







## SUMMARY REPORT

# Nature Pedagogics

Making the Green Deal Real by Starting Young

#### Background

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In the Nordics, we use nature pedagogy to foster a better relationship between humans and nature from a young age. Our philosophy is that by guided nature play; using nature as a teacher; and learning about the personal impact on our surroundings, we create aware and action-focused citizens who will carry the torch of the green transition. This idea permeates our nature-loving culture and is a defining feature of Nordic living which can serve as an inspiration across Europe.

The theme for the EU Green Week 2022, which falls on the Year of the Youth, creates an opportune moment to highlight the role that children play in the climate transition. A synergy more frequently highlighted at the European level as seen in, for example, the current EU Biodiversity Strategy; the EU Zero Pollution Action Plan; and the EU Action Plan for Circular Economy. With this increasing policy interest, we also see a growing interest for nature pedagogy from other EU regions and cities outside of the Nordic sphere.

During our webinar, we explored how the cities of **Lahti, Aalborg**, and **Gothenburg** use nature pedagogics in their climate transition by highlighting the administrative framework used and case studies performed.

#### Key Messages

- Outdoor pedagogy can be used as a tool for creating deeper knowledge and understanding for sustainability, equality environment, human rights, and cultural history
- Nature provides a space where children increasingly engage in communities across age groups, gender, culture and interests
- Allocate space and time in the school curriculum so that children and learners of all ages can have opportunities to experience and learn about and in nature
- Children's contact with animals is important for their development
- Ask the children, what they want to learn and include them in the design of their school yards and lessons
- It is important to consider the children's physical needs when designing outdoor areas for nature pedagogy
- Include working in nature as part of all teachers' (history, art, etcetera) curriculum research clearly shows the benefit for both children and teachers of learning outside
- Nature pedagogics could be tied to teacher well-being as part of the new EC proposal for Pathways to Success
- Continue exploring the links between play, health, and nature

#### Introduction to the webinar

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Moderator: Ulrike Pisiotis, Policy Officer Education for the green transition, European Commission, Directorate General Education, Youth, Sport and Culture

Through the European Green Deal and the goal to become climate-neutral by 2050, the EU is working to deliver on the transformational changes needed to meet the environmental challenges we face. This is an effort that involves many policy areas, including education and training. Learning and teaching for the green transition and sustainable development means preparing learners for a future and in fact already for a present where they have to be ready and able to tackle climate change and live and work more sustainably. The EU has issues policy guidance to support Member States in their efforts to embed sustainability in their education and training systems. This includes a <u>Council Recommendation</u>, a <u>Handbook</u> and a <u>framework for sustainability competences</u>.

Spending time in nature and providing children from a young age and in fact all learners with opportunities to learn in, about and from nature has a long tradition in Scandinavian countries.

Learning *in* nature and not only about nature can help learners develop a connection and a caring attitude towards nature and support sustainable behaviour. In fact, research shows that knowledge alone has little impact on a pro-environmental mindset and taking action for the environment. What has a big influence though is being connected to nature, spending time in nature.

We also know from research that being in nature enhances learning outcomes and personal development in general. Exposure to nature can positively influence attention, self-discipline and motivation, and overall well-being.

#### Environmental Education in Lahti, Finland Environmental Director, Elina Ojala, City of Lahti

The City of Lahti has adopted ambitious climate targets of becoming carbon neutral by 2025 and wastefree by 2050. During her session, Environmental Director Elina Ojala explained how the city has worked to align actions towards these targets; and how awareness-raising and education form an integral part of this work. The city's environmental education consists of three pillars: sustainable lifestyle and ecosocial education, environmental education programmes and its environmental educators that help implement nature pedagogy in kindergartens and schools; and they can already see the effects of this work.

While it is important to have good infrastructure in place in order to catch material streams, we need to also tackle our consumption patterns to succeed at creating a circular economy. Here we can see that the children are already displaying different attitudes towards recycling and waste than their parents and it is great that we have this channel to get through to the parents via the kids. Further, the city has also implemented "Nature Step to Health", which is a new 10-year programme that aims to highlight the idea that nature can positively impact both our physical and mental well-being.

#### Further reading

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- <u>Junior University</u> (Finnish)
- <u>Nature Step to Health Programme</u> (Finnish)
- UNESCO Global Geopark (English)
- <u>LYKE network</u> (English)

#### Nature Pedagogy in Aalborg, Denmark Nature Physiotherapist Helle Fuglsang, Aalborg Municipality

Four years ago (2018) the pedagogical curriculum in Denmark was modernised to increasingly work with nature, science and outdoor life. What they found was that the pedagogues who had not used nature as a tool before were surprised by the impact it had on children, as they could observe the children form new friendships outside, across gender, age groups etcetera. While it was an eye opener that what you can do inside you can do outside in nature, not all pedagogues were comfortable with working outside.

