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The Teacher's Guide for *Outdoor Activities*

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Exploring the Curriculum Through Nature Programs

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Introduction



Today is my favorite school day:
IT'S THE DAY WE GO TO THE FOREST!

We go out every Wednesday no matter the weather, because we are very well prepared. All of us come to school early, I think because we are very excited. Last night, before closing my eyes to sleep, I thought of what I would like to do today when we are there. I think I will try to balance on the big log we found the previous time and then my friends and I will fix it to be our pirate ship. I love playing pirates on those big rocks and the log is going to be our new ship, so everyone in the group can have a boat!

Oh... the forest is amazing... it's getting greener and greener every day now that winter has passed. Today it is a bit cloudy, but I think the sun will come out to meet us. Here, we will have our circle time first to say hello to the trees and all the creatures and to remember our agreements while we are here. We have to be very careful while we play because we are only visitors here. So many creatures have a home around and if we are lucky we might see some. Now, that is getting warmer, the ants usually come out from their nests and the tortoises will wake up soon. Some birds, like the swallows, will bring spring with them when they come.

Look! There are some tiny plants pushing the ground to come out! And the green forest carpet (which is actually called moss) is so, so soft! Sometimes we like laying here looking up at the sky where the clouds pass by. And this tall tree is called poplar. It used to have no leaves at all. All of them were on the ground and we played "raining leaves" with them. Now, I can see lots of green ones hanging from the branches. Listen to the wind how it blows through them....

My friends are very happy here. They are playing kitchen and making this huge table for everyone to join when dinner is ready.



We have all kinds of food here. Mud soup, stick cakes, pebble roasts. We are careful to use only what is on the ground because the plants like their leaves and branches to stay on them. Leaves are part of the plants' body after all!

Some others are climbing on the little hill. From up there, you can see very far. We must remember to have our hands free while climbing though. There are some roots from the trees that make for perfect steps and up there we find acorns and their hats so we play all sorts of games. Like the one where we make little people from the acorns. I have this hiding place where I go whenever I want a bit of quiet time. It's ok to just stay still and listen to the forest sometimes. When we are quiet, we listen to many more sounds. Once a robin came very close to me while I was there.

Oh! It's time for running around as the great superheroes that we are! We made this house from broken branches and sometimes it's still here when we come back, sometimes we have to build it again. This is how the forest is, constantly changing. New things to explore every time. That's why I like coming to this place every week. We see how it transforms itself and what treasures are waiting for us. I am going to put this stone that looks like a ladybug into the treasure bag after my friends have seen it, too.

Well... time to go.... I can hear the special call of the owl that means we gather around in a circle once more. We will share what we liked most from today's adventures and sing our goodbye song to the forest.

Thank you, creatures for having us here once more. We will come back next week... I am so, so tired and hungry. We are very lucky to be here... I look at my friends' faces. They are tired too, from smiling I think...





Chapter 1
What is outdoor learning?



- A historical perspective (6)
- Benefits of outdoor learning (7-11)
- Characteristics of outdoor learning (12)
- National Curriculum in the outdoor classroom? (13)
- How do children learn in nature? (14-17)

Outdoor education

A historical perspective

Way back in history, education was done mainly outdoors, preparing children to be good hunters, fishermen and to use nature for housing, food and health. Children learnt early to use resources wisely and that there is a rhythm and balance in nature to tune in with.

As early as Plato or Epicurus in Ancient Greece, great minds understood the importance of learning outside. The first theories on using the environment for education emerged with Jan Amos Comenius, Friedrich Fröbel and Maria Montessori. "It began [...] in the nursery sector and some of the most important early pioneers [...] have placed great emphasis in the need for children to be able to visit and learn in less structured space, developing independence and creativity."¹ In the early XXth century, international organizations such as the Scout Movement or Outward Bound used outdoor experiential learning for personal and social development.

A few decades later, Forest Schools developed in Denmark and spread quickly in other Scandinavian countries. Today, the number of such forest schools as well as schools offering one day a week forest group programs has been steadily raising all over the world.

Richard Louvé's "The Last Child in the Woods" (2005, 2008) also gave a remarkable boost to nature programs in education. He emphasized the gap between today's generation and their parents' free natural play. Although children today are more aware of climate change and environmental issues, their "physical contact, their intimacy with nature is fading. Increasingly, nature is something to watch, to consume, to wear – to ignore."

Unfortunately, even nowadays the mainstream outdoor education is confined to pre-school level, and the time spent outside diminishes as school years increase. Curriculum, time and financial restraints are the main excuses of an educational system that regards nature as something to view and analyse from afar and not as a valuable and inexhaustible source of applied learning.



John Amos Comenius
(1592–1670)



Friedrich Fröbel
(1782–1852)



Maria Montessori
(1870–1952)



The Scout
Movement,
Girl Guides,
Outward Bound



Richard Louv
(born 1949)



Forest Schools,
forest groups
and other nature
educational
programs use
the outdoors to
develop XXI
century skills.

"The proper education [...] does not consist in stuffing heads with a mass of words, sentences and ideas [...] but in opening up their understanding to the outer world so that a living stream may flow from their own minds just as leaves, flowers and fruit spring from a bud on a tree."

"Children should learn through sensorial experiences and not through ... the mere explanation of words."

"Education is a natural process carried out by the child and is not acquired by listening to words but by experiences in the environment."

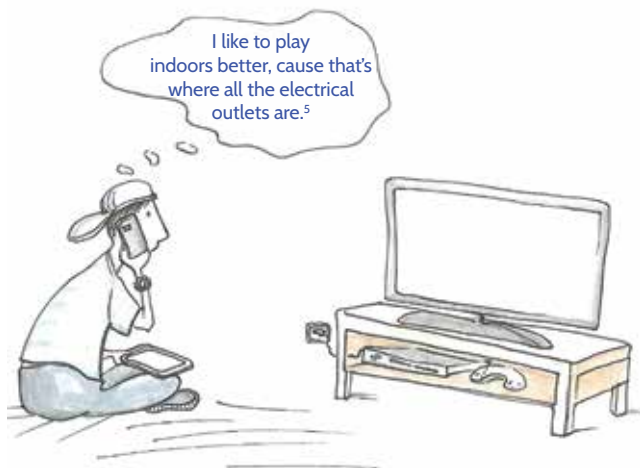
"Nature-deficit disorder describes the human costs of alienation from nature [...] The disorder can be detected in individuals, families, and communities."

1. "The Outdoor Classroom Ages 3-7 Using Ideas from Forest Schools to Enrich Learning", Karen Constable, Routledge

Benefits of outdoor learning

Problems of the modern world:

- 25% of the children are overweight¹
- Children spend less than an hour outside, and hours in front of a screen every day^{2,3}
- Percentage of children requiring some sort of mental health care has risen to 9.9% in Europe⁴
- Today's generation is disconnected from the journey of food.



All these problems have a simple solution:



Regular doses of vitamin G (Green)!

“Evidence suggests that, like a vitamin, contact with nature and green environments is needed in frequent, regular doses.
(Frances Ming Kuo)

“We can now assume that just as children need good nutrition and adequate sleep, they may very well need contact with nature.
(Scott D. Samson)

Lucky us this prescription is not hard to follow! It's amazing how easily we can rewire to nature and this is due to the fact that we are part of it and we feel an ancestral call to connect to it.

Once you regularly play and learn outside, it is clear that children feel a deep joy and awe in the natural setting. But what other reasons are there to have a classroom without walls?

There is a growing body of research that shows that nature is good for our physical and mental health, both as individuals and as a community:

1 World Health Organization, "Tenfold increase in childhood and adolescent obesity in four decades, new study by Imperial College London and WHO" (31,5 million people aged 5-19 were measured) "The number of obese 5 to 19 year olds rose more than tenfold globally, from 11 millions in 1975 to 124 millions in 2016. An additional 213 million were overweight in 2016 but fell below the threshold for obesity."

2 On-line questionnaire conducted by Happy Kids Kindergarten, 2017

3 Richard Louv "The Last Child in the Woods"; "In the U.S. the average child spends as few as 30 minutes of unstructured outdoor play each day, but more than seven hours each day in front of an electronic screen" (National Wildlife Federation, 2014)

4 From "The School Children Mental Health in Europe (SCMHE) 2015" project results that collected and monitored children's (6-11) mental health in the EU countries

5 Richard Louv, op. cit. quotes Paul (4th grader)

Benefits of outdoor learning



Experiential, practical and efficient learning²

Challenge and risk assessment⁵

Physical development⁹

Heightened the sense of school achievement

1. American Institutes for Research "Effects of Outdoor Education Programs for Children in California" (2005): "Research has documented increased standardized test scores, enhanced attitude about school, improved in-school behaviour, improved attendance and overall enhanced student achievement when students learn in and about nature. In addition, outdoor education effectively employs a greater range of children's intelligences."

