



# Early Language Development in Nature

Practical Handbook







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# Introduction

'What is that?' 'Why is that?' Children raise such questions all the time when we are wandering with them outside in nature. They are always curious, but at the same time, they do not know the required terms or have an explanation for many surrounding things.

'There, the moon! But it should be asleep!' exclaims five-year-old Alex in amazement at powerful sunbeams shining through the foliage of the forest. He tries to find the best explanation for this surprising and unknown phenomenon with other children and the educator. Stories and even songs about the moon are exchanged.

**Nature is full of words and, with that, also full of opportunities and occasions to speak.** Stories and questions are raised, and explanations are sought. Children encounter it and are encouraged to speak. The liveliness and variety of natural things and creatures, possibilities for movement, and special atmospheres **make nature an extraordinary language space.**

**To unfold this language-stimulating potential of the natural environment was the main mission of our project *ElaDiNa – Early Language Development in Nature*.** Specifically, **the project brought together two topics of great importance to the context of early education: language development and children's activities in nature. The core idea of the project was to create a new general approach for early language development in nature** based on the experience and expertise of project partners. Learning in nature and with nature is one of the dimensions of connecting educational programmes to the real world, with existing evidence showing a direct correlation between this kind of connection and an evident increase in the quality and efficiency of education.

## What is ELaDiNa?

ELaDiNa (Early Language Development in Nature) is an Erasmus+ KA2 Strategic partnership project (2021–2023) addressing the possibilities of developing and promoting language skills in natural environments for children aged 3 to 7.

**Language development is indisputably a crucial process concerning the general developmental process** and a successful educational career. At the preschool age, important steps of language acquisition set the course for a good start in school. However, it is also an acknowledged urgent issue for education (policy and practice) that some children struggle with early language learning and suffer from delays in language development, especially when they come from underprivileged backgrounds. **This project seeks to unfold the potentially considerable language support of experiencing nature. The proven benefits of outdoor learning for children, such as enhancing their curiosity and autonomy, providing first-hand experiences as a base for cognitive, social, and physical development, and promoting children's well-being and health, can be enriched and connected with a specific focus on early language development.**

**In recent years, nature-educational experience has been shown to have great potential to promote the linguistic development of children:** a potential that has thus far been neglected. When children are given the opportunity and space in natural environments, **their curiosity can be aroused and acted upon, their imagination stimulated, and their urge to move and fulfil themselves satisfied. These circumstances provide children with the chance to communicate intensively. The focus of the project was to recognise these opportunities and capitalise on them to help children learn and improve their language skills.**

Such an approach is novel and remarkably under-recognised, although outdoor approaches, in general, are well-known and widely acknowledged. Thus, **the main project activities were to:**

- develop, test, evaluate, and discuss the model 'Early Language Development in Nature' with international professional staff from academic and practical work fields,
- train an international group of in-service pedagogues and teachers,
- train trainers from different countries,
- initiate implementation of the approach in each partner region,
- prepare handbooks to support educators,
- disseminate the approach through further education for educators, pre-school teachers, and primary school teachers,
- share experiences at an international conference and different national events.



The results of all these project activities are presented in four different outputs:

- *Generic model of newly developed approach ELaDiNa*, formed as a set of instruments, protocols, procedures, materials, and case studies on the implementation of outdoor learning for developing language (literacy, oracy) and other competences of children from age 3 to 7. The model provides innovative opportunities for children to develop and extend different competences in language and other foundational skills.
- *Theoretical handbook*, in which the focus is set on theoretical contexts of the 'Early Language Development in Nature' approach. The handbook provides findings of the project's process of intellectual exchange, theoretical work, and evaluation of the practical field trial.
- *Practical handbook*, in which methods, tools and guidelines of the 'Early Language Development in Nature' approach are gathered and explained through selected activity plans for outdoor use.
- *Training programme*, developed and carried out with 40 teachers from partner countries, who gained new knowledge and skills on how to develop language in nature and how to transfer this knowledge to other experts.

