OUTDOOR PLAY MATTERS

The Benefits of Outdoor Play for Young Children

Barnardos
THE BEST CLASSROOM
AND THE RICHEST
CUPBOARD IS ROOFED
ONLY BY THE SKY

Margaret McMillan, Educationist and Theorist of Nursery Education
INTRODUCTION

This booklet is for parents and carers of young children up to the age of six, although most of the information applies to children of all ages. It highlights the benefits of outdoor play and shows how playing outside supports your child’s development.

Playing in an outdoor environment has huge benefits for young children’s learning and development. It is great for young children’s physical development and, while playing outside, children also learn how to get on with others and manage their feelings. Children also tend to develop a more positive attitude to learning when they are outdoors. They are usually more active, absorbed and involved, and they see a purpose in what they are doing.

‘The chance to connect with the natural world; first hand experiences of life and growth; endless opportunities for creativity and imagination; improved fitness and physical development – the countless benefits of outdoor play have a real positive impact on children’s lives.’

Into the Woods Outdoor Nursery, UK
THINKING ABOUT YOUR OWN CHILDHOOD

Think about your favourite place to be as a child, where you most loved to play outdoors. Take yourself there for a few moments... notice everything you can about that place – its size, its shape, what the light was like, any special smells, any sounds that remind you of it, any special features of it that you treasure... What was it about this place that you loved?

The delights of the outdoors are among the deepest, most passionate joys of childhood. Very often, adults remember and draw inspiration from magical experiences in natural outdoor settings as their strongest, most powerful memories. The outdoors was, for many of us, an invaluable place for learning. It provided opportunities for us as children to explore, to discover and to develop an understanding of the nature around us.

Along with an instinctive drive to play, young children have particularly deep connections with nature and the outdoors. Sadly, if this is not encouraged, children may not maintain these connections as they get older.

The outdoors gives children unique opportunities for:

- Experience with all their senses
- Physical activities
- Observations
- Art, science, mathematics, language
- Developing social skills
- Building and constructing with sand, water and mud
- Dramatic play
Research has shown that children these days are missing out on these kinds of opportunities. There are many reasons for this such as lack of time and safe spaces for play, a lack of awareness of the benefits for children of playing outdoors as well as negative attitudes about playing outside on the part of some adults. The number of hours children spend on screens – using tablets, phones, computer games and watching TV – has also grown significantly.

*Supporting young children to develop and nurture their sense of wonder and awe can be best achieved in natural environments.*
WHAT CAN THE OUTDOORS OFFER?

There are lots of benefits for young children when they can spend as much time as possible playing outside in interesting outdoor environments. Young children learn through the type of place or environment they are in. When they are outside, children have the freedom to shout and make noise, the space to be more expansive in their physical movements, which sparks their imaginations, and more places to hide in and explore. Children can also be messier outdoors, which encourages them to be more creative and to try things out and experiment.

Richard Louv, author of eight books about the connections between family, nature and the community, says that ‘children who play outside are less likely to get sick, to be stressed or become aggressive and are more adaptable to life’s unpredictable turns’.
Children get lots of physical exercise outside through activities like running, climbing, digging and swinging. Spending a lot of time getting physical exercise outdoors when they are young helps children to develop positive lifestyle habits that are good for their health generally, and also helps to prevent obesity. Children also get lots of vitamin D from sunlight, which is vital for strong bones and teeth and a healthy immune system.

Research shows that movement and thinking skills are powerfully connected. Movement and activity encourages brain growth and improves children’s attention and their memory.

‘The more you keep children sitting, the less attentive they become.’

Dr Tony Pelligrini, American Education Researcher

Movement is especially helpful for children with special needs.

‘Limiting the right of children to be active throughout the day (and in all weathers) can lead to early signs of ADHD.’

Marjorie Ouvry, Education Consultant and Author

Children’s well-being and their ability to understand as well as to control their feelings and emotions also increases from being outdoors as they relax and feel calm. Free play has been shown to help children to heal from stress and trauma in the same way as being able to cry does.
Outdoor play can involve...