2. State Education and Environment Roundtable "California Student Assessment Project Phase Two: The Effects of Environment-Based Education on Student" (2005): "Studies show that students learn more when they participate in authentic, inquiry-based lessons in the natural environment."

3. Louise Chawla "Learning to Love the Natural World Enough to Protect It" (2006): "Studies have shown that students who learn outdoors develop: a sense of self, independence, confidence, creativity, decision-making and problem-solving skills, and empathy towards others, motor skills, self-discipline and initiative."

4. Richard Louv, "Last Child in the Woods" (2005, 2008): "Children who spend more time playing outdoor have more friends [...] the deepest friendships evolve out of shared experience, particularly in environments in which all the senses are enlivened."

5. Scott D. Sampson, "How to Raise a Wild Child, The Art and Science of Falling in Love with Nature" (2015, 2016): "Studies show that kids in these schools (Forest Schools) experience fewer accidents and are more adapt at assessing risk."



Emotional and soft skills development³

More friends, less bullying⁴

Deeper school-family connection⁸

Reduced ADHD¹⁰

Reduced stress and fatigue⁷

Better eating habits⁶

6. North Carolina Division of Child Development and Early Education "Creating a Supportive Network and Training Resources for Naturalized Learning Environments in Child Care" in "Outdoor Learning Environments" (January, 2012): "Children who grow their own food are more likely to eat fruits and vegetables (Bell & Dyment, 2008) and to show higher levels of knowledge about nutrition (Waliczek, & Zajicek, 2006). They are also more likely to continue healthy eating habits throughout their lives (Morris & Zidenberg-Cherr, 2002)."

7. Scott D. Sampson, op. cit.: "Simply being in the presence of natural landscapes tends to reduce stress and promote relaxation. Such experiences lower mental fatigue and boost mental clarity while enhancing both work performance and healing."

8. Cheryl Charles "Children's Contact with the Outdoors and Nature: A Focus on Educators and Educational Settings. Children & Nature Network" in "Research Articles and Summaries of Outdoor Education" (2010). "The relationships developed through outdoor learning lead to greater parental and community involvement in and support for the school."

9. Scott D. Sampson, op. cit.: "Compared to kids confined indoors, children who regularly play in nature show heightened motor control – including balance, coordination, and agility."

10. Faber Taylor, A., & Kuo, F. E. "Children with Attention Deficits Concentrate Better After a Walk In The Park" (2008) in "Journal of Attention Disorders Online": "Nature helps students focus, including ADHD students. Students are more engaged in learning because nature is real and relevant for them."

Benefits of outdoor learning



Improves eye-sight¹⁴

Health and prophylaxis¹⁵

Focus and concentration¹²

Vitamin D²⁰

Promotes communication¹³

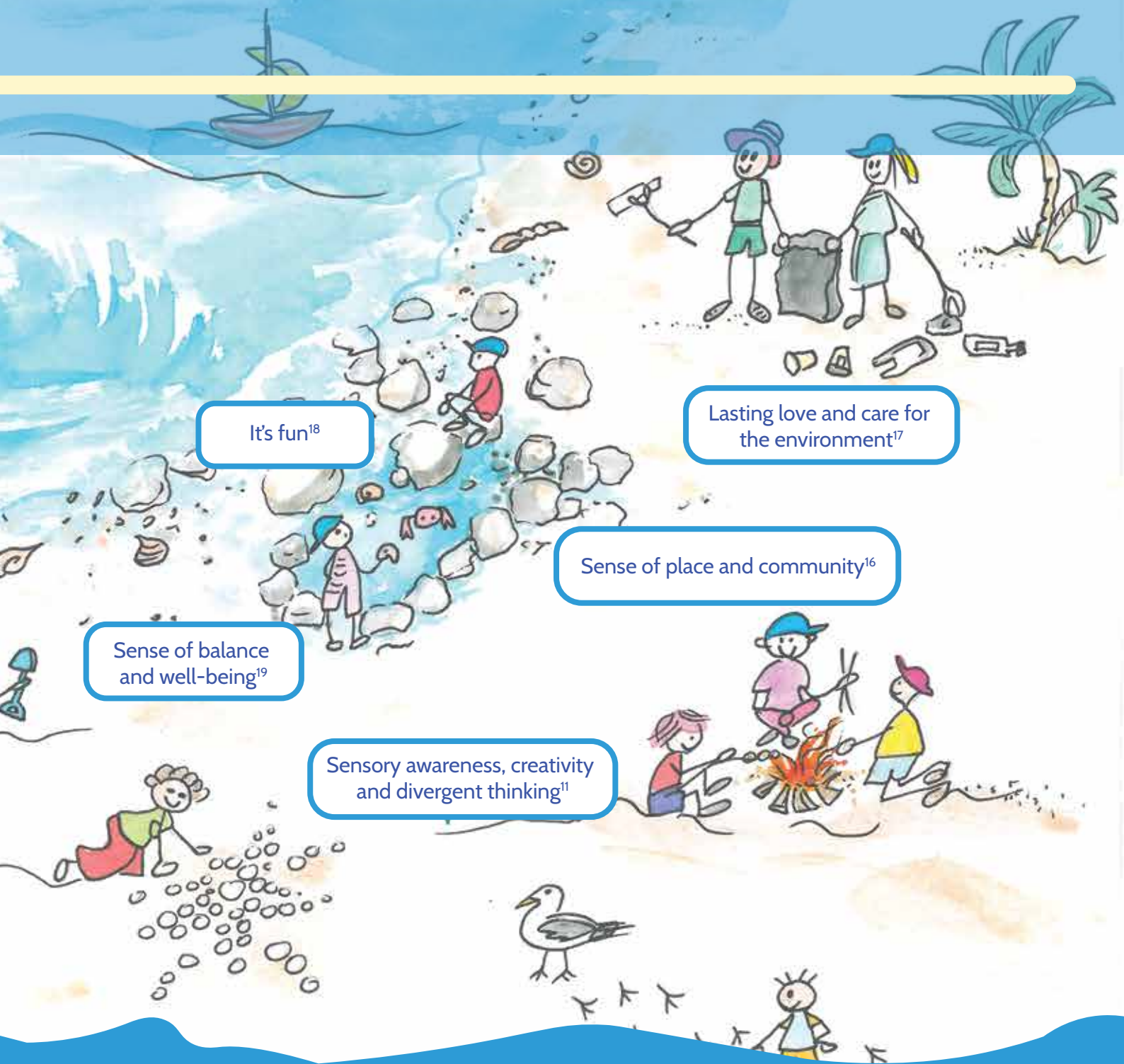
11. Patty Born Selly "Teaching Stem Outdoor Activities for Young Children" (2017): "Open-end toys foster creativity, collaboration and sensory awareness. They offer countless opportunities for cognitive growth. Children who use open-ended toys intuitively know that these objects have multiple uses. In this way, open-ended play objects encourage divergent thinking and creativity."

12. Rachel and Stephen Kaplan "The Experience of Nature: A Psychological Perspective" (1980): "Attention restoration theory: people can concentrate better after spending time in nature, or even looking at scenes of nature."

13. American Institutes for Research *op. cit.*: "Outdoor learning promotes communication. Students who participate in outdoor project-based or issue-based activities learn to communicate with their peers and community volunteers."

14. American Academy of Ophthalmology (2011) quoted by North Carolina Division of Child Development and Early Education *op. cit.*: "More time spent outdoors is related to reduced rates of near-sightedness, also known as myopia, in children and adolescents."

15. Scott D. Sampson, *op. cit.*: "Shinrin-yoku (Forest Bathing) practitioners experienced a drop of 16% or more in the stress hormone cortisol. In the forest, blood pressure tends to drop as well, while the immune system gets a major boost, increasing expression of white blood cells and anticancer proteins. At least a portion of these effects appears to be due to chemicals emitted by the plants."



It's fun¹⁸

Lasting love and care for the environment¹⁷

Sense of place and community¹⁶

Sense of balance and well-being¹⁹

Sensory awareness, creativity and divergent thinking²⁰

16. Cheryl Charles op. cit.: "Outdoor experiences help students increase their understanding of their natural and human communities which leads to a sense of place."

17. Scott D. Sampson, op. cit.: "Individuals who spend abundant time playing outdoors as children are more likely to grow up with a strong attachment to place and environmental ethic."

18. Idem: "Teaching and learning outdoors is fun [...] Studies have shown increased student enthusiasm for learning outdoors."

