when possible to make connections to streams, creeks, or land formations to build a relationship with the land.

These experiences offer indigenous children a sense of pride in their cultural inheritance and recognize ways to share that deep connection to their cultural identity in a natural way that may have been lost to their family members. This promotes an essential sense of belonging to community for all children.



Blocks and construction

Invitations to play are a meaningful way to engage children in exploring and learning about the world around them. Blocks and construction allow young children to problem-solve, demonstrate their creativity, develop fine and gross motor skills and spatial reasoning. Children are able to explore how pieces fit together. They can use their hand-eye coordination and learn to problem-solve using trial and error.



Music and movement



Music and movement play an important role in children's development and have many benefits. Music and movement allow children to release their energy and show off their creativity.

Movement can help improve balance and coordination, build on children's muscular strength, and can provide them a new and interesting way to express their emotions.

Music (clapping, singing, dancing, creating homemade instruments, etc.) allows children to process different pitches, teaches different musical patterns, builds on their language development, and allows children to connect to their environment and increase their attention and memory.



Cognitive and manipulative

Cognitive and manipulative materials allow children to think about the world around them, and build on their knowledge and problem-solving abilities. By providing cognitive and manipulative materials, children can apply their knowledge. This encourages children to process their thoughts. It is important to provide children with a platform to process information, make connections, and ask questions.



Dramatic play

Dramatic play encourages children to learn important social skills and allows children to explore their own thoughts and feelings. Children enjoy role-playing and it helps them grow, coordinate, and make plans with others. Dramatic play provides children an emotional outlet and supports educators to encourage and expand on children's ideas and ask open-ended questions.



Art and creative expression

Art and creative expression provide a new set of skills for self-expression and communication. Children gain useful skills through art, such as communication, problem-solving, social-emotional, and fine motor skills. Children learn to communicate visually. They learn to test possibilities and work through challenges. It is important for children to show their individual uniqueness and creativity, and feel confident in their accomplishments as they show their work.



Science and nature:

Science and nature are everywhere, which is why it is so important for children to explore! Science and nature help children develop their senses and overall awareness of their environment. As children engage in hands-on learning and tactile experiences, they learn to interact with their environment. This supports educators in identifying ways to inspire children to question their surroundings, engage in discussions, and interpret answers. Children are able to make connections with the world around them when educators and children collaborate in exploration and co-learning.



Sensory

Sensory play is important for early childhood development because it provides children with opportunities to actively use their senses of sight, touch, taste, smell, hearing, movement, and balance. It can support their language development, motor skills, and problem-solving. By bringing sensory play outdoors, it encourages children to engage with nature, and observe different environments full of colour, movement, textures, sounds, and smells.



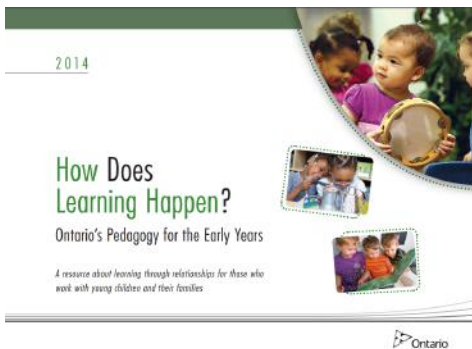
Language and literacy

Language and literacy support the children in your program to communicate, express, and understand feelings. It is important that the interactions between the children in your program are interesting, ongoing, and meaningful. As an educator, it is important to ask open-ended questions, gain insight, ask for feedback, and observe what the children are interested in. Language and literacy are crucial for early development because they bridge into adulthood so we can identify, understand, and interpret language in varying contexts.

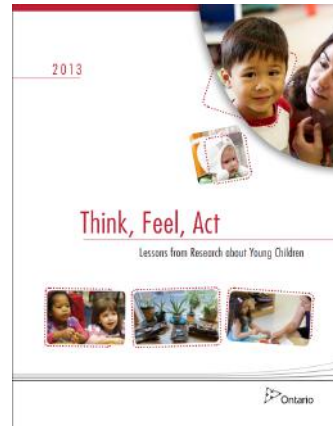


Check out these amazing resources to enhance your program!

If you are viewing this in PDF format, you can also access these documents by clicking on the title of the document.



How Does Learning Happen?: Ontario's Pedagogy for the Early Years



Think, Feel, Act: Lessons from Research about Young Children



Durham Region Operating Criteria - Playground Guidelines



How to use a QR code:

To use the QR codes above, open your camera on your phone and hold it up to the QR image you wish to view. The QR code will then generate a link for you to click on.

Public Health Agency of Canada. (2019). Physical Activity Tips for Children (5-11 years). Retrieved from Canada.ca.

Ontario Ministry of Education. (2014). How Does Learning Happen? Ontario's pedagogy for the early years: A resource about learning through relationships for those who work with young children and their families. Toronto: Queen's Printer.

Ontario Ministry of Education. (2013). Think, Feel, Act: Research from Lessons with Young Children. Toronto: Queen's Printer.

Tucker, T., Vanderloo, L., (2019). Children in childcare are not getting enough moderate to vigorous intensity physical activity. Western University. Retrieved from The Conversation.

The Regional Municipality of Durham. (2017). The Journey Together: Enhancing Durham Region Indigenous Early Years Learning

Harvard Medical School 2016, United States, accessed 25 May 2021
<<https://www.health.harvard.edu/blog/6-reasons-children-need-to-play-outside-2018052213880>>

Grounds for Play 2020, United States, accessed 2 June 2021,
<<https://groundsforplay.com/what-is-a-natural-playground>>

Playgrounds for the Planet 2015, United States, accessed 3 June 2021,
<<https://pdplay.com/benefits-of-natural-playgrounds/>>

Michigan State University 2017, United States, accessed 3 June 2021,
<https://www.canr.msu.edu/news/gardening_with_young_children_helps_their_development>