- Pretend play
- Being messy
- Being noisy
- Dealing with uneven surfaces and heights
- Pretend play
- Being noisy
- Trying out new things
- Cooperating
- Fun and enjoyment
- Digging and planting
- Getting dirty or wet
- Building and constructing
- Lifting, carrying and pouring
- Sometimes getting small cuts or bruises
- Running and jumping
When your child is running around outside or making mud pies, you might worry that they are ‘only playing’ and not learning things they need to learn. It is important to remember that play is one of the very best ways that young children learn.

Children learn through active, hands-on experience – playing, exploring, experimenting and discovering. For example, long before very young children begin to form speech, they soak in the sights and sounds around them that are essential to their language development.

Children’s right to play is so important that it is recognised in the United Nations Convention on the Rights of the Child (Article 31).

The value of play is also recognised in Síolta: the National Quality Framework for Early Childhood Education, a set of national standards for all those who care for and educate young children (see www.siotla.ie for more information).

In Síolta, the key role of parents, the value of play for children and the importance of where children spend their time learning and developing are all formally recognised. In Síolta it is clear that ‘Play is central to the well-being, development and learning of the young child.’

Aistear, the National Early Childhood Curriculum Framework, also recognises that young children learn and develop by doing things, by playing and by having hands-on meaningful experiences (see www.ncca.biz/Aistear). Aistear
tells us that the place where young children play and learn should allow them to:

- Express themselves
- Interact with others
- Make choices
- Test ideas and materials
- Create
- Develop and practice skills
- Stimulate curiosity
- Develop consideration for others and independence
- Explore and make discoveries
- Solve problems
- Persevere in the face of difficulties and uncertainties

Outdoors is the perfect learning environment for all of these.

*Many outdoor play opportunities meet the Aistear Identity and Belonging goal for children of showing increasing confidence and self-assurance in directing their own learning.*
CHILDREN LEARN THROUGH ACTIVE, HANDS-ON EXPERIENCE - PLAYING, EXPLORING, EXPERIMENTING AND DISCOVERING
PLAY AND CHILD DEVELOPMENT

Play is active learning that brings together the mind, body and spirit. Until at least the age of nine, children learn best when their whole self is involved. Their learning is holistic – they learn many different things at the same time and what they learn is connected to where, how and with whom they learn. Later learning builds on early learning, so young children’s learning grows layer on layer from birth, which means that their early learning impacts on what they can learn later.

When they are playing, children can relax and this means that they are more open to learning. We know too that children use their play to work through and make sense of their everyday experiences and of important things in their lives that affect them strongly emotionally. Examples include things like a new baby in the family, a trauma or a loss, or any anxieties or worries that they may have.

Play also plays a vital role in children developing high-level skills like being flexible, making decisions and planning.

Brain development

We now know from research in biology, in neuroscience, in genetics and in psychology that, aside from what a child inherits through their genes, the development of the actual structure of a child’s brain depends on the experiences and opportunities they have as they grow.
This early development of the brain forms the foundation of a person’s lifelong ability and capacity to learn, to adapt to change, to have resilience (cope with stress) and to be strong in unexpected circumstances, as well as the foundation of their physical and mental health.

‘Early experiences determine whether a child’s developing brain architecture provides a strong or weak foundation for all future learning, behaviour and (both physical and mental) health.’

Center on the Developing Child, Harvard University

The experiences young children can have during quality outdoor play will have a powerful effect on the growth of their brains, creating a strong foundation for all of their future development.

* Becoming familiar with and using a variety of print in an enjoyable and meaningful way is a learning goal of Aistear under the theme of Exploring and Thinking and the theme of Communicating.
WHAT CAN CHILDREN LEARN DURING OUTDOOR PLAY?

More than you might expect!

Children who can play freely with their friends develop skills for seeing things through another person’s point of view – cooperating, helping, sharing and solving problems.

The development of the senses of smell, touch and taste, and the sense of how they move through space (known as proprioception) are also best learned through experiences outdoors. These aspects of learning and development are just as important as (and also connected to) learning how to read, write or do maths.

Outdoor play and the excitement involved in it, whether it involves playing in the sand or in the mud, playing with water, jumping in puddles, crawling through tunnels, balancing on logs or building dens can help children in many ways (see opposite page).
Outdoor play helps children to...

