A Teacher's Guidebook

for bringing learning *outside*

THRIVE OUTSIDE

Table of Contents

Introduction

This Guidebook is designed to support educators through the stumbling blocks they might encounter when bringing outdoor learning into their practice for the first time. Common questions such as “What do I do about the weather?” and “How do I meet my curriculum outside?” are answered by experienced educators within the pages of this resource.

The sections of this Guidebook are linked in the Table of Contents for easy navigation. Start from the beginning or choose a section which jumps out to you! We hope this resource helps you connect children with nature wherever you are.

Let’s get more muddy boots outside!

Acknowledgements

The content of this Guidebook was created by Julie McLean and Chantal Larivière with contributions from Hannah Clarke and members of the Child and Nature Alliance core team. English translation by Nathalie Doyle.

About the Child and Nature Alliance of Canada

The Child and Nature Alliance of Canada (CNAC) is a national non-profit organization dedicated to fostering meaningful relationships between children and the natural world. Learn more about us at www.childnature.ca.

Nature Pedagogy Continuum

This continuum suggests four entry points for nature pedagogy. These stages allow for further engagement between the child, their environment and their learning. According to your pedagogical intention or scenario, you could choose one stage over another during your outdoor outings. They are all accessible, it is up to you to situate yourself in terms of your comfort level and explore the diverse possibilities with your students.

Substitution	Augmentation	Modification	Redefinition
Activities suggested by the adult are easily accomplishable outside, with little or no adaptation.	Activities suggested by the adult allow for interaction with the natural environment.	Activities suggested by the adult and by students are anchored in learning in the environment. The environment is used to make connections with diverse pedagogical opportunities.	The child is the master of their learning. Through free play, they observe, explore and ask themselves questions about their environment. They discover problems and initiate and elaborate their own projects, looking to realise those projects on their own or with classmates and/or pedagoges.
Outdoor Environment			
A little space in the playground or nearby. The playground. A green space near the school.			
Interactions			
The natural environment is not exploited to its full potential.	The natural environment is used to connect to knowledge and learning.	The natural environment is used as a pedagogical tool.	The natural environment to support an interdisciplinary process.

Pedagogy			
Expository Pedagogy Ex. Lecture	Demonstrative Pedagogy: learning happens by reproduction and repetition of knowledge and procedures. Ex. Controlled Inquiry	Interrogatory Pedagogy: Learning happens through research that seeks to answer questions posed by the learner with support of the adult. Ex. Guided Inquiry Place-based Pedagogy Emergent Curriculum	Discovery Pedagogy: Learning happens through research and creation. Ex. Free Inquiry Emergent Curriculum Play-based learning in an Inquiry-based learning culture Place-based Pedagogy
The Role of the Adult			
The adult holds knowledge and know-how. They transmit their knowledge.	The adult holds knowledge and know-how. They plan their activities and lessons using the environment.	The adult holds knowledge and know-how. Questioning is the main strategy used by adults. The questions vary according to the answers given by the learners. There is permanent feedback between the student and the adult.	The adult and the learner hold knowledge and know-how. Interventions are limited and their role is to create a pedagogical scenario and bring the learner to gain knowledge by trial and error.
The Role of the Student			
The student learns by listening to the lesson.	The student listens and follows instructions.	The learner gains new knowledge by discovering answers to their questions with the support of the adult.	The learner builds knowledge by engaging in an action-experience process, testing their theories in real time and validating or invalidating those hypotheses themself, or by debating them with other learners.
Examples of Activities			

Ex. Reading aloud, writing activities, discussion, oral presentations, relaxation, revising a lesson	Ex. Search for signs of spring, class in ascending order natural objects, spatial orientation	Ex. Observe, question oneself and note the evolution of the environment, conduct an inquiry on the quality of air in the neighbourhood	Ex. The student conducts their own project by connecting to their environment

Resources:

- The SAMR model: A reference for the pedagogical integration of ICT in the classroom (Sébastien Wart, 2013)
- Guide d'introduction: L'enseignement extérieur (Julie Moffet, Fondation Monique-Fitz-Back, 2019) (French only)
- Types of Student Inquiry (Trevor Mackenzie)

Other helpful links to get you started:

- Into Nature Teacher's Guide (Back to Nature Network)
- Ready...Set...Wonder! (Back to Nature Network)
- Dirty Teaching: A Beginner's Guide to Learning Outdoors (Juliet Robertson, 2014)
- Nature as a Classroom (David Suzuki Foundation)
- A Walking Curriculum: Evoking Wonder And Developing Sense of Place (Gillian Judson)
- Messy Math (Juliet Robertson)

5 Tips for a Successful Initial Outing

1. Plan an activity that you are familiar with and that you have already done indoors. You will be more comfortable leading this activity outdoors. For example, the buddy reading routine, group work in math or a nature-art project.

2. Make sure to check the weather for the day. Inform parents of your intention to spend a part of the day outside and provide a list of clothes the children should have with them. Children will likely feel more comfortable if they are dressed for the weather and the outing will be more pleasant.

3. Bring a First Aid Kit and establish a way to communicate with the school secretary. That way, if an unexpected situation arises, you will be better equipped to manage it. For example, a student who trips and is injured or a student that gets stung by a wasp.

4. The morning before the outing, make sure to go for a walk on the grounds that you will visit. This way, you can be sure that nothing has changed and you can better manage unexpected situations.

5. Take the time to speak with the children about safety rules and establish them. For example, choosing a gathering signal (such as a wolf howl) and establishing the limits of the area. It is always easier to run a successful activity if everyone's expectations are clear.

Pedagogical Documentation

Pedagogical documentation allows us to collect, in various forms (photos, videos, anecdotal notes, etc.), information about the students who are learning with us. After collecting this information, the next step is to analyze it in order to better understand what we have captured. This new information then allows us to get to know the students better and thus better meet their needs. The documentation collected can be used to keep records of student learning but also to communicate progress on a regular basis with parents and families.