## Who is ELaDiNa?

**Leading partner:** Center šolskih in obšolskih dejavnosti – CŠOD (Slovenia), <https://www.csod.si/>

**Project partners:**

- Zavod RS za šolstvo (Slovenia), <https://www.zrss.si/>
- Jönköping University (Sweden), <https://ju.se/en/>
- Universitätsstadt Marburg (Germany), [www.marburg.de/portal/startseite.html](http://www.marburg.de/portal/startseite.html)
- bsj Marburg (Germany), [www.bsj-marburg.de](http://www.bsj-marburg.de)

**Associated partners** – primary schools and preschool/daycare centres from partner countries:

- HallonEtt AB, Jönköping, Sweden (a preschool),
- Förskolan Pärflugan, Jönköping, Sweden (a preschool),
- Råslättsskolan, Jönköping, Sweden (a primary school),
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- Osnovna šola dr. Janeza Mencingerja Bohinjska Bistrica, Slovenia (a primary school),
- Osnovna šola Slivnica pri Celju, Slovenia (a primary school),
- Osnovna šola Litija, Slovenia (a primary school),
- Osnovna šola Miklavž na Dravskem polju, Slovenia (a primary school),
- Vrtec pri Osnovni šoli Voličina, Slovenia (a preschool),
- Vrtec Galjevica, Ljubljana, Slovenia (a preschool).

## How the Practical Handbook was developed

As it was important for us to develop a special generic model for early language development in natural environments, with the theoretical background in current research and relevant theoretical findings, we were also aware of **the importance of high-quality training and qualitative transfer of our theoretical approach into practice**. Taking this into consideration, we have paid particular attention to **organising and implementing qualitative training for educators from our associated project partners from all partner countries: Slovenia, Germany, and Sweden**.

In the training, which is presented in more detail in the ELaDiNa Training Programme, we have included 40 educators from kindergartens and preschools, from primary schools and after-school childcare centres in the selected countries. Throughout the training programme, we have paid particular attention to monitoring, evaluation, and self-reflection from the participants to adequately assess the quality of the transfer of our approach into practice and its practical implications.

At the end of the training programme, we asked our participants to demonstrate the knowledge gained in their everyday practice. They prepared activities for children that entailed key elements of our ELaDiNa approach and tested them with children. The best examples are presented in this practical handbook.

## How to read this handbook

**This short introduction has informed you about the main ideas, objectives, and key results of our project ELaDiNa – Early Language Development in Nature** to provide you with a broader context and an important insight into the following chapters.

**The first chapter offers insight into relevant theoretical guidelines and instructions for stimulating language-learning opportunities in natural environments, with special emphasis on language-stimulating strategies.** There are numerous opportunities in natural environments that can evoke language-stimulating situations. However, to turn these opportunities into real language-learning moments for children, you need to be able to recognise these situations and accompany them linguistically in a supportive way.

**The second chapter includes selected activity plans, which were prepared by the participants of our training programme.** The chapter starts with a few general recommendations and an overview of selected activities, which also includes the most relevant stimulus in support of early language development in nature. This general introduction is followed by selected practical examples of how to support early language development in natural environments.





Chapter 1

# Language- Stimulating Strategies

# How to stimulate children's language acquisition

There are numerous opportunities in natural environments that can evoke language-stimulating situations. However, to turn these opportunities into real language-learning moments for children, attentive accompanying persons or other significant adults are needed to recognise these situations, decide on an appropriate one, and accompany them linguistically in a supportive way.

We also need to understand that it is not activities alone that are language-stimulating. Only sensitive, responsive dialogue during and/or after activities turns them into successful language-learning opportunities for children. In their language acquisition process, children need appropriate dialogue partners who are familiar with the art of language stimulation, modelling techniques, and other language-stimulating strategies and who react sensitively and contingently to children's verbal or non-verbal utterances. Such shaping and support of conversation have a decisive impact on whether such activities have a beneficial effect on children's language acquisition.

## Children's language development depends on adult dialogue partners

As we discuss in more depth in our theoretical handbook, **children's language acquisition can only develop in close interaction with other people and depends greatly on the specific environment that stimulates language and invites speech.** An immersion in or exposure to language in a merely passive form (e.g., through films, radio, or other digital media) is not suitable. Language acquisition is a complex interplay of innate, biological prerequisites and linguistic stimulation by the environment: a completely reciprocal, interactive context. In this context, a child starts to speak on the basis of developmentally necessary communication with caregivers. When using language as a tool, a child learns to speak not for the sake of language but out of a social need: they want to communicate, exchange with caregivers and others, come into contact with each other and achieve something through language. Being able to communicate with language enormously expands a child's possibilities to act and to negotiate the social and material world, which is ultimately also a linguistic world. The will to speak and the need to communicate and establish contact with other people are the main drivers of children's

language acquisition. Decisive for the success of this acquisition process are the quantity and quality of the language offered.