Since not all schools have access to surrounding green areas<sup>1</sup>, Nature Physiotherapist Helle Fuglsang works on how to best integrate nature into kindergarten playgrounds. She teaches schools to explore nearby nature, such as elderly homes gardens, and make use of so-called "green corridors" to get there. Using these gardens and including the elderly in the education of the children also allows for intergenerational learning and combats loneliness.

Further, the COVID-19 pandemic further accelerated the process of using nature in education since all pre-schools were outside, employing social distancing rules. Now, Aalborg Municipality has employed a system where they plan for future kindergartens to have one less room than classes – in this way one class will always be learning outside. Starting with Børne Unge Universet, Stigsborg.

#### **Further reading**

- <u>https://groenskole.dk/</u> (Danish)
- Krible Krable (Danish)

#### Outdoor Pedagogy in Gothenburg, Sweden

#### Planning Officer - Outdoor pedagogics Susanne Bergdahl & Zoologist Linda Thelin, City of Gothenburg

In the City of Gothenburg, outdoor pedagogy is seen as a tool that has the potential to reach out to people with deeper knowledge and understanding for questions like sustainability, equality, environment, human rights, and cultural history.

The city has worked strategically with nature pedagogics since the early 2000s. Planning Officer Susanne Bergdahl's work has focused on making green areas around the city fit for this purpose. The city uses a mixture of both manned and unmanned nature pedagogy as well as temporary and semi-permanent

<sup>&</sup>lt;sup>1</sup> This is a problem that is expected to grow with increasing urban densification.



activities around the city to reach their primary target group of children and teenagers, as well as all citizens and visitors of the city. For instance, in the large centrally located park *Slottsskogen*, which include a zoo, children and the public can experience nature and come into close contact with animals. Further, they can also increase their knowledge through for example school programmes, daily information sessions and signs. Zoologist Linda Thelin, stress that the visitors' own experience of nature is very important since the science say that this is the most important tool if you want to induce pro-environmental behaviours.

In Sweden, there is strong support for working with nature pedagogics; both from school legislation which allocates time in the curriculum for outdoor learning and from pedagogues in schools. Although, since schools are very much guided by the curriculum, the content of school programmes must have a clear connection to the curriculum and closer collaboration with the city school administration is preferable. Here, the city has used reference groups of teachers for input and organises reference classes where the children themselves can speak about what they want to learn.

#### **Further reading**

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- Ut och njut i Göteborg (Swedish)
- Barns kontakt med djur i vardagen (Swedish)
- New report: Common Cause for Nature (English)

#### Panel Discussion

Policy Officer Joint Research Center (JRC) European Commission, Vera Winthagen; Susanne Bergdahl & Linda Thelin; Helle Fuglsang; moderation: Ulrike Pisiotis, European Commission

Nature pedagogy has close links to the New European Bauhaus, could you provide a brief description of what it is?

**Vera Winthagen (JRC)**: Yes, New European Bauhaus (NEB) started about 1.5 years ago. The main question was how we want to live together after the pandemic – knowing that we have a lot of societal transitions coming up that combines the Bauhaus principles, sustainability, inclusion and aesthetics. NEB started as part of the Renovation Wave, focusing on buildings, but tackles everything that include our "living environment". NEB started with a co-design phase, because we knew that there was already a lot of good initiatives taking place within Europe. When we collected the results, one of the biggest themes was "Reconnecting with nature", that carries similarities with nature pedagogy. For instance, children working with elderly in their garden – it has a very similar theme.

#### How do you see that change is happening? Hopefully happening?

**Helle Fuglsang, Aalborg Municipality**: The Green Flag institutions make a plan for the year and shares all the progress that they have made so the Green Flag Council can share good examples with other schools. This means you can monitor the progress made both National and in their local area.

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**Linda Thelin, City of Gothenburg:** We evaluate our activities, for instance in *Slottskogen City Park* we ask the classes to fill in an evaluation. These results are good, but it is harder to make long-term evaluations. Currently, we are having discussions with academia to see if we can form a research project where we would follow-up with children or adults in a longer aspect. We systematically use research results in other parts of our work, when we talk about nature, animals, ecosystem services etcetera. We also try to evaluate our current actions in collaboration with academia – here, *Slottskogen City Park*, is an arena for many disciplines such as ecology, pedagogy.

## What would your advice be to cities that are not so rich in nature/natural green areas? How can they create space where people can connect with nature?

**Susanne Bergdahl, City of Gothenburg:** In Sweden we have a lot of natural forests, parks, and areas in which we have the opportunity to work with outdoor pedagogy. However, when we plan, we need to ensure that different values provided by nature are taken in consideration. It's important to understand that outdoor pedagogy can be beneficial in many ways, such as physical and cognitive development for the children. A more carefully planned and natural-like area without borders can also create an environment where the children play more as equals, not only between the sexes but also between children of different age groups and children with disabilities.