The practice of pedagogical documentation is possible in an outdoor learning context and allows teachers and educators to keep track of student learning.

Here are some resources that will help you learn more about pedagogical documentation:

- Making Learning Visible Through Pedagogical Documentation (Dr. Carol Anne Wien, York University, 2013)
- Pedagogical documentation: Why? When? Who? What? Where? How ? (Diane Kashin, 2015)
- Qu'est-ce que la documentation pédagogique? (Centre Franco-Ontarien de ressources pédagogiques) (in French)
- Dossier sur la documentation pédagogique (Marie-Andrée Ouimet, MaoTechno) (in French)

Collecting and Organizing Pedagogical Documentation

There are many different ways to collect and organize our pedagogical documentation. The most important thing is to choose ways that are convenient to our situation and do not add to our already full workload.

How can I collect pedagogical documentation outdoors?

- Have a notebook that has a page for each student, take notes on post-its and place them on the respective student's page.
- Use a note-taking application, such as "Google keep" or "Microsoft Onenote", to take notes of all the information seen and heard during student interactions.
- Take photos or videos with a cellphone, a tablet or a camera to log and show student progress and successes.
- Use a dictaphone to record our conversations with students or conversations between students.
- Ask students to record their own photos, videos or sound clips.

  ****It is very important to always ask permission to the students before recording them. With the different recording options, students should have the opportunity to choose the one with which they are most comfortable. For example, if a student is not comfortable being filmed, maybe he is ok with his voice being recorded.****

Organizing collected pedagogical documentation

- Create a digital portfolio for each student. Invite students to participate in the creation of the portfolio. This will allow them to go back to see and become more conscious of all that they have learned. These portfolios will be useful to share information with parents and during report card season.
- Print photos, productions and excerpts of collected documentation to hang it up in your classroom. This allows them to visualize their learning and come back to it. This also makes the class learning visible to everyone who enters the classroom.

- Create documentation posters to tell learning stories. This consists of telling the story of how learning happened. For example, it can present the story of a child who discovers that snow is sticky. In the beginning, he notices that snow sticks to his mitten, then notices that the snow sticks to itself and can be molded into different shapes. He then decides to create a masterpiece with snowballs. Telling this story with photos or words can make up your documentation poster. These posters can be hung up in your class or presented virtually.

- It is also possible to collect documentation on a specific theme, project or question. If this is the case, you can include the ideas, explorations, hypothesis and experimentations in a table. By displaying this documentation every day or every week, the children (and adults) can see the progress of their thinking on the same subject.

  If we wish to experience this activity outdoors, the documentation could simply be attached on a string with clothespins. That way, it is easy to bring out the string and display it when desired.

- There exists many platforms that enable sharing pedagogical documentation. Whether we talk about Storypark, SeeSaw, or other similar platforms, they are all designed to facilitate communication of learning between families, students and educators.

  ****It is very important to get the approval of parents/guardians of your students before publishing any form of pedagogical documentation.****

Outdoor Journals

The outdoor journal is an excellent tool to keep track of student learning. It consists of a notebook, bought or made by students, that would allow them to take notes about their discoveries. This notebook is dedicated only to outdoor play so we have to expect that it will be quite different from the ones used in class.

By observing student journals, it will be possible to recognize a lot of evidence of learning, which will be useful for adults who want to follow student progress. Here are some examples of outdoor journals and the ways they can be used:

To write words, sentences or poems about our discoveries

To create works of art

To calculate "bills" in a "store"


To create building plans and take note of measurements


To make treasure maps or take note of a route

Helpful Weather Tips for Outdoor Play and Learning

"There's no such thing as bad weather!" is a firmly believed philosophy in the Forest and Nature School approach. Play happens in all types of weather! So much learning and growth emerges from interacting with various weather patterns and temperatures. Children and educators/parents/caregiver begin to normalize checking in with each other, listening to their hearts, bodies, and minds, and using language to help them name what they are feeling. Experiencing different weather conditions can strengthen our love, care, and connection to the land and the environment.

With that, there is always the possibility of inclement or extreme weather - it is something you will most likely encounter when taking learning outdoors. It is important to establish with your team some inclement/extreme weather policies and procedures - whether that be emergency meeting zones, designated shelter spaces, cancellations of programs (extreme wind/cold/heat), and other safety protocols depending on your region.

Something you can do, if it is available to you, is to download a weather tracking application. Environment Canada and The Weather Network are great applications to monitor weather/temperature and receive warnings/alerts to assist your team in making safe, smart and informed choices when it comes to program decisions.

Here are some possible strategies to help you navigate certain weather conditions in outdoor play:

Extreme Heat
PREVENTION of heat-related injuries/illnesses is key! (Extreme heat may be classified as 30 C.) ● STAY HYDRATED! Ensure access to water sources (jugs, dromedary bags, extra water bottles, watering cans and spray bottles) for drinking and for cooling skin/washing hands. ● Establish a habit/routine of drinking water all together, and individually. REFILL, REFILL, REFILL water bottles! Make sure there is a main source of water to use as a refill site. ● WEAR HATS! Everyone. Educator team, children, families. ● Continually monitor the children for signs and symptoms of dehydration, heat exhaustion, heat-related illnesses, etc. ● Seek space with shade and slow down! No need to be moving fast all day long! Rest is important. If shade is not available to you, try not to go out during the heat of the day. Or, set up a tarp for shade - here's how. ● See FAQ resource ("Weather" section) for additional information.
Wind
● Monitor the wind speeds and direction closely (via a weather radar app, if available). ● Complete a Daily Site Risk Assessment (p. 53) wherein you inspect the stability of trees and branches near by your shelter space. ● If there are extreme winds, stay close to/inside a shelter space (use your discretion and judgement). ● If the winds are strong, but minor, seek out play spaces that are mostly clear from trees or heavy branches, i.e. grassy fields with no overhanging branches or objects that could potentially injure someone. ● In the event of a tornado watch or warning, deliberate amongst your team and create a policy wherein you have an emergency plan. Perhaps that includes establishing a designated emergency meeting spot(s), a secure shelter, and a protocol for action, wherein you may have to contact families and inform them of updates.