19. Florence Williams "The Nature Fix, Why Nature Makes Us Happier, Healthier, and More Creative" (2017): "Psychologist Roger Ulrich, in another experiment, he stressed out 120 students by showing them movies of bloody accidents in a woodworking shop. He knew they were distressed because he measured their sympathetic nervous activity – the sweat gland on their skin, their heart rates and their blood pressure. Afterwards, some students were assigned to watch a ten-minute video of nature scenes and some to watch videos of urban scenes, from a pedestrian mall to cars on the road. The results were dramatic: within five minutes, the brains-on-nature returned to baseline. The brains-on-built environment recovered only partway – as indicated by those nervous system measures – even more than ten minutes later."

20. Joy A. Weydert, "Vitamin D in Children's Health" published on Semanticscholar.org (2014): "Beyond the skeletal effects it pro-offers, there is more evidence now supporting the beneficial effects vitamin D has on immune health, mental health, and overall life expectancy."

Characteristics of outdoor learning

Outdoor learning takes place in the **same place** that we visit **repeatedly and regularly**. This way we better understand the rhythm of nature and children develop a sense of belonging to this area;

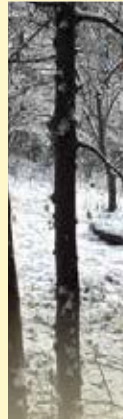
Nature is everywhere (schoolyard, park, green house, backyard garden, meadow, forest, beach etc.) and all natural habitats present learning opportunities;

The teacher is rather a **facilitator** than an expert, and focuses on how to use the experience and the awe of the moment to reach curricular aims;

The teacher **assesses risks** and **stays alert** at all times;

Any planning should consider the pace of **nature** (you can't observe insects on a rainy/cloudy day nor can you observe ice on a warm day);

Learning should be sensorial, taking advantage of the natural elements around (**place-based**) and should involve children actively (**experiential, inquiry-based**);



Experiential learning should end with an exercise of **meta-cognition**, that is, to think how the process/phenomena can apply to us;

Free exploration is an essential part of outdoor learning;

Children have different responses in nature. Sometimes, a child feels the need to sit and observe the nature alone, and this is ok;

The **process is more important than the product** and often we learn more from mistakes than from success;

In outdoor education, we welcome challenges, assume a certain amount of risk in order to gain confidence, independence, and a better assessment of risky situations;

The use of the outdoor place should follow the principles of **sustainability**.

National Curriculum in the outdoor classroom?



Debunking the myths on the usage of the National Curriculum in outdoor programs:

Myth 1: To introduce outdoor learning in schools we need to change the National Curriculum.

We analysed the national curricula of six European countries (Greece, Bulgaria, Italy, Latvia, Romania and Spain) to study if the content is applicable in the outdoors and we concluded that every learning domain and each objective can be applied in nature and with natural elements. Outdoor learning isn't another subject or topic; it's a way of teaching the existing ones.

Myth 2: Outdoor learning is just for extra-curricular activities.

Outdoors can be used by teachers for core curriculum subjects. Lessons on PE, science, maths, arts and language development work very well in nature.

Myth 3: Outdoor learning is about hikes and trips.

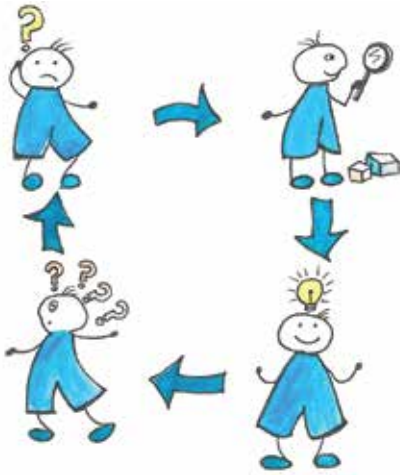
No, outdoor learning usually happens in the same natural area. It's like a larger classroom in nature.

Myth 4: Unless we can show outdoor learning has an impact on exam results we won't be able to convince school administrations.

New research shows that schools running nature programs have already witnessed improved academic performance in their pupils. According to the American Institutes for Research: "schools that use outdoor classrooms and other forms of nature-based experiential education support significant student gains in social studies, science, language, arts, and math. Students in outdoor science programs improved their science testing scores by 27%."

How do children learn in nature?

When in nature, a spark of curiosity lights every child's eyes and a large smile appears on every face. Learning outdoors can be a very rewarding experience when teachers feed their hunger for knowledge and build on the surroundings. From our experience, traditional teacher-led activities with the whole class are rarely a good idea. What works best is to have small groups that explore the environment, investigate questions/hypotheses or want to prove their point. The most efficient methods in outdoor learning are:



Q Inquiry-based learning

It's an investigation that starts from an inquiry/question often asked by the children and not by the teachers. The teachers ensure the proper context and input for the children's exploration: they observe, question, predict, collect data, experiment, reason and draw conclusions based on evidence.

The discussion of the results will lead to new questions, thus closing the inquiry cycle. Nature offers plenty of opportunities and materials for such exploration: "What can I do with clay? How does a grass-hopper jump? Where does rain disappear? Which types of clouds are in the sky today?"



Experiential learning

Inspired by David Kolb's "Model of Learning Styles" (1984), experiential learning means hands-on experience followed by reflection time - when you observe, consider and talk about the experience, its outcomes as well as the participants' feelings. Conclusions will emerge after reasoning, and the new lessons will be applied to similar or new situations.

This process of metacognition (what happened, why did I (not) succeed, how can I improve, how did I feel and why, etc.) brings along not only fast learning, but also emotional growth and inner transformation. Outdoor is the perfect setting for experiential learning and things like climbing down a steep ravine, using tools, paying attention to the time-limit or team-work are learnt through the method of experiential learning with visible results.





Placed-based learning

Unfortunately, children come to know names such as "coconut tree" or "flamingo" earlier than the local words "beech" or "magpie". Fortunately, there is such a thing as place-based learning that makes use of the local landscape and community to implement the curriculum. Here, the surrounding nature is the tool and the community is the resource for new learning.

Children not only learn in a practical way, but they also develop a strong sense of belonging to the place and find out about community service. Community (neighbours, family, NGOs) get actively involve in school life. Children who learn in a place-based manner are more likely to become a generation of active citizens who love and care for the local nature and community. Growing vegetables in the school garden, reading animal tracks, visiting local farms or just using the immediate background for learning are examples of placed-based learning.



Play-based learning

Play is the highest form of research, said Albert Einstein. It positively impacts on the children's learning because they are actively and willingly involved, the content makes sense and is relevant to them since they engage socially and emotionally. Let's think: when they build a shelter that they call home, they have to sort and match the best sticks, they help each other carry them to the site, they share ideas, they use their knowledge of the real world to solve technical problems, they invent stories, and they use their creativity to add original elements like a hanger or scenting plants. And in the meantime, they have fun and charge their internal batteries.

Outdoor play can be free-play, when children follow their own interests or purposeful play (Ex. the children get mirrors and they find ways to use them in their play. Thus they discover multiple reflections, symmetry or that mirrors also reflect the heat of the sun).

Teachers can take different roles: they can document play (while children make a stone pyramid, the teacher talks about distribution of weight, balance, pyramid base, the Egyptian Pyramids of the Giza or the Aztec pyramids); teachers can observe while taking notes about children's collaboration and way of thinking (children are most true to themselves when they play), or can simply co-play with the kids.



How do children learn in nature?

Types of play

Symbolic Play



A stick can be a person, a stone can be a pie. Symbolic play, when kids use objects, ideas, actions to stand for other objects, ideas or actions, lays a solid groundwork for letters, numbers and abstract thinking. This way of playing is particularly useful in role-plays or to represent Math problems in a visual way.

Creative Play



Children visualize what they want, understand how to do it and create something new. Loose elements are the main materials and the possibilities of combinations are endless. Kids "create" a doll with a small, leafy pine branch and a cone tied to it, or they make a monster trap using string.

Exploratory play



Children use their senses to learn about the looks, properties and functions of the things around them. They want to know where the roots go under the ground, how the ants work on their ant hill, how things move on an inclined terrain or how frog eggs feel like. It's like science put into practice.

Pretend Play



It can take the form of socio-dramatic play (like re-enacting real situations such as family situations), dramatic play (ex. children pretend to be animals), fantasy play (children pretend to be wizards, witches, flying ponies or any other creatures belonging to the realm of fantasy and fairy-tale)

Mastery Play



It's when children change through their play, elements in their natural environment - they build a dam to change the course of a stream or they dig a mine to remove rocks from the ground. In this type of play, they often use tools and work together to achieve their goals.

Recapitulative Play



Children re-enact moments from the history of mankind legends and myths (they make spears or light the fire like in the prehistoric times, they use swords and make stone forts like in the medieval period, or they can practice the bartering system with natural elements they find around).

Communication Play



Children use their senses to learn about the looks, properties and functions of the things around them. They want to know where the roots go under the ground, how the ants work on their ant hill, how things move on an inclined terrain or how frog eggs feel like. It's like science put into practice.