The curriculum for the compulsory schools and preschools has several goals which are connected to nature. For instant it says that there should be a focus on the "seasonal changes as well as some animals and plants life-cycles". The prospect of finding a small animal in the flowering trees or shrubs during the spring, to be able to access the trees by climbing or perhaps try an apple during the autumn adds several new dimensions in how the children move. Since children tend to naturally have activities where they run fast and then go through a form of active rest, elements such as climbing trees, puddles or fallen leaves that are accessible to them provide other possibilities for learning – It's therefore important to create areas where we look to children's physical needs and abilities. It is in the unprogrammed nature-like spaces where they can find new ways to access knowledge through play. In the end, the green part of a playground is as crucial as the playground itself. We see that climbing a tree is as important to a child's physical cognitive development as sports.

#### How can New European Bauhaus support such urban planning?

**Vera Winthagen, JRC:** We have calls, but the main thing is to build a network so that people can learn from each other, from concrete projects that can advance the knowledge. By collecting best practice and putting them in the spotlight, for instance during the New European Bauhaus Festival. We (JRC) are currently working on a document for a participatory approach "Did you forget the children when you designed the public space?" – it'll be a type of checklist that you can use to assess your own project.



How do you use research as part of your work?

**Helle Fuglsang, Aalborg Municipality:** We collaborate with Copenhagen University that has done a lot of studies on the effects of nature on the wellbeing of children. <u>Center for Børn og Natur – Københavns</u> <u>Universitet (centerforboernognatur.dk)</u> and <u>Steno Institut outdoor play programme</u> where they are trying to see what happens to the children's wellbeing in the long term because of the outdoor school "Move out". So, we use these two a lot.

When it comes to intergenerational learning, we saw the example of grandparents acting as nature guides – are there special courses for the grandparents?

**Helle Fuglsang, Aalborg Municipality:** I'm currently planning to create a course for grandparents and children to take in nature. We believe that it is important to learn about the lifestyle of the grandparents as their lifestyle is generally a lot more sustainable. For instance, we have organised repair cafes and arts and crafts days where we create Christmas decorations from re-used materials. In the example of gardens, we found that when the grandparents brought their own plants for the children to plant, the children took way better care of the plants since they know where it comes from.

#### In terms of developing motor skills when in nature, how do you think children benefit from this?

**Helle Fuglsang, Aalborg Municipality**: The children develop better coordination and balance and they run more. I believe that research says that one hour teaching outside is the same as sports education in school. This is especially important in the kindergartens and why you need to go outside the fence (of the school yard). In Aalborg Municipality, we call it "hunting the motorical skills" when we go outside of the school yard and the kids have to help find the route, and you run, climb and crawl under things.

**Linda Thelin, City of Gothenburg:** We can also see that when the children interact with animals, they are often very active. They run with the animals, try to lift it, pet it and gives it food. Contact with animals also train the children's cognitive and social skills.

**Helle Fuglsang, Aalborg Municipality**: We also see that if the children have a grown-up acting as a role model, they will be more active.

**Linda Thelin, City of Gothenburg**: Building upon this, having role models around also impacts the children's attitudes when they interact with nature, since they reflect the atmosphere around them.

In Gothenburg, you mentioned the example of "Digital Quiz Walks" where you intentionally bring nature together with the digital. This is something that we don't normally see, can you explain what your reasoning is for this?

**Susanne Bergdahl, City of Gothenburg:** In the Nordics, quiz walks are extremely popular. Our digital quiz walks are built on this tradition. With the new digital quiz walks people can answer them with an app in



their phone instead of using pen and paper. Further, making it digital means that we can update the quiz in several different areas per week. The quiz walks are new to Gothenburg. However, in other cities that have used them longer we can see that there is a small overrepresentation of women who use them. In other areas connected to sports and exercise there are often a higher percentage of men that are represented. This, in turn, is interesting in terms of trying to create gender equal society.

In what way do you see that the European Commission can support?

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**Linda Thelin, City of Gothenburg:** We see that foundational grants can have a catalysing effect, but also to keep stressing the importance of environmental questions to all member states and that the possibilities to experience nature is the key to promote pro-environmental behaviours that are necessary for a sustainable future.

**Susanne Bergdahl:** It would also be good if it became a natural part for teachers to be outdoors with the children. It would be good if outdoor pedagogy and nature became a larger part of the curriculum for pedagogues and that it was included in the university courses they are required to read. Both the importance of nature, but also how it could be linked to what they are teaching, for instance – how could we use nature pedagogy as part of other classes, such as art or history?

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