Rain
● Be prepared with extra gear (socks, mittens, boots, etc.). ● Bring a handful of single-use bags. These are helpful as protective barriers in rubber boots to keep socks dry. ● Tarps are handy. They serve as great protection from the rain! (Video: How to set up a tarp)
Thunderstorms
● Ensure you have a shelter for protection in the event of lightning and/or heavy wind/rain storms. ● Stock that shelter space with things to do inside (arts, crafts, books, puzzles, blocks, etc.) so you can wait out the storm until it is safe to go outside again.
Extreme Cold
PREVENTION of cold-related injuries/illnesses is key! (Extreme cold may be classified as -25 C). MAINTAIN WARMTH: ● Layers of clothing that cover the skin (you want to limit skin exposure). Materials to wear that are best for keeping warm include wool, synthetic, and fleece. ● Monitor exposed skin, constantly assess the children and watch for early signs of frostbite, hypothermia, cold-related illnesses, etc. ● Bring EXTRA gear with you (mittens, socks, neck warmers, hats, etc.) ● Hand warmers and feet warmers are excellent for instant warmth relief! ● Stay and play close to a shelter area (for warming breaks). ● See FAQ resource ("Weather" section) for additional information.

What to Wear for Outdoor Teaching and Learning

Warm Weather

- Sun Hat (for protection and prevention of heat-related illnesses)
- Sunscreen, SPF 30 or above
- Loose fitting long sleeve shirt (for prevention of ticks) or T-shirt
- Long pants (loose fitting and light, to keep cool)
- Socks (wool/synthetic are breathable)
- Running/Hiking shoes

HELPFUL TIPS!

- TUCK IN all clothing (for tick prevention)
- In your kit/when out on the land, pack bug repellent and sunscreen
- Pack extra clean hats and socks (in case someone needs dry ones)
- Bring spray bottles full of water to mist/cool down children/yourself
- Bring a water source for refills and cool downs

Cold Weather

- Warm hat
- Neck warmer/short scarf (not long scarves, as they get tangled and inhibit play)
- Upper Body
    - Base layer (this layer is in direct contact with your skin, flat-seamed or seamless garments are most comfortable. Make sure it is a “wick”-away material, one that helps moisture evaporate, i.e., synthetic or wool materials)
    - Mid layer (fleece to trap in warm air without adding bulk)

    - Outer shell, winter coat (water resistant)
- Mittens or gloves (mittens tend to keep hands warmer)
- Lower Body
    - Base layer (long underwear, fleece pants)
    - Mid layer (light pPnt, depending on temperature)
    - Outer shell, insulated snow pants
- Socks, i.e., wool/synthetic socks if that is available to you (provide extra socks as well!)
- Winter boots (helpful to bring an extra pair of boots too)

HELPFUL TIPS!

- Hand warmers and feet warmers work well as instant warmth and relief!
- For educators, pack the following extra gear when in your kit/when out on a hike:
    - Socks
    - Mittens
    - 2 or 3 pairs of winter boots
    - Bring a handful of single-use plastic bags (grocery store bags). These can be used to prevent further wetness, as they act as a protective layer in rubber boots/winter boots against further seepage. They can keep the new dry socks dry!

Wet Weather

- Hat (depending on temperature, either a sun hat or winter hat)
- Upper Body
    - Base layer (need is depending on season and temperature. If cold, choose thick base, if warm choose thinner. This layer is in direct contact with your skin, flat-seamed or seamless garments are most comfortable. Synthetic or wool materials “wick” best.)

    - Mid layer (Sweater or long sleeve shirt)
    - Outer shell, rain jacket (waterproof or water resistant)
- Mittens (if cold! As mittens soak up water, they tend to get cold quickly, so it may be best not to wear any.)
- Lower Body
    - Base layer (depending on season and temperature. If cold, long underwear or fleece. If warm, light/loose fitting pants.)
    - Outer shell rain/splash pants (waterproof or water resistant)
- Socks, i.e., wool/synthetic socks if that is available to you (pack extra pairs of socks too)
- Rubber/Rain Boots (they keep feet dry and warm as opposed to winter boots)

HELPFUL TIPS!

- For educators, pack the following extra gear in your kit/when out on a hike:
    - Socks
    - Mittens
    - 2 or 3 pairs of rubber boots
    - Bring a handful of single-use plastic bags (grocery store bags). These can be used to prevent further wetness, as they act as a protective layer in rubber boots/winter boots against further seepage. They can keep the new dry socks dry!

Literacy Activities Outdoors

Preschool (Junior and Senior Kindergarten)

Read a book to students outside

Go on a word hunt: look for all the words outside that start with the letter A, letter B etc.
For example: B for branch or L for leaf

Create (with the children) a list of vocabulary containing everything we see around us.

Go on a letter/word hunt by hiding letters/words outside and asking students to find them

Create or bring marionnettes or stuffed animals outside and ask students to invent/tell stories with those objects.

Go on a literacy hike by photocopying the pages of a book and placing them outside. The students will move around to find the pages. You can run the same activity with images and have the students invent a story.

Play guessing games! Students can hide an object in a bag and the others have to guess what that object is while asking questions

Trace letters in the snow, in mud, in the sand or in other natural material.

Primary (Grades 1, 2 and 3)

Read a nature-themed book with students outside. From this story, initiate an activity in the playground.