Risky and Rough Play



Involves elements of risk to develop the children's sense of risk evaluation and self-confidence. Balancing on a suspended beam, climbing up a ravine, tree climbing are such examples. Rough play is often played between adults and children and involves tumbling or chasing within safety limits.

Outdoor learning tools

Story-telling

Stories are mirrors of us: they talk about our experiences, beliefs, moral values, dreams as individuals and as humans. Both story-teller and listener fall under the transformative spell of the story: it changes how we think and even who we are.

We tell stories to teach, to share our heritage, to entertain, to inspire. Folktales, fairy-tales, legends, myths, fables or riddles talk about what we, as humans, have experienced and learnt throughout our history. Personal stories can sparkle thinking, give you questions to think of, frighten or amuse. When we tell stories, we remember, imagine, reason, use different tones of the voice, use new vocabulary and follow a logical sequence.

Not only teachers tell stories. Retelling an experience in a story can help the process of metacognition – children deepen their understanding of the event, think over processes, reasons and outcomes. They gain confidence as speakers in front of an audience, improve and expand their vocabulary, learn how to express feelings, empathize and develop their imagination. Other stories can have a therapeutic function. They are the magical place where our alter-ego can escape reality, where we can be super-heroes and confront our worst fears and thus, heal.

Let's keep in mind that story-telling can take many forms: verbal narrative, journaling and art, sketching and writing in a journal, photography or a "show and tell" for the children's discoveries.



“ In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it.
(Simon Nicholson)

Loose-parts

Sticks, logs, root parts, leaves, bark, flowers, seeds, pods, cones, straws, rocks, gravel, sand, clay, mud, water – nature is the treasure chest of loose-parts. They can be blended, divided, assembled, moved, changed in countless combinations. If you add some crates, baskets, ropes, bowls, cups, fabric, glass beads... sky is the limit!

Please pay attention to small parts that can be swallowed and handling of tools (scissors, knives, hammers), if that's the case! The loose-parts should be sourced sustainably, so they can grow back or be reused in a short while.

We also noticed that if children work with loose-parts, they are more likely to accept that their creations will find their way back in the boxes and wait for new creative play-time. Ideal for open-ended play, loose-parts help with eye-hand coordination, the development of gross/fine motor skills, sensorial perception, creative thinking, visual perception and... patience.





Chapter 2
*Stepping stones to
successful outdoor classes*





- Approaches to outdoor education (20-23)
- Place and group management tips(24-25)
- How to plan an outdoor lesson?(26-28)
- Assessing learning in the outdoor class (29-30)
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Approaches to outdoor education

As learning outside the classroom is becoming more popular around the world, several approaches to outdoor learning have developed. Instead of naming and presenting these approaches, this chapter aims to support a more conscious practice, that is:

“How and why do I approach learning outdoors?”

One way of approaching learning in an outdoor environment is to maintain the same model of teaching and learning but move it outdoors. In this case, what we are doing is replicating the classroom structure in an outdoor setting. This has proven benefits such as stress relief, better mood and greater motivation. In this case we are exploiting the full potential of the outdoors and we are embracing the fact that our students have many ways of learning and that the outdoors can offer many more opportunities for learning.

Let's use an example to envision an outdoor session:

You have a group of 4th graders and ahead of you lies a chapter of Physics on "**Types of energy such as gravitational, kinetic and potential energy**". Here are some of the options you have as a teacher:

1. You teach indoors using the schoolbook, so children read the definitions and you use the whiteboard to sketch an apple falling from a tree, a swing ready to be released and a child running.

2. You move outdoors to the school yard, sit on the grass in a circle, and ask the students to read definitions from their books. You call a student to demonstrate how an apple would fall from a tree, then ask another student to swing while his friends observe and lastly you ask another student to run fast around the circle so everyone can see. You expect the class to remain still and quiet during the demonstrations, to observe carefully and to listen to you as you talk and explain the study material.



3. You head outdoors with your class, you split it into groups and assign each group with one type of energy. You ask them to find examples of where this energy can be found in nature and describe how they can sense it with their body and to then present it to the rest of the class. There is a lot of noise, discussions and perhaps arguments, children are moving all around the school yard, some seemingly just running and throwing stones.

4. A fourth and very different option would be the following: you know that sooner or later in the year you will have to cover the types of energy from your Physics curriculum. Your eyes and ears are open to find the opportunities to introduce these concepts.



On one of your trips to the forest you observe several children playing with a small log that they are rolling down the hill. You approach them and ask why they believe this is happening. You take part in their discussion, ask questions, suggest next steps in their game.

Later, when you return to school you ask this groups to share with their classmates what they did. The following day you bring balls and toy cars and encourage them to play with these on the school yard slide. When you feel it is the right time, you point them to their physics book to further investigate their interest...

We can look at these 4 options as lying on a spectrum that stretches from traditional, teacher-centered teaching to child-centered and child led learning. As you move along the spectrum two important aspects of teaching and learning change: 1) Vertical participation: how interested and engaged a single child is, and 2) Horizontal participation: how many of the children participate. At the beginning of the spectrum vertical participation is very low as the subject is “enforced upon them” with no hands-on activity, no real life connections. However, all students are exposed to the material and we can assure that they all have the same opportunities to participate, thus we have high horizontal participation. Moving along the spectrum children become more engaged due to the design of the session and eventually it is they who are leading the learning and are therefore fully engaged. Here, high vertical participation is paired with low horizontal participation as some children may never get involved in the learning process.

Approaches to outdoor education

So here are some of the questions that we need to ask ourselves when designing an outdoor session:

- In which case will children learn more?
- How much control do I need?
- When do I feel confident that everyone is covering the material?
- Do I feel comfortable with the set-up and the activities of this session?
- Could this session take place indoors?
- Am I making the best of the opportunities that nature offers?
- Are children involved in different styles of learning?
- What is the purpose of this session? Is it an experiential introduction to a concept, is it the application of acquired knowledge in a real-life situation?
- How will this session blend with other teaching of the same material? Is it enough to cover the material or is this session a part of a series of sessions indoors and outdoors?

From the above it becomes clear that the outdoor session needs to be well planned and that this planning should include continuous assessment of the learning that is taking place. This will allow us to provide learning experiences in which all children are engaged.



Place and group management tips



“ We all care about the well-being of our students and want to provide a positive environment in which students are healthy, motivated and learning content in creative ways. Every educational setting, whether urban or rural, has such a place ... outdoors. (Children & Nature Network, Natural Teachers Network eGuide)

Starting a new routine can be daunting for most of us. Thinking about using nature to teach our regular classes can be a bit scary if you are not prepared. In this chapter, we aim at giving you the tools and tips for organizing the outdoor place and the groups of children.

Organizing the outdoor place



Do you have a regular place you can go with the children? Fantastic! Then visit this school without walls and figure out the ways of access and the best entry/exit points. Next, set the boundaries ("Children can go from this tall tree to the tree next to the stream"), decide on gathering places and on flat grounds suitable for games and group activities.

Each outdoor space invites for certain types of activities. Analyse the area and see if there are trees that are safe to climb, a place for a vegetable garden or a pond for water activities. You may find lime-stone or clay which are real treasures.

Explore the area with the eyes of a kid, then make a thorough risk assessment. If you see places which are dangerous (sharp rocks, ravines) keep them outside of the established boundaries. Look around and see if there are any dangerous elements (glass, irritant plants, and syringes). Try to remove them, or if they cannot be removed, find a better location, or put that area outside your boundaries.

Indoors, you have desks or chairs. Outside you sit on logs, on tarp or on the ground and you will need a clipboard or a small whiteboard for a desk.

Place and group management tips

Figure out where can you shelter if the weather changes suddenly to worse. Even a tarp shelter is better than nothing. Also, make a plan to leave quickly, and under safe conditions! The places where people can go to the toilet are very important. Portable toilets work, too.

Finally, some small sheds are really useful to place some of the tools so that you don't carry them every time, especially if your school has a daily outdoor program. Spades, shovels, rakes, buckets, even a mud-kitchen can easily fit into such a shed, saving you a lot of trouble.



Organizing the group of children

There is a general misconception that in the outdoors children “go crazy” and put themselves in danger. From our experience, we can tell that with a regular, well organized program, children get really involved in the tasks while being happy to be outside.

Before going for the first time to your outdoor place, begin where you are, on your school grounds. Ask students to suggest ground rules (no more than 3 to begin with). Some group safety rules can be “Choose a partner and keep that person in your sight throughout the day” or “We throw things only at Mr. Nobody”; these will be your “Agreements”, for everyone to follow.