**There are certain decisive factors for children to learn speech and language:**

- they are provided with a language-stimulating environment, offering them a variety of occasions and opportunities to speak,
- they experience intensive social interaction with their caretakers or other reference persons, who are willingly and frequently engaging in interactions and dialogues with them,
- their non-verbal signals are also interpreted and responded to as attempts at communication,
- their conversation partners not only show interest in their topics, but they purposively take them up and sensitively expand on them,
- they experience good language role models who offer them rich vocabulary and age-appropriate constructions of sentences, from which they can implicitly derive grammatical rules,
- the language addressed to them is adapted to their linguistic abilities,
- they receive linguistic support in situations that are meaningful to them.

**The social environment thus plays a key role in the children's language acquisition process, as only adequate linguistic stimulation can lead to the development of biologically inherent language ability.** Developing language-stimulating behaviour is more than just talking to the children, especially in a professional context. It is greatly important to reflect on one's own language behaviour, optimise language interaction and consciously apply language-stimulating principles and language-stimulating strategies.

## What stimulates language?

**As explored more deeply in our theoretical handbook, numerous studies analyse relevant features of parental language to support children in their language acquisition process in the first years of the children's lives.** In these analyses, parent-child dialogues of linguistically well-developed children were compared with those of less well-developed children. Relevant findings have been drawn from a comparison of such dialogues regarding language-stimulating or language-inhibiting behaviours and strategies.

According to key findings of the research, **sensitive perceptions of the child's initiatives and expressions combined with a prompt and appropriate reaction are positively related to the children's linguistic development.** Situations of joint attention can also be observed, which support language learning, especially for the acquisition of word meanings. Furthermore, the intensive response of caregivers to children's interests as well as taking up and continuing their topic were recog-

nised as important characteristics of beneficial communication. This aspect is of great importance for a child's further joy of speaking and associated growth in linguistic competence. Extended conversations with several changes of speaker (turn-takings), as well as frequent use of language teaching strategies, such as corrective feedback, also play a decisive role.

**In contrast, children with lower language skills experienced more directive behaviour from their caregivers, with a more controlling interaction style.** They were less involved in decision-making processes and experienced more instructions. Their caregivers more often used explicit language corrections and fewer so-called language modelling strategies. The proportions of speech in the dialogue were also not balanced; instead, caregivers were found to have significantly higher proportions of speech. Consequently, children lacked intensive exercise and practice, as well as necessary feedback and response, within their active acquisition process.

## Language-stimulating behaviour

**Based on these research findings, relevant language-stimulating behaviours and language-stimulating strategies can be derived.** They are basic principles and basic competencies for language education that can be integrated into everyday life. Language education and support are not understood here as an additional programme in the daily routine that is limited in time and only takes place with certain children (children with a special need for language support). Rather, **language education is lived as a universal principle and is seen as a cross-sectional activity that is practised by all participants in every situation that arises in everyday life.**

**To support personal reflection on one's own language behaviour and expanding language-stimulating competences, several important language-stimulating strategies are explained in further sections.** In addition to instruction of a language-stimulating activity in the natural environment, language-stimulating interactions can be developed by consciously using different strategies.



# Language-stimulating strategies

## 1. Adopt a fundamental language-supportive attitude

Various communicative considerations, for example, body language and certain mental factors (i.e., consciously conducting the conversation in a language-stimulating way), play a decisive role in creating a good conversational atmosphere that invites children to tell their stories and talk to each other. Below are listed the important aspects that must be actively established by the dialogue partner to create a suitable positive atmosphere that can also stimulate a trusting relationship. This attitude expresses the willingness to accept the conversation and to turn fully towards the child. At the same time, it signals openness to all kinds of contributions to the conversation. Regardless of a child's current language level, this should encourage him/her to enter dialogue and participate in a conversation.

- Move down to the child's eye level.
- Maintain eye contact.
- Pay full attention to the child.
- Assume a facing posture.
- Use affirmative facial expressions.
- Listen and let the child speak.
- Ask questions with interest.
- Radiate the joy of communication.