Take advantage of the inspirational power of nature to read/write poetry.
Participate in collective projects like the #PhotoPoesie project on Twitter.

Play Bingo in nature by asking students to find natural objects and living things represented by the words written on the Bingo sheet.

Create (with the children) a vocabulary list of everything you see around you. Use those words for writing workshops or word study.

Invent stories with the help of images found in the playground or forested area near the school or from images created by students.

Buddy reading

Read to help us better understand our discoveries (informative books on insects, birds, trees etc.)

Play guessing games like "I spy with my little eye, something that is red, something rough etc..." This can be played with a buddy or in a larger group, sitting or while walking.

Invent stories and present them to our friends.

Take our notebooks and go work outside.

Organize activities or games for younger students and share those activities with them.

Create a Nature Journal with students and use it to log information about the natural environment around us.

Take advantage of the playground to share knowledge, discuss in large groups, for presentations, for mini lessons, etc.

Go on an information hunt in the playground.

Middle School (Grades 4, 5 and 6)

Take our notebooks and go work outside.

Take advantage of the inspirational power of nature to read/write poetry.
Participate in collective projects like the #PhotoPoesie project on Twitter.

Go outside to read a nature-themed book to the students. Use this book to initiate an activity in the playground. For example, "Shi-Shi Etko" by Nicola I. Campbell, to speak about Indigenous education and sense of belonging.

Read informative texts to help students better understand their discoveries (informative books on insects, birds, trees etc.)

Find situations in the schoolyard that allow you to write mathematical problems.

Go on an information hunt in the school playground.

Go on thematic walks in the playground or in the neighbourhood. (For example, textures walks to find descriptive words, shape walks, color walks etc.)

Organize games or activities for other students, write out the planning and invitation emails and present the activity to a target group.

Write stories or math problems for younger students of the school.

Do skits or prepare oral presentations outside.

Take advantage of the schoolyard to share knowledge, discuss in a larger group, do oral presentations and do mini-lessons, etc.

Numeracy Activities Outdoors

How can we take math to the playground or to our school neighbourhood? How can we teach mathematical concepts as outlined in the curriculum? Have you already observed the shape of a sunflower, the structure of a snowflake or the leaves of a fern? On top of its beauty, we can also observe the Fibonacci sequence in the sunflower. In the snowflake, we can observe hexagonal symmetry and in the fern leaf we can observe fractal geometry. In this section, we attempt to briefly present the possibilities of activities you can conduct with your students to experience math activities outside of your classroom.

Preschool (Junior and Senior Kindergarten)

Ask students to build their own scale. Afterwards, invite them to weigh and compare the mass of different elements in nature.

Measure and compare different masses using non-conventional units of measure in the context of learning through play and inquiry-based learning.

Write numbers or represent a quantity with natural loose parts to establish relationships between numbers.

Go on a number hunt. Invite students to hunt for numbers in the neighbourhood/schoolyard.

Identify, explore, describe, compare and create patterns using natural loose parts.

Primary (Grades 1, 2 and 3)

Compose and decompose natural numbers from 0 to 50, using natural objects and using different containers.

Build various structures with natural loose parts and identify the solid and flat shapes they contain.

Gather grains/seeds found in nature and compile them in a data table. Process, analyze and use them to formulate persuasive arguments and make educated decisions in various contexts of everyday life.

Use natural loose parts to measure the area of a surface.

Use ten-frames to represent and solve problems such as sharing equal parts between 2 and 4 people.

Observe snowflakes to recognize and describe patterns. Invite students to find other patterns in nature and then reproduce them with natural loose parts.

Lay out containers with different capacities for students and invite them to estimate, measure and compare their capacities. Ask them to explain the effect of overfilling or underfilling containers.

Invite students to build paper airplanes. Throw the airplanes and measure the distances travelled using conventional and non-conventional units of measurement (ex. the length of a foot). Suggest materials or weather conditions that would cause variation in the paper plane's movement (for ex. different thickness of paper, a windy day, etc.).

Observe symmetry in nature and invite students to create them with natural loose parts.

Ask students to draw a treasure hunt map. Then invite them to read the map, situate themselves on it, and find the treasures. When they have found the treasures, ask the students to describe their movements from one spot to another.

Junior (Grades 4, 5 and 6)

Work on measurements by using trees in your playground or neighbourhood. Invite students to measure their circumference, their height, the distance from one tree to another, etc. If you have a tree stump, you can calculate the age of the tree by counting the tree rings.

Ask students to draw a map to use for a treasu hunt and to describe hints using angles. Ther invite students to read, situate themselves on t map, and find the treasures. When they have found the treasures, ask them to describe the movements from one spot to another.

Build a sundial. Students can describe the movement of shadows in time, calculate angles, visualize time passing, etc.

Observe symmetry in nature: bilateral symmetry (by 2), pentagonal symmetry (by 5), hexagonal symmetry (by 6), cylindrical symmetry and fractal symmetry. Afterwards, invite students to establish symmetry by creating a mandala.

Estimate the length of a street or a path and estimate the time it will take to walk it at a normal pace. Take note of these variables and test out the walk while recording the time on a stopwatch and by measuring the return trip with a pedometer or by counting steps.

Take the temperature at different spots at different times during the day, then compare and compile the data in order to graph it.

Build structures and observe the various types of triangles using the measurements of the angles or given sides.

Some more concrete examples if you want to go even further...

- The Tukey Paw Project (Grades 4 and 5)
- Geocaching (Grade 3) (in French)
- Le projet poubelle (Grade 2) (in French)
- The School Carnival (Grades 1, 2 and 3) (in French)

Cultivating Wonder in your Schoolyard!

Rain, water, sand, mud...

Water and its properties...

Snow and its properties...

Habitats and traces of animals...