The day before going outdoors, check on the weather and inform the children and the parents about the place, the time spent and the activities planned as well as the things to wear and carry. As the school years begins, you can inform the parents of the summer and winter outdoor outfit, so they have some time to buy these things before the program actually begins. Right before heading out, make sure that everyone is dressed properly and carries what they need (food, water, sunscreen, etc.).

It is a good idea to start with the schoolyard and with short periods of time that can be gradually extended once the children get used to the outdoor program.



Once there for the first time, make sure the children practice the agreed rules and signals, understand the boundaries, and have a guided exploration of the place. It helps if, on this first tour, they understand how the terrain goes up and down and the different sights, feelings and smells of each type of environment (for instance a forest is cool and damp while a meadow is sunny and full of flowers).

Parents who attended a school outdoor event:

“ It was a unique experience, we enjoyed it to the fullest.

(María and José, parents of Miguel 1st grade)

“ The feedback of an outdoor activity is always positive. Not only for big events like a hike in the forest or a camp, but even for a stroll in the school yard, in the nearby park, or just a lesson outdoor.

(Kiril Kolev, teacher)

“ I love the outdoors! It helps me with my muscles (and he shows his biceps), to make friends, and to develop my brain.

(Matei, 8 years old)

💡 Special tips for awesome teachers

When a child asks a questions we, teachers, feel good to provide the answer immediately. By doing that, though, we many times kill curiosity and initiative. Instead of providing the answer, let's better ask the right questions that will ignite the child's spirit of inquiry and imagination. Questions like "What happened? How is this similar/different to another experience/thing...? Why do you think this happens? What follows if you...? If ... then ...? What's your conclusion? Can you prove it? What is the story behind?" engage the children with the nature around and help them make their own discoveries.

If you ask the right questions, if you engage in side-by-side exploration, listen more than talk and encourage kids to tell their own stories, you become less of a teacher and more a bridge between children and their natural world.

Then, it happens quite often that you plan an activity that you think it will be amazing. You spend time planning it, and you pull everything you need together. Yet sometimes, the unexpected occurs: the wind blows the leaves in a whirlpool, a tiny bird starts singing, or a grasshopper jumps on a child's arm. It's enough to cut your activity short. Don't worry! These unscheduled events bring about great learning experience. Go with the flow: as long as the children are learning and are engaged in discoveries, you win!

Show passion and affection for the world around and don't forget to have fun with the children. Give the kids the freedom to explore, discover and create in nature. You might be surprised of the unexpected lessons they will learn by simply being kids!

How to plan an outdoor lesson?

Who makes the planning?

The first questions are who makes the planning and how? In most cases it is the class teacher but, if you are lucky enough to have an outdoor teaching team, there is room for common planning. The class teacher should be responsible with "what are we teaching in the outdoors", and "how is this connected to the indoor teaching", while the outdoor team can help with ideas and get in charge of the group management, safety issues and overall organization. If there is no outdoor team to help out, you can rely on volunteering parents, the recommended child/adult ratio being of 5-7/1, depending on the age of the children.

Important variables

It is now, more than ever, that you have to take into account some variables before planning: first of all, it's the season. If you plan a day on birds, it has to be early in spring, when birds are very active and you can easily spot them. Next it is the weather. This determines not only the types of activities (more dynamic/static depending on the temperature, the chosen place (in the sun/shade) but also other important factors like clothing and footwear which will also regulate the types of activities (running a long distance is difficult in rain boots). The outdoor place allows for certain types of activities (you can plant in a vegetable garden) but if you plan to observe pond life, you will change the place accordingly.

Also, other important variables are the age of the children (children under two will do better on flat ground), their number, their experience with the outdoors and the number of participating adults.





Sometimes, something extraordinary can happen that will shape your day: for example, a huge storm that uprooted some trees made way to a lesson on the forces of nature and their impact on vegetation.

Classical versus backwards planning

The classical way follows the yearly and weekly planning on curricular objectives. The outdoor day will be embedded in the weekly plan, but the objectives for the outdoor sessions will be customized to suit the above mentioned variables and make use of the natural elements outside. For example, for preschool level, if your weekly theme is "Spring is here!", children can be detectives to spot as many signs of spring as they can. For primary school level, if the theme is "I am unique in this big, wide world", each child can choose symbolic elements from the environment to talk about his/her physical characteristics, personality, strengths and weaknesses. Again, we come back to the idea to allow room for the spontaneous and unique moments that sometimes happen in nature.

Another approach is the backward planning which is play-based and child oriented. When outside, children choose how/what and who to play with. The teacher facilitates their discoveries and uses their focus of interest as a scaffold for the next day/week planning. This type of approach is very suitable for early age and allows for the development of individual skills.

For example, you observe that a group of children get busy with digging and they wonder at the things they find under the ground. First, you approach the group, and use their enthusiasm to allure other kids to the place. "What do you think that is? What makes you think so?" For the next week you can plan a chapter called "Under the ground" where you start from pictures taken and the children's stories about their own "scientific" work.



How to plan an outdoor lesson?

An outdoor day



What does an outdoor day look like? First of all you need to plan how you and the children get there. Once gathered at the outdoor place, a good idea is to start with a morning song (for example, we sing a very short song greeting the people and the elements in the nature around), followed by a review of the rules that apply for the outdoor area (signals, general safety rules like “Keep yourself and others safe”) and special rules that apply for the day. The circle time ends with describing the sessions of the day and some general success criteria. For the main activity, divide the children into several groups, each monitored by a teacher/teacher helper. Each group will work at a station. Station rotations are possible only if you have enough time. However, if your time is limited, each group can report on lessons learnt at the end of the day. Every group activity follows the steps of a regular lesson:

5 Step Lesson Plan Template¹

Anticipatory Set	<ul style="list-style-type: none">• Set 1-2 special rules/agreements for this specific lesson, if necessary.• Engage students with a surprise element.• Explain what students can learn and do in order to ensure efficient learning.
Introduction of New Material	<ul style="list-style-type: none">• Activate prior knowledge.• Ask the right questions and provide a context for the new learning.• Model new skills.
Guided Practice	<ul style="list-style-type: none">• Facilitate student individual/group work.• Check for understanding and draw a conclusion of your discoveries.
Closure	<ul style="list-style-type: none">• Have students briefly summarize their learning.• Connect new knowledge to real life.• Get students’ feed-back and provide feed-back

The last moment, the closure, is particularly important: when students summarize their learning and the moment of metacognition (how the new learning is relevant to you and the world you live in) are excellent assessment tools. On the other hand, the feed-back (what we liked, what were the difficulties to overcome, etc.) ensure the needed emotional connection.

Remember to plan some time to eat, and the children also need toilet and play time. In case your time is limited to one/two hours a day, you should choose a nearby location rather than waste a long time on getting to a place.

In winter, when the weather is snowy and cold, we came with a different type of organization: we go on hikes to keep the children on the move and when they are warm enough, we stop to have our snack or 10-15 minutes long activities, then we are off again.

1. Source: <https://study.com/academy/lesson/5-step-lesson-plan-template.html>

Assessing learning in the outdoor class



When you are outdoors with your class, there is so much happening to your students' bodies, hearts and brains. They are developing their motor skills, they are getting relieved from stress and they are also learning many things about themselves and the world around through their senses and their experiences. They are learning about the trajectory of the sun, the gravity that leads water to move to lower ground, the circle of life of trees and plants.

But what about specific items of the curriculum that we want our students to learn, what about the math, science, language that we want to teach them in nature? When outdoors, teachers may often find themselves worried about how they can assess if their students are learning and how they can know if an outdoor learning session has achieved its goals.

However, assessing outdoor learning is in many ways similar to assessing indoor learning with many extra opportunities and just a few technical constraints concerning materials and weather (obviously, drawing a concept map at the end of an activity in a rainy day cannot be done outdoors!).

When we are outdoors with our classes a lot of the learning occurring is inquiry-based and experiential-based learning. This situation offers itself to what is called Assessment for Learning. This ongoing assessment will allow us to adjust our outdoor session according to how students are responding to it and will help us plan next our session (indoors or outdoors) in the same unit.

What we are really doing is, we are putting techniques, tools and activities in place that will allow us to answer the questions that always 'bug' a teacher during a lesson: have they understood or have I lost them, is this too difficult for them, do they realize why this is important and where it can be applied, are they learning, will they remember anything after we have finished the activity?



“ *Assessment for learning involves teachers using evidence about students' knowledge, understanding and skills to inform their teaching.*

(New South Wales Education Standards Authority, Australia)

One way to categorize the tools, techniques and activities you will use for Assessment for Learning is to use the idea of Triangulation of Sources. That is, in order to assess students' learning, you collect information from three sources: **OBSERVATION, CONVERSATION, PRODUCTS.**

Assessing learning in the outdoor class



Of course, we have to keep in mind what the goals of our outdoor session are and design the assessment accordingly. These goals have to take into account the special value and different kinds of learning that take place outside of the classroom. For example if we are doing an outdoor session that is connected with division with students measuring and cutting sticks in 3 or 4 equal pieces, our goal would certainly not be that students would better master the technique of division. Rather, this outdoor session would aim to offer children a better understanding of how this division works and when it is better applied.