- Develop their language and communication skills
- Build their strength and resilience
- Work out ways to get on with other children
- Get over some of their fears
- Make more sense of their world
- Build their strength and resilience
- Develop self-control
- Become more independent
- Learn more about their bodies
- Learn about decision making and problem solving
- Cope better with stress
- Develop the ability to share, take turns, cooperate
- Test their abilities
- Learn more about their bodies
- Use and develop their imagination
- Make more sense of their world
- Experience adventure
- Develop the ability to persist
- Develop conceptual abilities – the ability to imagine an idea without actually seeing it in practice. This is a higher logic and mental exercise, and a really important foundation for maths and science.
- Improve their self confidence and self esteem
- Learn about the outdoors, the weather and the seasons
- Develop their immunity
Opportunities to engage, explore and experiment in their environment and use new physical skills including skills to manipulate objects and materials meets one of the learning goals under the theme of Exploring and Thinking in Aistear.

The outdoor play space:
- Provides a place full of meaning for children to gain understanding and skills
- Makes learning fun and enjoyable
- Encourages children to explore and discover together and on their own
- Allows children to add to what they know and are learning
- Allows children to practice skills
- Allows children to test how much they are able to do
- Encourages children to experiment and take risks
‘Children will fall and will get bruises because that is part of their learning.’

Marjorie Ouvry, Education Consultant and Author

It is common for parents to worry about children playing outside, but exploring, solving problems and testing how far they can go is how children learn.

You might sometimes find yourself saying things like “Watch out, you’ll fall” or “You’ll get dirty” or “That’s too high”, but children need to experience challenge and if you are doing this constantly, it suggests to your child that you have doubts in their abilities and this can undermine their efforts. Suggesting to a child that they are likely to fall may even lead to them falling through ‘the power of suggestion’. Often too, the amount of risk involved is less than you might think.

Simply being told about possible dangers is not enough – children need to see or experience the consequences of not being careful. By engaging in exploration and adventure, taking risks and meeting challenges they can learn what they are able to do as well as the limits of their physical capabilities.

Children, therefore, need to be given the chance to ‘have a go’, to try new things, to test out their own ideas of what they can do and explore a range of outdoor activities. This, at times, may involve getting dirty, trips, falls and some minor cuts and bruises or some tears. However, it is these experiences that are an important part of learning and developing confidence.
Everyday life always involves a degree of risk and children need to learn how to cope with this from an early age. They need to learn how to take calculated risks. For this learning to happen, children must have opportunities for challenging and adventurous play and to move and act freely.

For example, a child playing with large boxes may want to see how high they can build them or climb on them while a child with a large bucket may want to see how much they can fill it and still be able to carry it. They can only answer these questions for themselves by being allowed to try. Being outside with extra space allows this to happen more freely and gives them the opportunity to learn what works and what doesn’t and about weight and the power of gravity.
Weighing up the risk

Setting too many limits and not letting children play for long periods of time outside could lead to:

- Too much time without movement
- Children being overweight or obese
- Poor ability to get on with others
- Poor physical skills, such as the ability to throw, to run and to balance
- Reduced self-confidence
- Reduced ability to concentrate
- Reduced creativity
- Reduced ability to cope with new and different situations or to solve problems

‘One of the best ways to help children to learn about risk is to teach them how to deal with difficult and tricky situations by allowing them to experience them in controlled conditions. Removing risk is not the answer. Life is not risk-free. Risk needs to be part of a child’s education.’

Chief Inspector of Schools, Ofsted, UK
It is important that all of those who are responsible for children follow appropriate safety procedures and assess the risk involved but, as a parent, you need to accept that if your child takes part in outdoor activities, there is always going to be some element of risk.

*Being aware of their bodies and their changing abilities, discovering, exploring and showing good judgement when taking risks are some of the learning goals for young children under the theme of Well-Being in Aistear.*
THE REAL RISK FOR CHILDREN’S DEVELOPMENT IS THAT THERE IS NO RISK!

Prof. Anita Bundy, Occupational Therapist, University of Sydney
THE LEARNING OPPORTUNITIES IN PLAYING WITH WATER

In an article written for Community Playthings on Making the Most of Water Play, Dr. Sandra Crosser looks at the many things that young children can learn from water play. The following is adapted from what she says.