Insects, birds and other animals...

Exploring the soil...

Exploring the clouds...

Some resources containing ideas of activities you can set up in a "normal" schoolyard:

- La nature et moi (Fondation Monique-Fitz-Back) (in French)
- Mission: Explore Outside the Classroom! (Outdoor Classroom Day, 2017)
- La nature au coeur de l'éducation (in French)
- Step Outside (Learning for a Sustainable Future)
- Banque d'activités collaboratives (Fondation Monique-Fitz-Back) (in French)
- Walking Curriculum (Gillian Judson)
- Creative Star Learning UK (Juliet Robertson)
- Video: Outdoor Play and Learning in a Schoolyard (Evergreen Canada)

The Value of Risky Play

A list of resources to help you better understand and articulate the value of risk-taking in play:

- Position Statement on Active Outdoor Play (Collective)
- Topic Commentary: Why Outdoor Play? (Mariana Brussoni, PhD, 2019)
- Outdoor Risky Play (Ellen Beate Hansen Sandseter, PhD, Rasmus Kleppe, PhD, 2019)
- Unstructured outdoor play and risky play (Parachute, 2020)
- Il est bon de laisser les enfants jouer : l'école en forêt et en nature, le jeu risqué et l'éducation préscolaire (Marlene Power, 2016) (in French)
- À vos marques, prêts, jouez! (Isabelle Paré, 2019) (in French)

For further information, check out: Risk-Benefit Assessment for Outdoor Play: A Canadian Toolkit

How to Pitch Outdoor Play and Learning in Schools

Here is how to make your case for outdoor play and learning in schools. To see this in presentation format, click here.

Why Outdoor Play and Learning?

- Overwhelmingly research has demonstrated the benefits of nature programming and nature involvement in the lives of young children.

  Benefits include:
  - Improved wellbeing, emotional regulation, interpersonal skills
  - Reduced stress and increased development of protective factors associated with resilience (1)
  - Greater developmental growth and personal initiative (2)
  - Overall signs of increased happiness, better physical health outcomes, and greater creativity (3)

  There is a growing body of research which indicates that many Canadian children do not experience healthy levels of physical activity, sleep, and screen time (4). This in turn has contributed to a growing awareness of the role and importance of nature and forest experiences across our Canadian education sector.

- Being outdoors is safer during the COVID-19 pandemic.
  - In response to the ongoing COVID-19 pandemic, health authorities across the country and around the world are recommending outdoor spaces as the safest place for social interaction (5).
  - This is primarily due to the natural ventilation provided by air currents which rapidly dilute virus droplets while also providing more space to maintain proper social distancing protocols (6).
  - In addition, physical activity - a cornerstone of active outdoor play - is a key factor in the prevention of any virus, including COVID-19 (7).

- There is also evidence that Vitamin D - gained from exposure to sunlight - can mitigate the symptoms of COVID-19 (8).
- In a time of increased mental health issues among children, access to the outdoors can help mitigate some of the negative effects of stress and anxiety (9).

What is Outdoor Play and Learning?

- Outdoor play and learning is child-led, educator supported, unstructured play on and with the Land.

- What is Play?
  - Play is what children and youth do when they follow their own instincts, ideas and interests, in their own way, and for their own reasons (5).
  - Play is:
    - **Freely chosen** (a child chooses when, if and how to play)
    - **Intrinsically motivated** (a child plays because they are motivated internally to do so)
    - **Personally-directed** (a child individually and/or collectively directs their own play)
  - Outdoor play takes place in a very broad continuum of spaces that include urban, rural, suburban, and wilderness settings (Outdoor Play Canada Glossary of Terms, 2017).

- The Play-Based Learning Continuum: https://www.playlearninglab.ca/types-of-play-based-learning

- Free play can look like…



Who is Involved?

- Children
    - Play, learn and experience joy and wonder
- Educators
    - Trust that the land will provide provocations and elicit learning opportunities
    - Build trust with parents
    - Communicate the learning and health value of outdoor play
    - Communicate the value of appropriate risk taking
    - Communicate risk-benefit procedures as a way of building trust
- Parents
    - Ensure children are properly equipped with clothing that makes outdoor play comfortable and enjoyable
    - Build trust with children so parents can feel comfortable with children leading their own play
- Principals and Administrators
    - Develop trust with the educators they support
    - Ensure educators are supported and receive proper training on outdoor play and learning
    - Are aware of challenges and try to resource educators
    - Are able to communicate the value of outdoor play and champion it
- The Land
    - Takes care of us and offers rich learning opportunities

The Role of the Educator

- Observe
- Ask questions
- Narrate
- Document
- Make curriculum connections
- Engage in responsive and emergent planning
- Offer tools and resources

- Navigate risk

Where Does it Happen?

- Anywhere and everywhere!
- Schoolyard
- Sidewalk or parking lot
- Tiny patch of grass

When Does it Happen?

- Anytime and in all weather!
- Spring
- Summer
- Fall
- Even in winter? Yes!

How to Get Started

- Go outside and let kids play!
- Refer to Thrive Outside resources (Learn more about risky play, how to make curriculum connections and more: www.childnature.ca/thriveoutside)
- Take a professional learning course (The Child and Nature Alliance of Canada offers a Forest and Nature School Practitioners Course: www.childnature.ca/forest-school-canada)

References:

1. Chawla, Louise, Kelly Keena, Illène Pevec, and Emily Stanley. "Green schoolyards as havens from stress and resources for resilience in childhood and adolescence." Health & place 28 (2014): 1-13. Quoted in Ernst, Julie, and Firdevs Burcak. "Young Children's

Contributions to Sustainability: The Influence of Nature Play on Curiosity, Executive Function Skills, Creative Thinking, and Resilience." Sustainability 11, no. 15 (2019): 1-22.