Therefore, to assess this lesson, instead of a test that would require children to complete a series of divisions, we would for example:

Observe the children to see if they used division to calculate how long each stick they cut should be, if all members of each group agreed and listened to the mathematical language they used along the way.

Have a conversation at the end of the activity where each team will present their work and use mathematical reasoning to explain how they went about the activity.

Returning to school, each student will produce a small drawing of the sticks at full length and cut into smaller pieces, with all the divisions and other mathematical operations that were used by the team.



By triangulating the sources of assessment we can reach a fairly accurate conclusion about our students' understanding of the operation of division.

Again, as with any outdoor session, apart from the curriculum material involved we should assess what else our students are learning! Perhaps apart from division, they are learning to cooperate, to use their imagination to solve problems, to discuss, to make and test assumptions, to analyze failures, to cope with failure, to manage time, to listen to others, to observe, to learn.

Risk assessment & place awareness

It's a basic instinct to protect our children from harm and pain. However, many parents of today's generation are "umbrella parents", trying to secure children from any kind of discomfort and avoiding any potentially threatening situation. Why are parents wary of the outdoors? Because lately, wilderness has been associated with danger.

Why do we fear nature?

An important influence is that of the media and society that "unconsciously associate nature with doom – while disassociating the outdoors from joy and solitude."¹ Dramatically presented animal attacks, kidnapping cases, ticks that "spread" the Lyme disease, severe accidents, all scare people out of the woods. And this happens while "research shows that the great majority of injuries kids sustain during risky outdoor play are minor and require little or no medical treatment."² From the experience of two Erasmus partners we can tell that only one severe but not major injury occurred in 7 years of practice, with 30 to 70 kids being outside almost on a daily basis.

On the other hand, parents and children focus on immediate entertainment, and the habit of hiking for days and wondering in the woods for peace and solitude is fading.

Well-meaning schools, communities and families prefer safety for fear of any accidents and litigation: better stay safe in an over-controlled environment!



“ Risk and challenge offer a powerful medium for personal growth and development by building self-esteem and self-confidence, and in group situations, they foster the development of trust, leadership and judgement.

(Jane Williams-Siegfredsen)

Why taking risks is good for us ?

If children never experience challenges that they overcome themselves, how can they perceive dangers or evaluate the risks? How will they learn about their own strengths and limitations and how will they take care of themselves? We all know that children are naturally curious and they want to explore the world around. If we don't let them try to succeed or fail, they will be more curious about the forbidden and never understand our concern for their safety. The children who today are able to step out of their comfort zone and learn from their mistakes, will better deal both physically and mentally with their life experiences in the future.



1. "The Last Child in the Wood", Richard Louv op.cit.

2. www.verywellfamily.com/why-risk-taking-is-healthy-for-kids-4118491, Why Kids Need to Take Risks in Life?

3. "Understanding the Danish Forest School Approach", Jane Williams-Siegfredsen, Routledge, New York 2017

Risk assessment & place awareness

Risk-related terms	A hazard	Anything that has the potential to harm. It may be a substance, a piece of equipment, a work procedure or a child condition (bee venom, a hammer, handling a shovel, unattended children, security of entry/exit points are just
	A risk	The chance or likelihood that harm will occur from the hazard: it can range from "never" to "certain" and depends on a number of factors like conditions, number and age of people involved, medical restraints, allotted time, etc.
	Control measures	The measures or actions that are taken to remove or reduce risk. Whenever possible, the risk should be removed. When it cannot be removed, measures must be taken to reduce the risk.

How to run a risk assessment?

Risk assessment is the overall process when we identify the hazards, do the risk analysis and specify the control measures to be taken. Here is an example of risk assessment that you can run with colleagues and even parents:

Hazard severity	Hazard likelihood
3 Major	3 High=certain harm will occur
2 Serious	2 Medium=could occur frequently
1 Slight	1 Low=seldom occurs

Hazard	Who is at risk?	Severity (S)	Likelihood (L)	Risk estimate (R)	Control needed
Sunburn	Children, adults	2	2	4	Provide sun hats Parents/carers to put sun cream on children
Drilling	Children, adults	2	1	2	Adult supervision and role-model the use of the drill



The way we estimate the Risk (R) is by multiplying severity (S) by the Likelihood (L) :

$$S \times L = R$$

The risk estimate may vary if the teachers are more or less experienced. Some teachers make a risk-benefit assessment where they compare the risks to the benefits in order to evaluate if the action is worth taking. Next, we look at some of the children's favourites:

Climbing trees

Why do it?

Supports children's ability to problem solve and make decisions as they assess distances and angles, judge the strength of limbs, work out where to put their hands and feet and navigate uneven surfaces.

What could go wrong?

Scratches, bruises, sprained limbs, broken bones.

How to do it right?

Have 3 support points (like two hands and one leg or two legs and one hand), do it when it's sunny, pick trees other than fruit trees.



Sticks and loose parts

Why do it?

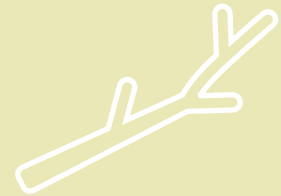
They are portable: children can move, sort, stack, build and manipulate them how they wish;
Provide opportunity for imaginative play, problem solving, teamwork and muscle development.

What could go wrong?

Scratches, bruises, eye injury, swallowing.

How to do it right?

Adult supervision required, avoid fencing or hitting with sticks, children under 5 should pick sticks no longer than the kid's arm, throw sticks only at Mr. Nobody.



Bare feet

Why do it?

Offers sensory stimulation by walking on different surfaces with uneven or varying textures (mud, pebbles, grass, rocks, sand, dry earth);
Enhances children's ability to sense what their feet are doing without even looking at them (proprioception);
Builds strength in children's arches, preventing flat feet.

What could go wrong?

Cuts, scratches, bruises, loss of balance.

How to do it right?

Check the area for broken glass or sharp objects.



Risk assessment & place awareness



Fire

Why do it?

Provides opportunity to embed real life experience in learning. Teaches about flammability, basic fire-safety, effect of fire on objects and food.

What could go wrong?

Singed hair and clothes, burns, smoke inhalation, start a forest fire.

How to do it right?

Build a safe fire place, pay attention to items that hang and loose hair, only walk around the fire, do the fire-position when approaching the fire-pit (one foot and one knee down), constant adult supervision.



Real tools

Why do it?

They provide an authentic experience for children for tinkering, gardening, constructing, whittling, cutting, and understanding how things work.

What could go wrong?

Bruises, cuts, piercing.

How to do it right?

Adult should role-model the use and rules, then supervise individual or small group handling of similar kinds of tools; adapt the tools to the age and abilities of the children.



Uneven or steep ground/ravine

Why do it?

Enhances children's overall coordination and balance, helps the healthy development of bones and muscles;

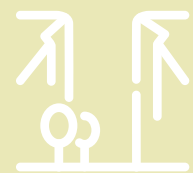
Gives opportunity to experiments with the inclined plane, weight, gravity and frictional forces, balance of forces, motion and rest.

What could go wrong?

Sprained limbs, broken bones.

How to do it right?

Show children how to walk on an inclined ground, start exploration with small areas, walk rather than run.



3 more ideas about risk



“Cold weather outdoor play boosts immune system.”
(Pennsylvania Department of Health)

“Bad” weather – is it worth the risk?

Going outside on a rainy or snowy day can give the children the opportunity to expand authentic learning about seasonal changes and weather patterns. Usually, weather changes the surroundings and new challenges appear which stimulate the children cognitively and physically. In addition, cold weather strengthens the immune system, contrary to the popular belief that children get sick because it is cold outside.

However, going out depends on each situation, and the outdoor coordinating team will have the final call. From our experience, wet and cold at the same time, don't make a good mix for children.

What is the teacher's best approach?

We, as teachers, should encourage and acknowledge the children's competence to assess risks as well as envision possible consequences. Although children like exploring, they rarely go beyond their limits or put themselves in real danger. Generally, they seek the challenge but they do not take unnecessary risks. On an Erasmus mobility, we witnessed a scene where a girl did not dare climb down a tree. The teacher just stood close and offered her moral support until, 14 minutes later, she had the courage to jump off the last branch. She was a very, very happy child!

Parent communication

A success criterion for any outdoor program is the school-parent communication: first teachers should give the parents the opportunity to openly talk about their fears and address these fears as well as challenge the myths around safety with research studies, videos and workshops. Parents should also be aware of the benefits of risk taking. Build with parents a strong relationship based on trust, regularly share the developmental benefits of every child and make known the first aid/outdoor training of the staff as well as the emergency procedures in use!