Water play is suited to all children regardless of the child’s ability or disability, age, language, gender, culture or needs, and is a wonderful learning tool. Water is also fascinating and intriguing, children are always eager to explore it. Outdoor play with water can involve anything from puddles, spray bottles and garden sprinklers to paddling pools, streams and the sea.

What can children learn from water play?
Water play helps problem-solving and thinking skills in general and it particularly helps the development of the foundations of maths and science and the essential building blocks for later learning. It can also help the development of physical skills, promote social learning and cooperation, and enrich language experiences.

Children have a drive to make sense of their world and playing with water can be one of the puzzling, new and unusual situations that can promote learning. With the time and opportunity for lots of exploration, a child will develop meaningful ideas about how things work.

Playing with water can help to challenge children’s existing ways of thinking. For example, a child playing with a variety of objects in water might come to the wrong conclusion
that all heavy objects sink and light objects float. If that child comes across an object that is heavy but also floats, such as a log, this will not fit in the child’s idea of floating and sinking objects and they will be challenged to adjust their original thinking.

**Learning maths**

The following list contains just some of the maths concepts that can be learned through playing with water:

<table>
<thead>
<tr>
<th>empty/full</th>
<th>many/few</th>
<th>before/after</th>
</tr>
</thead>
<tbody>
<tr>
<td>thick/thin</td>
<td>more/less</td>
<td>same/different</td>
</tr>
<tr>
<td>heavy/light</td>
<td>shallow/deep</td>
<td>greater/less than</td>
</tr>
</tbody>
</table>

**Learning science**

Water play leads children to ask questions, “What does it do?”, “How can I change it?” Curiosity leads to experiments, which provokes even more curiosity and more questions to challenge and wonder. Wonder is what drives scientists to explore.
Learning physical skills
Physical skills are developed through using water – the use of both large and small muscles as well as the skills needed to match eye and hand movements.

- Children use large muscles as they lift buckets and use big sponges.
- Eye-hand coordination is practiced as children catch things in the water with nets, scoops, sieves and their fingers.
- Small muscles are used to fit plastic tubes on to funnels, pour water from container to container or to squeeze bottles and sponges.

Learning social skills
When involved in any form of play, children have many opportunities to learn about sharing of materials and ideas. Even playing on their own means they must consider the needs of others, for example, if they want to splash water they need to make sure nobody else gets wet.
Learning language

When children play, they use and learn language naturally. Words such as sieve, funnel, surface, whip, pour, flow and strain add to the young child’s vocabulary and allow them to express themselves more clearly. Words about position – beside, above, through, over, under – and words about how one thing relates to another – larger, smaller, last – grow naturally out of water-play experiences.

‘It is important to understand the concept of upside-down before understanding the difference between a letter “b” and a letter “p” or a number “6” and a number “9”.’

Marjorie Ouvry, Education Consultant and Author

Children learning English as a second language particularly benefit from the language and chat that flows when children work together or side by side.
CONTACT WITH NATURE AND NATURAL MATERIALS

‘...regular contact with nature is part of a balanced diet of childhood experiences’.
Tim Gill, Writer, Researcher and Consultant on Childhood

All the expensive equipment and all the indoor materials produced by the best makers in the world cannot replace the experience of hands-on involvement with natural materials.

- The sparkle of sunlight through leaves or on water
- The sound and movement of plants and trees in the wind
- The look and feel of a cobweb
- The sight of butterflies, ants or other insects
- The imaginative possibilities of mud or a pile of sand
- The feelings and sensations involved in playing with water

When children are free to follow their own interests using ‘open-ended’ materials they learn to think for themselves. Open-ended materials or playthings are those that allow children to determine for themselves what to do with them and how to do it.

Natural outdoor areas are full of open-ended opportunities. A piece of wood can be a mobile phone, a plate, a camera, a truck... even a baby! Water can be tea, ice cream, even wine! Sand can be made into roads, it can be food and when added to water it can become cement. A cardboard box – as we all know – can be anything!
‘Imagination is the source of every form of human achievement’

Sir Ken Robinson, International Advisor on Education
WHAT CAN PARENTS DO?

You can support your child’s enjoyment, learning and development by understanding the benefits that outdoor play – sometimes risky, sometimes messy and sometimes wet or cold – can provide. Being outside in all weathers and in every season gives children the chance to experience ice and snow, sunshine and wind, the changing colour of the leaves in autumn and the appearance of green shoots in spring.