2. Ernst, Julie, and Firdevs Burcak. "Young Children's Contributions to Sustainability: The Influence of Nature Play on Curiosity, Executive Function Skills, Creative Thinking, and Resilience." Sustainability 11, no. 15 (2019): 1-22.

3. Child & Nature Network. "Connecting with nature to care for ourselves and the earth." Nature for All (2018): 1-32.

4. Nature Canada. "Screen time vs. green time: the health impacts of too much screen time." (2019): 1-14; & ParticipACTION. "Canadian kids need to move more to boost their brain health: The participACTION report card on physical activity for children and youth." (2018): 1-27.

5. SickKids, "COVID-19: Guidance for School Reopening," SickKids.ca, July 29, 2020, https://www.sickkids.ca/PDFs/About-SickKids/81407-COVID19-Recommendations-for-School-Reopening-SickKids.pdf.

6. Keith Neal, "Expert Comment on Risk of Transmission while outside and vitamin D," Science Media Centre, May 14, 2020, https://www.sciencemediacentre.org/expert-comment-on-risk-of-transmission-while-outside-and-vitamin-d/

7. Simpson, R., & Katsanis, E. (in press). (2020). The immunological case for staying active during the COVID-19 pandemic. Brain, Behavior, and Immunity. https://doi.org/10.1016/j.bbi.2020.04.04

8. Children's Mental Health Ontario. "Covid-19 Mental Health Impacts" May 6, 2020, https://cmho.org/covid-19-mental-health-impacts/;

9. Lovell, R., and J. Roe. "Physical and mental health benefits of participation in forest school." Countryside Recreation 17, no. 1 (2009): 20-23.

Additional resources to help you article the benefits of outdoor play and learning:

- The Benefits of Going Outside (Jessie Thuswaldner, Let's Talk Science, 2019)
- Reconnecting Children Through Outdoor Education (Council of Outdoor Educators of Ontario, 2017)
- Turning Education Inside Out (Jay Walljasper, Children & Nature Network, 2020)
- Une vaste étude confirme les bénéfices considérables de l'apprentissage en plein air sur la réussite éducative (Julie Moffet, 2017) (in French)
- L'apprentissage en plein air dans la vie de tous les jours (Maxime Pigeon) (in French)
- Ce que la nature peut enseigner à nos enfants! (Roxanne Coupal) (in French)
- Le jeu libre à l'extérieur comme élément indispensable au développement des jeunes (Québec en forme, 2012) (in French)

The Importance of Routines, Rituals and Traditions

Making the jump from classroom teaching to teaching outdoors is a change in routine for students and could cause them to lose their bearings. This can result in feelings of frustration and loss of control with our group of students. Developing rituals and having a few routines related to time spent outdoors can help to create (a sometimes invisible) structure that allows students to resituate themselves. Here are a few examples of routines and rituals that we like to use during our outdoor outings.

Routines:

- ❏ Make sure we go to the washroom and wash our hands before heading outside.
- ❏ Make sure to grab our snacks, water bottles, nature journals and any other important objects.
- ❏ Depending on the age of students, sing a song to make sure that they all have the necessary clothing for the outing. For older students, take a few minutes to do a visual check of their clothing.
- ❏ Check for essential equipment with the help of older students.
- ❏ Before leaving, ask students to line up or sit down while you count them.
- ❏ Take the time to remind students of the various rules and instructions for the outing.
- ❏ Remind students that they have their snack with them and can eat when they are hungry. It is not necessary to organize a snack time where everyone eats together.
- ❏ Before returning to class, ask students to line up or sit down while you count them.

Rituals:

- ❏ Help a friend put their snack in the hood of their coat. That way, they don't have to hold it. Usually, this ritual also guarantees some laughs.
- ❏ Always meet at the same spot outside, take the time to say hello and start off the day on the right foot.
- ❏ Start sessions with the same types of activities (read/tell a story, solos or other).
- ❏ Take the time to decide, as a group, what activities will be held during the session.
- ❏ Finish the session by presenting favourite moments and sharing in gratitude.
- ❏ Finish the session by letting out a wolf cry in unison or by saying "Thank you, forest" or "Thank you, Earth".

Traditions:

- ❏ Take the time at the beginning of the year and the start of each season to ask the students which projects they would like to work on.
- ❏ Participate in the various events organized for outdoor classes.
- ❏ Organize a schoolyard cleanup day every spring.
- ❏ Collect maple syrup in the spring.
- ❏ Meet with Indigenous Elders to further develop our understanding of our environment.
- ❏ Let students organize activities for the whole school (school carnival, Earth Day, days without lights, etc.)

For further information: The Importance of Rituals and Traditions in Early Learning: Now More Than Ever! (Diane Kashin and Nicole Pierce)

Working With Challenging Behaviours: Setting Up For Success

Step 1: Anticipate

- Visit the space
- Think of your group of children. What are they going to want to do (that is worrisome to you)?
    - Hint: what are they going to want to climb/throw/swing?
- Where are they going to want to run?

Step 2: Think Through The Boundaries

- Are these obvious physical boundaries or will you need to set visual reminders?
    - Strategies: look for treelines, fences, creeks, sidewalks
    - If none of these exist, consider using traffic pylons, rope, coloured tape.
    - Try walking the boundary line with your group. Have the children hit the boundary line with a stick!
    - Hang a brightly coloured backpack (could be your first aid backpack!) from a visible place (e.g. from a tree). Ensure that the children know they must be able to see the backpack at all times. This may require regular checking-in with your group: “Can you see the backpack?” If not - “ok, please move closer so you can see it”.

Step 3: Empowering

- Talk to your group of children about all the things they CAN do, instead of fixating on rules and what they CANNOT do.
- E.g. “You wanna run? You’re allowed to run! Please stop at the X”. “You wanna climb? You’re allowed to climb! Please get an adult first if you’d like to climb something”. “You wanna throw rocks? I know it sounds so fun to do that. We can’t throw them but we CAN stack them, paint them, build with them, etc.”.