Place awareness

If you have the area for the outdoor activities you should know it really well. First, be like a child and explore it yourself with all your senses and dreams. You should be aware of all its opportunities and challenges. Next, get informed about the legal status of the area (maybe it has a different owner and you need some permits) and what you can legally do over there.

Next, look closely at the plants and animals. Children love foraging wild food but some of the plants on the location may be poisonous or rare, protected plants. Whenever you can, use sticks and leaves that already lie on the ground instead of living plants. Avoid over-harvesting or uprooting any plant. An area that is resourced sustainably will bloom and thrive many years to come. Some of the animals could also be poisonous or rare. Kids should learn that plants and animals are beautiful where they are: in nature, undisturbed.



What to wear & what to carry?

What to wear

Breathable, light clothes for summer time:



T-Shirt

High socks

Outdoor shoes or rain boots

Additional summer clothing: sunhat, sunglasses.

Layer clothes for winter time:



Winter hat

Thermal clothes

Waterproof ski jacket and trousers

Mountain socks

Winter outdoor boots

Additional winter clothing: scarf, gloves, fleece and gaiter.

“ There is not such a thing as bad weather, there is only bad clothing. (Saying)

What to carry

1. **Attention getters:** whistle, duck/bird call

2. **Essentials:**

- Emergency procedure, emergency contact list
- First-aid kit, health card, some money
- Food (sandwich, fruit, dried fruits/seeds) and extras for the kids who forgot their lunch pack
- Still water, water for washing hands
- Energy bar for hypoglycaemic situations
- Mobile phone (extra battery for longer hikes)
- Parent's mobile phone list in zip-log bag
- Children allergy information list in zip-log bag
- Rubbish bags (can also be used as raincoats)
- Tissues, wet wipes, toilet paper, hand sanitizer
- Penknife, outdoor knives for children
- Sunscreen, insect repellent



3. **Useful stuff:**

- Waterproof mats for sitting
- Flint, scissors, paintbrush, torch
- Paper, pencils, clipboard
- String/rope, barricade tape
- Photo/video camera

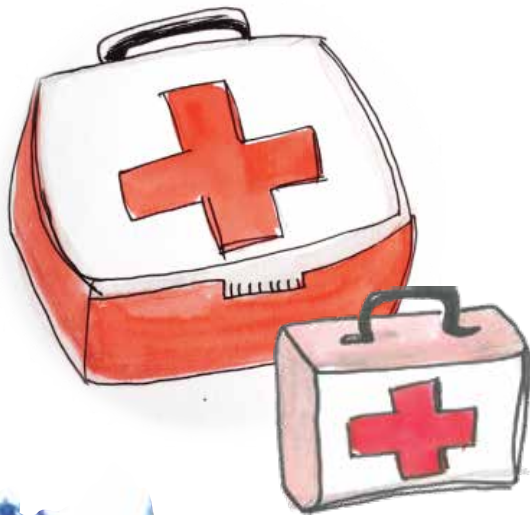


4. **Focusing and observation tools:**

- Binoculars, compass, magnifying glass
- Small bag and jar for collecting cool stuff
- Micro-container with magnifying glass
- Small water net

5. **Other teaching materials you need.**

First aid kit



- Adhesive bandages, butterfly bandages
- Gauze pads and gauze roll
- Duct tape
- Sterile rinse solutions
- Antiseptic creams and ointments
- Anti-inflammatory ointments
- Eye-drops
- Tweezers, scissors, safety pins
- Tick removal tweezers or syringe
- Hydrocortisone cream
- Antihistamine for allergic reactions
- Hand sanitizer, mask, surgical gloves.



Ideas of exploration areas and amenities

Where to go?

You have the determination, the children are willing to go outdoors, but where? Start exploring your court-yard, a park or a vacant lot space close to the school, where human intervention is minimal. There, you will find a variety of plants and small creatures.

If you have the approval of the school administration for (half) a day-long outdoor day, you should regularly visit an outdoor location which could be a nearby forest, orchard, beach or meadow. River sides, lakes and ponds also offer a large variety of exploration possibilities. These are some of the natural environments our schools use during the outdoor program that we run:

If the weather is too bad to go outside, you can still learn about nature in the natural science museums, local farms, agricultural or animal exhibitions.



Natural Amenities

Natural Amenities are all those mainly outdoor elements or spaces that are meant to improve the learning of our children. They are meant to facilitate learning, social relationships, improve their practical skills and physical abilities, decorate our school gardens and court yards. Amenities can occupy a well defined limited space, or a much larger area. Some man-made amenities help reach our curricular objectives (flowerbeds, vegetable patches, artificial ponds, sandpits, natural reconstructions of animal habitats such as: ant and snail farm, tortoise gardens, musical walls, writing tables, mud kitchens or water exploration area). Motor skills assemblies (balancing log area, sensory paths or climbing walls) improve children's balance and coordination. An open-air stage or an area for loose-elements will favour social interaction and creativity.



Communication with parents

Parents should be informed in writing of any off-site visits unless it is a regular part of the school curriculum which parents have already been informed about through the school prospectus or a letter.

Field/Forest/Sea trips are a fun and memorable activity for students and staff. The communication with parents is an important part of the preparation and realization of the trip.

Once the visit has been decided upon and been given permission by the school administration, the next step is to contact the parents by letter, explaining the reason for the visit. This letter has two parts:

Letter for parents outline

THE FIRST PART OF THE LETTER

The top part of the letter should contain the following information:

- Where you are going;
- What the purpose of your trip is, including the curriculum connection;
- When you are going, including the time you are leaving, and the time you are being picked up;
- The contact information for the school and contact person during the trip;
- What students will need to wear (if applicable) and all the things they need to bring, including money, if appropriate;
- What you will be doing for food arrangements;
- What the transportation arrangements are;
- Standards of behavior;
- The deadline for returning the permission forms.

THE SECOND PART OF THE LETTER

The second part of the letter will be at the bottom, and meant to be torn off. This part will look like this:

I, (Name of the parent/guardian) give permission for (name of the student) to attend the ***** field trip on the date of *****.

Signed: _____ Date: _____

**Please make sure you study the regulations of the Ministry of Education in your country for leaving the school premises. You may have to complete other documents with the parents, students, transportation companies, school administration, etc.*



Example of a letter to parents



Date *****.

FIELD TRIP TO ***** – WEDNESDAY 22ND MAY 2019

Dear Parents and Carers,

The children from 3rd B class will be going to the (name of the place) on (date of the field trip). The aim of this visit is to create a memorable experience and to inspire them in one of this term's topic - "The Flow". The children will be able to discover all about the river and the animals that live in it. This will be the basis for the unit and the visit will create inspiring opportunities for the children to talk about what they have already learnt and help them think about what they would like to learn while studying our topic. The cost of the visit is ***** and is being heavily subsidised by the school.

The children will be transported by bus to the (exact name of the place) and will need to arrive at school promptly at 8:00 a.m.

To ensure that your child has a fun and safe experience we ask for your help with the following:

- **Wear appropriate footwear (tennis shoes or hiking boots). No sandals, please!**
- **Dress appropriately for the weather in layers. Layers can always be removed!**
- **Protect your child from outdoor conditions such as the sun, mosquitos, and ticks.**
- **Notify your teacher of any health conditions/concerns (bee sting allergy, asthma, etc).**

There will be transport back to school for 3:15 p.m. ☐ Children will need to bring a packed lunch. If your child is entitled to school meals and you would like the school to provide a packed lunch, please let us know as soon as possible.

Please fill in the attached permission slips and return it to the class teacher till (date).

Yours sincerely,
Mrs..... Class Teacher

DECLARATION

I, (name of the parent/carer), parent of (name of the student) **DECLARE:**

I give permission for (name of the student) in class***** to participate in the field trip to (name of the place).

I am familiar of the program of the field trip to (name of the place).

I am familiar with the rules for safety and security during the field trip and I take the responsibility that my daughter/son will observe them.

My child is entitled to School Meals, please provide a packed lunch yes no.

