

Follow Nature: Embracing Nature's Wonders

Natural exploration in early childhood involves children asking questions and seeking answers through exploration and investigation. Learning through nature is not memorizing facts and concepts. It is developing the ability to think critically and understand the world, where we fit in it, and how to care for it.

Why Nature? The benefits of nature play are astounding!

- Stress reduction: People who spend time in nature produce lower concentrations of cortisol (stress hormone), lower pulse rate, and lower blood pressure.
- Immunity boosts: Phytoncides are airborne chemicals that plants emit to protect themselves from rotting and insects. Phytoncides also benefit humans by boosting white blood cells.
- Improved cognitive functioning: Experiences and materials are child-led through imagination and creativity
- Improved socio-emotional development: improves confidence, encourages risk-taking
- Improved physical health: reduction in obesity, increase in large and fine motor skill functioning

Glossary:

Phytoncides: Airborne substances produced by plants and trees to protect them from germs, rotting, and insects. When people breathe in these chemicals, our bodies respond by increasing the number and activity of a type of white blood cell called natural killer cells.

Petrichor: The earthy fragrance of the rain hitting dry ground was named petrichor by Australian researchers in 1964. They described it as a combination of plant oils and the chemical compound geosmin which are released from the soil when it rains and named it petrichor.

Shrin-rin-yoku: Forest bathing A type of nature therapy with the intention of improving an mental or physical health, specifically by the being within nature or outdoor surroundings.

Earthing/Grounding: This practice of the simple contact of your feet with the earth can serve as an effective strategy against pain, poor sleep, and inflammation. Studies show that walking barefoot can improve chronic health conditions, reduce stress, and support immune system functioning, as well as support emotional and physical well-being.

American Forest Kindergarten Model - early childhood program <http://forestkindergartenassociation.org/>

1. Spends several hours of unstructured free play in nature. All weather nature immersion.
2. Implements child-led/flow learning. Flow learning leads to emergent curriculum, the lessons that emerge when children are free explorers in nature.
3. Inquiry-based teaching is used. Teachers are guides and co-learners (reflecting back awe and wonder in nature). Activities can be offered but are not required.
4. Documentation of learning is collected for educators, children, and parents to reflect on children's learning and experiences.

Provocations: Use provocations to draw out interests and encourage them to think more deeply about what they are interested in. Provocations are thoughtful decisions made by the educator to extend the ideas of the children. Teachers provide materials, media, and guide as needed, but the children take the ideas where they want (Journey into Early Childhood).

Mr. Rogers Episode List: [https://en.wikipedia.org/wiki/Mister_Rogers%27_Neighborhood_\(season_1\)](https://en.wikipedia.org/wiki/Mister_Rogers%27_Neighborhood_(season_1))

Child and Educator Roles

EDUCATORS Role:

- **Co-constructors/encourager/lifelong learner:** provoke, guide, nurture, ask questions, learn, hypothesize
- **Researcher:** gather information, observe, and act on who, what, when, where, why, how to advance learning
- **Documenter:** observe, listen, record, display, revisit
 - Take pictures throughout the process
 - Jot down meaningful, direct quotes and actions objectively
 - Children may draw pictures of their impression of the experience
 - Collect examples
 - Gather and construct a poster board or bulletin board of learning for reflection

CHILDREN:

- Engage
- Notice
- Wonder
- Question
- Investigate
- Hypothesize

Reflect together about learning, ideas, feelings, and experiences

Nature Explore Classroom Design

Examples of Nature Explore Classrooms: <https://certified.natureexplore.org/certified-nature-explore-classrooms/>

1. Open Area for Large Motor Activities (Wheeled toys, Space for Duck, Duck, Gray Duck)
2. Climbing/Crawling and Dynamic Equipment Area (Swings, Slides)
3. Music and Movement Area (Music Wall)
4. Nature Art Area (place to create and design mud pies and mosaics)
5. Building Area (blocks, sticks, ramps)
6. Gardening Area (or pathways through planting)
7. Gathering Area (a place to sit and read/relax)
8. Messy Materials: Water, Sand, Dirt-Digging areas)
9. Storage Area
10. Materials, toys (including loose parts), tools for exploring and measuring

No Child Left Inside Child Care Pledge: I will encourage and support opportunities for children to:

- Splash in clean water and breath clean air
- Dig and plant seeds in healthy soil and watch what grows
- Climb a tree and roll down a grassy hill
- Skip a stone across a puddle...and occasionally jump in it!
- Follow a trail and see where it leads
- Listen to song birds and watch them eat and fly
- Discover wildlife in the backyard, whether under a log, rock, or in a web
- Soak up the beauty of the sky, sun, and clouds
- Find a sense of wonder and purpose in our ecosystem called Earth
- Become a part of the next generation of nature lovers