Step 4: Dynamic Risk Assessment

- When you see or feel something escalating, try to catch it early. Bring the calm. Don't shout. Move closer. Speak in a calm voice. Think - what is the need that is not being met? Is it that they want to be heard? Is it that they want to be seen? Try to respond to that need.
- Get on the same team. What emotion is there? "I can see you're mad. I understand."
- Read the energy and mood of the group. Before something reaches a boiling point, try to adapt your plan (e.g. change location).
    - Need to expel energy? "Let's start a running game".
    - Need to bring energy down? "Let's bring out clay/beads/a story".
- Try to notice and understand the group's needs - emotional and physical. Are they hungry/thirsty? What is the need behind the behaviour?

RUNNERS

Have a protocol in place in the case that a child runs away (e.g. someone being proximal to the runner at all times). If a child does manage to slip away/run away - notify your people (administrator, colleague, etc). One person stays with the group and determines if they are safe to stay put or if they need to return to school/homebase.

4 Strategies for Preventing Running

1. Never work alone
2. Have a plan
3. Have a stopping mechanism (e.g. wolf howl)
4. Once you know you have a runner, get to know their triggers. Stay close to this child.

IF A CHILD IS NOT LISTENING

- This is relationship dependent - how well do you know them? Does someone know them better?
- Stay with them.
- Try to de-escalate.
- Stay calm - don't get into a power struggle.

- Be on their side - repeat “I hear you. I see you’re upset AND I need you to come down”.
- This will take time and space. Be prepared to stay awhile.
- Make sure your team members/colleagues are aware of what’s going on.
- Be prepared to call for backup. Remove yourself and call in someone else who has a better rapport with the child.
- Remove the audience. Move the children away from the ‘scene’.
- There may be a point where you need to intervene - know your organizations’/school boards’ policies on interventions.

Here are some possible risky play scenarios where you may encounter challenging behaviours…

This list is not exhaustive. Of course, there are a plethora of scenarios where challenging behaviours could happen!

TREE CLIMBING

As an educator I am constantly shifting and learning about my boundaries and “trusting my gut” when it comes to risky play. I recognize now that risk-taking in play leads to learning and honouring a child’s own interests, self-regulation and motivation. It helps to develop their physical and cognitive abilities, and increases self-awareness. The value shows up in so many ways.

Tree climbing will always make my heart skip a beat, and my gut will fill with butterflies. That feels fine to me when supporting emergent risky play. Those markers are important when we collaborate and consult with children to make safe and smart decisions. Including the child in assessing risk is so valuable for them! I have learned, “When in doubt, talk it out” - be it with the child, or the team of educators.

Here is a possible dialogue you could experience when tree climbing…

Child: WHOA! Look at that tree! I want to climb!

Grown-up: I hear that you want to climb...and I want to say yes! That would be so fun! Let's go check it out together, and we can make a plan?

Child: YEAH!

Grown-up: What is our first step?

Child: Ask an adult, then check the tree to make sure it is safe?

Grown-up: M-hmm, what do you think of that branch?

Child pushes down on the branch and it snaps

Child: OH! Maybe that one is not that strong!

Grown-up: Shall we test the other side for size and strength?

Child: YES!

Grown-up: What are some things we can do to make sure we climb safely?

(*There is so much to consider here, the weather - is the tree wet? Slippery? Are they wearing winter boots? Are there rocks underneath...dynamically co-assess the risks in the moment with the child. Talk it through*).

Grown-up: How are you feeling about your plan for climbing? (*after confirming that it feels strong, with lots of spots for foot/hand holds, and having discussed that they will only climb twice their height, and that they will talk with the grown-up who is there to help and guide them*).

Child: Good! I am going to start here, and move up along that side where that hole is.

Grown-up: (*Continue checking in*). Are you feeling safe? Comfortable? What can you see from up there? I'm here if you need me, okay?

Child: Wow! I feel so strong! I can see a caterpillar eating a leaf right here! I'm looking right at it!

> *Also check in on how YOU are feeling. Listen to that feeling. Ultimately, if you are feeling like something is not safe, find a way to make it safe. It could be asking the child to come down, and that is totally okay. Trust that intention. Perhaps the child starts climbing a little too high for your comfort zone and risk tolerance…*

Grown-up: I **notice** that you are getting higher than twice your body height (*a gauge sometimes used for allowing climbing to certain heights*) and **I am feeling** nervous about your plan to get down.

Child: But I want to keep climbing, you said I could climb this tree! This isn't fair!

Grown-up: I hear you. I can see you may be frustrated. You are so strong, and capable. And, for me, this isn't feeling safe anymore. AND I need you to start coming back down.

Child: Hmpf. (*Slowly comes down…)*

Grown-up: I saw another tree on the other side of the yard, can we go check that one out together? (*Continually check in, and gauge the feelings/body language of the child. Maybe it is time to switch it up to something like reading or looking for salamanders. Or maybe it feels right to find another tree to climb...that is a judgement call*).

Emergent risky play is complex, active, and requires constant care and intention. When we let children determine their next steps (in a safe way) it can result in such self-accomplishment and joy. They are competent and capable of making decisions about what feels good, right, and safe to them. It is our job as educators/caregivers/parents/friends to support that decision-making process, while ensuring that they are safe.

**** For further reading on tree climbing and dynamically assessing risk, check out** this blog post.

STICK PLAY

Sticks offer such rich and deep learning opportunities. “Sticks need space” is a commonly used phrase in a forest school approach. It is something that is clear and direct, and easy to remind folks if they are playing with long sticks too close to other children’s bodies. “Sticks need space” is a phrase that makes sense. It can then lead to folks moving somewhere where they have more room, or can take some time apart from the group (while still in sight) to de-escalate or regulate.