Signed _____

Date _____

Nature education organizations





Organizations that work in the field of nature education and where we can find more information on nature programs for children and families:

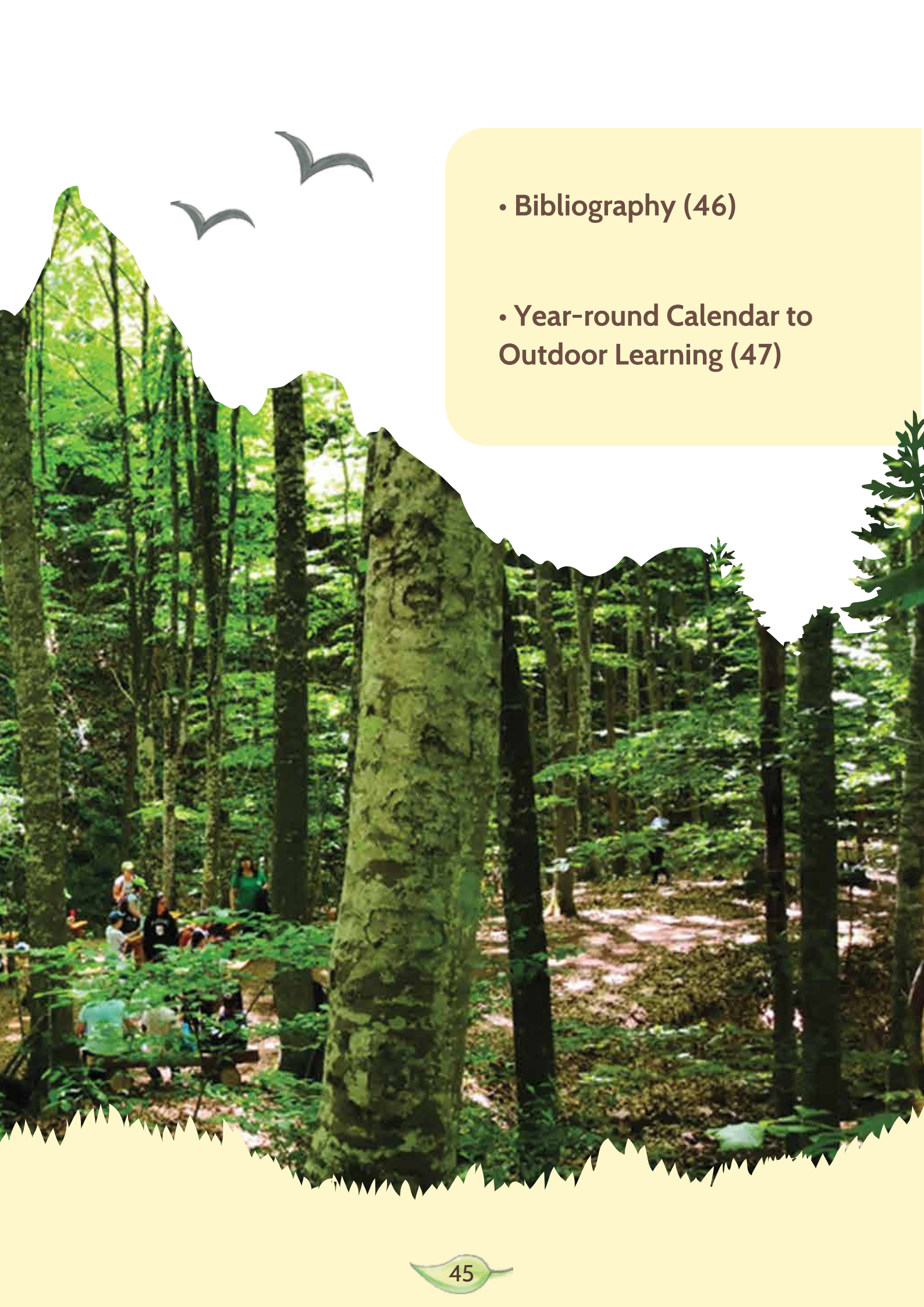
1. World Organization of the Scouts Movement <https://www.scout.org/>
2. Learning about Forests – the Leaf Programme <https://www.leaf.global/>
3. Inside Out Nature Center <http://insideoutnaturecentre.com/>
4. Outward Bound International <https://www.outwardbound.net/>
5. Child & Nature Network <https://www.childrenandnature.org>
6. Eco-Schools <https://www.ecoschools.global/material>



Chapter 3

Conclusions





• Bibliography (46)

• Year-round Calendar to
Outdoor Learning (47)

Useful literature



“ A quiet place and a good book are the two best cures for anything. (Anonymous)



Author	Book	Publishing House
Richard Louv	Last Child in the Woods	(2008) Algonquin Books of Chapel Hill
Richard Louv	Vitamin N	(2016) Algonquin Books of Chapel Hill, New York
David Sobel	How to Raise a Wild Child	(2016) Mariner Books
Jane Williams-Siegfredsen	Understanding the Danish Forest School Approach	(2011) Routledge
Clare Walker Leslie	The Nature Connection - An Outdoor Workbook for Kids, Families, and Classrooms	(2010) Storey
Jane Worroll and Peter Houghton	Play the Forest School Way, Woodland Games, Crafts and Skills and Adventurous Kids	(2016) Watkins
Jane Worroll and Peter Houghton	A Year of Forest School, Outdoor Play and Skill-building Fun for Every Season	(2018) Watkins
Juliet Robertson	Dirty Teaching - A Beginner's Guide to Learning Outdoors	(2014) Independent Thinking Press
Juliet Robertson	Messy Maths - A playful, Outdoor Approach to Early Years	(2017) Independent Thinking Press
Peter Wohlleben	The Hidden Life of Trees	(2018) Harper Collins Publishers
Peter Wohlleben	Can you hear the trees talking?	(2019) Greystone Kids
Clare Walker Leslie	The Nature Connection, an Outdoor Workbook	(2010) Storey Publishing
Laura England	Looking for Learning -Loose Parts	(2019) Featherstone
Dan Westall, Naomi Walmsley	Forest School Adventure	(2018) GMC Publications
Sara Knight	Forest School in Practice	(2016) SAGE Publications Ltd;
Angela J. Hanscom	Balanced and Barefoot	(2016) New Harbinger Publications
Constable Karen	Outdoor Classroom in Practice	(2018) Taylor & Francis LTD
Annie Davy	A Sense of Place: Mindful Practice Outdoors	(2019) Featherstone



Year-round Calendar to Outdoor Learning

January

- 1 SURVAKI (BG) wishing health, wealth and good weather
- 11 Step in a puddle and Splash your Friends Day
- 17 St. Antony Day—protector of farm animals (IT)
- 21 Squirrel Appreciation Day
- 23 National Environment Education Day
- 23 CO2 Reduction Day
- 30 Peace Day (Sp)



February

- 2 World Wetland Day
- 14 Energy Day (SP)
- 17 Random acts of kindness day
- 20 Love your pet day
- 40 days before Easter = CARNIVAL (IT & SP)

March

- 3 World Wildlife Day
- 5 International Energy Efficiency Day
- 12 Plant a Flower Day
- 16 Everything You Do is a Right day
- 20 World Sparrow Day
- 22 World Water Day
- 23 World Meteorological Day
- 24 Earth Hour Day
- 25 Forest National Day (RO)

April

- 1 International Birds' Day
- 7 National Forest Week (BG, starts on the 1st)
- 19 Bicycle World Day
- 22. Earth Day, The Symphony of Tulip (RO)
- 24. Global Day of Banning Experiments on Animals

May

- 1 Wild Flower Not Picking Day (GR)
- 5 World Day of Laughter
- 10 Birds and Trees Day
- 11 Flower Festival (IT)
- 15 Zelenika Day (BG Rhododendron Plant)
- 17 3XR Day (SP)
- 22 International Day of Biodiversity
- 21 Outdoor Classroom Day
- 24 European Day of Parks
- 30 Water a Flower Day

June

- 1 International Child Day
- 5 World Environment Day
- 8 World Oceans Day
- 15 World Wind Day / Nature Photography Day
- 21 World Sun Day
- 22 ENYOY Day (PG picking herbs day)
- 24 Mid Summer's Day (RO—Sanzienele)/St. Giovanni (IT+SP)
- 29 Danube River Day, International Mud Day

July

- 27 National Tree Day
- 28 Schools Tree Day
- 29 National Anthem Day (RO)

August

- 8 International Cat Day
- 9 Indigenous People World Day
- 10 Shooting Star Day (IT)
- 26 International Dog Day
- 29 European Night of Bats/ Anti-Nuclear Testing Day



September

- 16 International Day of Protecting the Ozone Layer
- 22 European Mobility Week (it starts on the 16th)
- 26 Carpathians' Days (RO)
- 30 Walking Day

October

- 2 World Farm Animals' Day
- 4 International Day of Animals—St. Francis, Protector of Animals Day (IT)
- 7 World Habitat Day
- 16 World Food Day
- 21 Apple Day
- 31 Black Sea Day (RO+BG)

November

- 7 World Eco Schools Day
- 11 St. Martin, Chestnut Day (IT)
- 17 International Hiking Day
- 21 Children's Rights Day
- 22 Go for a Bike Ride Day

December

- 5 World Soil Day
- 6 St. Nicolas Day, Protector of the Fisherman (BG)
- 11 World Mountain Day