Sometimes parents don’t like their children going outside to play because they don’t want them getting dirty. Dr. Ashok Jansari, a Cognitive Neuropsychologist, says that ‘...letting your children go out and play and maybe even getting a bit dirty is actually a very good thing’.

Learning about the natural environment and its features, materials, animals and plants, and their own responsibility as carers is a goal of Aistear under the theme of Exploring and Thinking.
WHEN YOUR CHILD IS AT CRÈCHE OR PRE-SCHOOL

Often, early years educators ask parents to send their children to their crèche or pre-school wearing comfortable clothes that they can move freely in, clothes that are not too good, and also to include a spare set of clothes. Some ask that you provide sunhats, wellies or raingear too. This helps them to provide as wide a range of valuable outdoor experiences as possible for your child without having to worry about how you, as a parent, might react if their child gets dirty or wet or damages their clothes.

It is also helpful for your child to feel free to get fully involved in whatever outdoor play experiences and opportunities are provided without feeling concerned that you might be cross with them if they get dirty or wet or accidently tear their clothes. Your crèche or pre-school may welcome donations of old clothes or wellies that your child has grown out of so that they can have a supply for other children who might need them.

Some pre-schools or crèches may also ask for old kitchen utensils such as sieves, colanders, saucepans, wooden spoons, jugs, containers, baking tins and other items that can be used for imaginative play outside in the sand, mud or water. They may also be delighted to get open-ended materials like the large cardboard boxes you get when you buy something like a new washing machine or fridge.

It is also very important to remember the benefits of risky play for your child’s healthy development and to be open
to discussing with the staff at your crèche or pre-school what activities you feel confident about allowing and supporting your child to participate in.

Other things that you can do

- Provide as much opportunity as possible for your child to experience and play freely in natural outdoor environments – the garden, the local park, the beach, the woods or the local playground.
- Support your child to be physically active, allow them to explore and encourage them to be imaginative.
- Encourage your crèche or pre-school to provide as much time outdoors as possible for your child by letting them know that you value and appreciate the learning opportunities this kind of play can provide and are happy for your child to be outside in all weathers.
- Ask to see the service’s policy on Outdoor Play.
- Ask about your crèche or pre-school’s approach to Risky Play and about whether they consider the benefits for children as well as the possible risks.
- Consider volunteering to support visits by the service to local natural environments such as parks or woods.
- Show your child that you are interested in what they played while they were outside at crèche or pre-school.

There are further ideas around play on the following websites:
www.letthechildrenplay.net
www.sunhatsandwellieboots.com
www.theimaginationtree.com
www.ncca.ie/en/Curriculum_and_Assessment/Parents

You can find more resources for parents on www.barnardos.ie.
When I’m playing outside, I’m learning:

Absorption  Arranging  Adapting  Action  Animals
Autonomy  Balance  Belonging  Calculating  Caring
Change  Cause and Effect  Chemical Reaction  Community
Classification  Creative Thinking  Construction  Co-operation
Density  Communication  Creatures  Culture  Connections
Confidence  Conservation  Depth  Distance  Evaporation
Exploring  Force  Experimenting  Environment  Friction
Feelings  Friendship  Gravity  Height  Identification
Inertia  Insects  Investigation  Initiative  Independence
Invention  Light  Listening  Language  Manipulating
Movement  Matching  Measurement  Mass  Myself
Negotiation  Nature  Nurturing  Number  Observing
Ordering  Patterning  Physics  Planning  Problem Solving
Propulsion  Plants  Questioning  Reaction  Risk
Responsibility  Self control  Size  Shape  Speed
Spatial  Representation  Suspension  Scent  Seasons
Scientific Method  Touch  Temperature  Team Work
Texture  Vibration  Volume  Weight  Weather

And so much more!

Playing outside makes me happier, healthier, smarter

(adapted from www.letthechildrenplay.net)
This booklet was written by Marie Willoughby and produced in collaboration with Kilkenny County Childcare Committee; Wicklow County Childcare Committee; Wallaroo Playschool, Cork; Irish Steiner Kindergarten Association. Thanks are due to Grassroots Preschool, Kilkenny and Glen Outdoor Preschool, Letterkenny, Co. Donegal.