You can also establish safe zones where sticks can be swung about in a bigger capacity, or transformed into wizard staffs, swords, and/or fire breathing dragons to ride on.

Sticks can often cause conflict or tension between children, “That was my stick!” “Nooooo! I found it” “Because I put it there” “Well, I found it!” “It’s mine!!” “Nooo….” I think you know where this is going...

There is a lot to dig deep about in those conversations - about ownership, entitlement, sharing, etc. And mostly, it is a totally normal thing to encounter in our day-to-day work with children. It can be tricky to navigate those conversations.

Resolving conflicts amongst children is very hard work! And it requires time, space, and lots and lots of patience. Sometimes de-escalation/calming strategies work really well, and sometimes they don't. That's okay!

Here is a possible dialogue that revolves around stick use and play...

Child: WHOA! Look at this branch I could build with!

Grown-up: That stick is so cool, and HUGE! Let's move your body so you can have more space to play without hitting anyone else's body!

Child: Yeah!

Grown-up: For a stick that big, what can you do to be safe?

Child: Keep one end touching the ground, and drag it. THE FOREST SCHOOL DRAG! (*This is something we like to do with sticks/branches that are longer than the length of the child's arm - one end touching the ground, and drag it along*).

Grown-up: What's your plan with this branch?

Child: I am going to make a shelter! With lots of branches!

Grown-up: *(Continually check in on the child and the space they are holding...does the play feel settled, creative, focused, or perhaps unpredictable and could escalate fast? Dynamically assess the risk and benefits of the large stick play).*

The child continues to circle back to the group, seemingly unaware, with the large stick coming close to many other children's bodies.

Grown-up: I see that this branch is hard to move, remember that sticks need space. Please keep the long sticks with one end touching the ground! Forest school drag!

After 2 or 3 reminders (giving chances to do the safe, kind thing), the child keeps bringing long sticks/branches close and lifting them in the air near children's faces/bodies (not using the forest school drag).

Grown-up: I **notice** it is hard for you to use the forest school drag right now. I **feel** worried about the safety of your friends when you lift those big sticks in the air **and I need you** to put that stick down **for now**.

Child: BUT I DON'T WANT TO! I'M BUILDING!

Grown-up: Totally, I see your amazing shelter and **I hear you.** You must be feeling upset. AND I need you to take a pause from big sticks for now. OR...For now, I need you to put down that long branch, and find one that is the length of your arm and take some space.

(*At this time, assess the group dynamics, feelings, responses, body language of the child, etc. If it feels right, pursue with some other stick options…*)

Grown-up: (*Finds an open space*) Maybe this could be a 'training area' for your sword practice? What do you think? Maybe you could find a stick that is the length of your arm?

Child: Yeah, I can do this and this (*swings smaller stick around and around).*

Use your discretion about what feels kind and safe for the child, the group, and yourself. Perhaps the child is not ready to use/play with sticks for that day. Revisit stick play for this child later in the day, "I want to say yes, can you show me how you would use this stick safely?". If they can, great. If not, that's okay too. Maybe sticks need a pause for that day. "We will try next time!"

**** For more information, check out this blog post:** Trusting children to resolve conflicts in play.

SNOWBALLS

Sometimes when encountering challenging behaviours, it is because there is a need not being met. Here is a scenario wherein a group of children (some of which have more challenging moments) collaborate to meet everyone's needs in the form of play. This dialogue showcases the value in honouring a child(ren)'s autonomy and agency. This dialogue also highlights topics like consent - asking and checking in to see if "everyone is still having fun".

This group of children wanted to be able to throw snowballs at each other (a very common theme in wintertime). They asked me if they could. I told them "I want to say yes. In order to do so, what are some things you can do to stay safe? What's your plan?"

The group of children went away, then came back to me holding up a piece of paper. They created a list of guidelines to ensure, when they are having a snow 'battle', or snowball game, that they are having fun and doing so safely.

Here is the list of guidelines, which emerged organically from the group, on how to stay safe...

How to play a Snowball Game!

- No face shots. Bellies, backs and legs ONLY!

- Find a spot that can be the “safe throwing zone” (* a space to play the game)
- Fluffy snow only. No sticks or leaves or ice inside the snowballs
- Every person for themselves (no teams)
- If someone isn’t having fun anymore, they can say STOP and leave the game. They can join in again at any time
- If hit 5 times, you sit for 30 seconds and then you can get back up again
- Listen for the ‘Howl’ for the game to be done

Collectively, they discussed things like consent, or “checking in to make sure everyone is having fun”. How empowering for these children to, on their own, create the safety guidelines for their game!

When they began to play, I observed closely and listened to changes in behaviour and feelings amongst the participants. In this instance, I did not have to step in – the children involved were able to communicate with each other when one felt something was unfair, or if someone needed clarification on a certain guideline for the game.

The collaboration, care, fun, empowerment and expression that emerged in the snowball game was something truly magical. Instead of saying no to a request to throw snowballs at each other, I asked the children how they could do so kindly and safely. They found a way, and it was wonderful.

My experience watching risky play emerge in the forest has shown me that risk-taking in play helps children to learn how to make decisions, problem-solve, exert self-control, regulate emotions, and develop and maintain peer relationships. Very meaningful connections form when children take risks, learn about their own boundaries and feelings, as well as acknowledging the boundaries and “gut feelings” of people who care about them (the educators, grown-ups in their lives, family members, friends, etc.). We strive to say ‘yes’ and want to allow for children to take risks, all the while honouring their ability to make safe choices for themselves. Risky play provides that opportunity.

**** If you’re curious for more, check out these blog posts about a** memorable Risky Play workshop **and** Risky Play on the Schoolyard.