Nature Awareness Activities

- Material Ideas for Nature Play: Pallets, Spools, Sticks, branches, logs, twigs, Fallen tree, stumps, 2x4 or 2x6 (balance beams, walkways, small bridge), tall native ornamental grasses, shrubs and bushes: willow shrub, edible plants: chives, kale forest, herbs, green beans, peas, bird feeders/birdbaths, rocks, water source, funnels, gutters, musical instruments/music wall (pots, pans, grills, bamboo), wild flowers for butterflies, vegetable garden, fairy village, thermometer, rain gauge, wind sock, stepping stones, logs for sitting and balancing, tires, table for exploring nature finds, rain gutters for floating, dripping water or rain barrel for water play and caring for plants.
- FYI when planning for planting: <https://www.dhs.state.mn.us/main/groups/licensing/documents/pub/dhs-288784.pdf>

LOOSE PARTS: in a natural play area: water • sand • dirt • sticks • branches • logs • driftwood • grasses • moss • leaves • flowers • pinecones • pine needles • shells • bark • feathers • boulders • rocks • stones.

On a playground: balls • hoops • jump ropes • tires • sand • water • dirt • straw • boulders • rocks • stones • pebbles • buckets • cups • containers • digging tools • chalk • scarves • ribbons • fabric

In an indoor environment: blocks • building materials • manipulatives • measuring • pouring devices (cups, spoons, buckets, funnels) • dramatic play props • play cars, animals, and people • blankets • materials • floor samples • water • sand • sensory materials • recycled materials (paper tubes, papers, ribbons, caps, lids, wood scraps, wire, foam, cardboard) • plastic gutters • small plungers • tools • art materials (spools, natural and colored popsicle sticks, beads, straws, paints, brushes)

Tools: Binoculars, Magnifying glasses, Flowers for butterflies and bee observation, Nesting boxes and bird houses, Bug jars – peanut butter, parmesan cheese, Ziploc disposable type containers on hand at all times to temporarily capture critters!, Folger's coffee containers, Wooden rulers, Clipboards, paper, writing utensils/colored pencils and so much more! The only limit is the children's and your imagination, creativity, and, of course, health and safety.

NATURE! EMBRACE IT WITH ALL SEASONS, EXPERIENCE IT WITH ALL SENSES!

"DET FINNES IKKE DÅRLIG VÆR, BARE DÅRLIGE KLÆR"

There's no bad weather, only bad clothing.

Links and Resources for Following Nature

New 2016 ECIPS Guides: <http://education.state.mn.us/MDE/dse/early/ind/>

DHS August 2016 Plants List: <http://www.dhs.state.mn.us/main/groups/licensing/documents/pub/dhs-288784.pdf>

MN State Parks Junior Naturalist Program: http://www.dnr.state.mn.us/state_parks/kids.html

Nature preschool and child care environments:

Preschool at 1870s farm: <https://www.wildflowerlearningcommunity.org/>

Natural Start Alliance: <http://naturalstart.org/>

Nature Explore: <https://natureexplore.org/>

Forest Kids Early Learning School: <http://www.forestkids.ca/>

Dodge Nature Center in St. Paul: <http://www.dodgenaturecenter.org/>

Timbernook: <https://www.timbernook.com/>

The Cedarsong Way: <https://cedarsongway.org/>

Activities:

Conservation Education Lesson Plans: <https://naturalstart.org/resources/inspiring-childrens-spirit-stewardship-toolkit-early-childhood-programs>

Nature Play at Home:

https://natureplayandlearningplaces.org/wp-content/uploads/2014/09/NaturePLayatHome_WEB_0_508.pdf

Loose Parts:

<http://fairydustteaching.com/2016/02/loose-parts-construction-checklist/>

http://www.childcarequarterly.com/pdf/winter14_parts.pdf

<http://playgroundideas.org/new/loose-parts-manual/>

Facebook pages:

MN ECO: Minnesota Early Childhood Outdoors: <https://www.facebook.com/MNEarlyChildhoodOutdoorLearningNetwork/>

Secret Forest Playschool: <https://www.facebook.com/TheSecretForestPlayschool/>

ForestKids Early Learning: https://www.facebook.com/ForestKidsCanada/?ref=br_rs

Dodge Nature Preschool: <https://www.facebook.com/DodgeNaturePreschool/>

The Curiosity Approach: <https://www.facebook.com/thecuriosityapproach/>

Let the Children Play: https://www.facebook.com/letchildrenplay/?ref=timeline_chaining

Let the Babies Play: <https://www.facebook.com/letthebabiesplay/>