## 2. Follow your child's lead - establish joint attention

Children particularly enjoy a conversation when the common focus of attention is on an object or topic that has meaning for a child. To establish this situation, a dialogue partner should hold back his/her own ideas and must fully engage with the child's interests. To find out more about a child's topics, an observing but simultaneously actively participating attitude is necessary. If a child's topics and interests are then given time and space, motivation to speak can significantly increase. Premature hints by a conversation partner on certain topics and subsequently lead-

ing conversation are less effective. Rather, a child experiences encouragement and reinforcement when his/her process of thinking is followed and he/she is clearly in charge of the conversation. Accordingly, this strategy is often the first step towards entering into a dialogue.

- Observe, wait, listen.
- Perceive and focus on the child's interests.
- Give up one's own leadership and follow the child.



### 3. Parallel talk and self-talk

Verbalisation of actions is of great importance not only to acquire the meaning of words but also to learn specific linguistic structures. Long before children actively speak their first words, they develop an understanding of words, for example, by handling an object and repeatedly hearing a certain sound chain (the corresponding word), which they can then associate with this object. Such a process of associating what they hear with concrete objects or situations can only succeed if a dialogue partner links action and language congruently. Congruence means that what is said must relate exactly to a respective action so that clarity is created. This strategy is particularly suitable for children who do not yet speak actively due to their early age or for children who are at the beginning of their second language acquisition and have thus far communicated exclusively in their first language. If one's own actions and those of the child are described by the language, the child has a chance to learn new words and language structures of the target language.

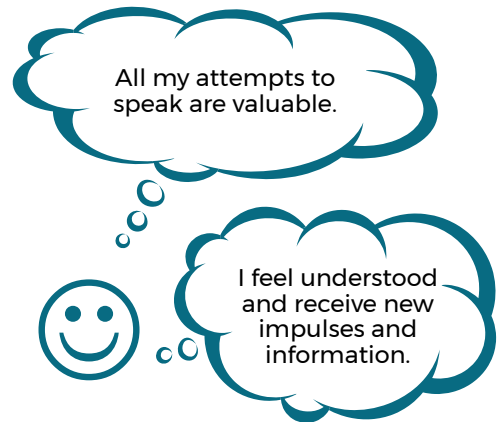
- Accompanying the child's actions with language.
- Speak about your own actions.
- Use this strategy, especially when the child is attentive.



## 4. Confirm, repeat, and expand the child's utterances

A child receives important reinforcement when his/her utterance is firstly acknowledged, and then this acknowledgement is also put into words. A simple 'Oh, yes.' or 'Exactly.' as a reaction from a conversation partner initially gives a child valuable recognition for his or her statement. If a dialogue partner then repeats what has been said in a meaningful way, this further underlines the fact that a child's topic is taken seriously. The further course of a conversation can be encouraged by taking up the child's topic and adding further information or a new aspect. The right dose is important here because too many additions might again lead a conversation too far from a child's interest. The child could lose interest in a conversation because the dialogue partner becomes the leading person in this conversation.

- First, find words to confirm a child's utterances and repeat what has been said in the sense of active listening.
- Add one more piece of information or expand it with needs a space here alimited/manageable number of new considerations.
- When making additional comments, pick up on a topic and interest of a child.



## 5. Corrective feedback

Learning to speak is an active acquisition process in which children continuously refine and improve their linguistic competence by trying things out and receiving feedback for it. Independently, they derive linguistic rules from what they hear. Sometimes it happens that they apply a newly learned rule in contexts in which a learned rule does not apply. These so-called productive errors are not actually errors, but rather they show a child's level of competence and point to the next step of development. This is where adult responses as corrective feedback come in. Through corrected repetition of a child's utterance, their error is not explicitly pointed out, but it is indirectly shown to a child how his/her utterance would be correct. With this form of correction, one stays completely within a child's statement without taking away the child's joy of speaking by making him/her aware of his/her inadequacy. Due to highly sensitive speech perception and processing in childhood, such indirect hints are sufficient and also very necessary in a normal process of language acquisition.

- Repeat utterances with correct pronunciation and grammar.
- Repeat incomplete sentences completely.
- Use this strategy repeatedly but sensitively.



Step by step I feel more safe in communicating.

I hear my utterance again correctly and have a chance to do it better next time.

## 6. Name unknown words frequently

Words and their meanings must be securely stored in a mental lexicon so they can be recalled in any required situation. Secure memorisation is supported when dialogue partners allow intensive exploration with all their senses and linguistically accompany this process. Many repetitions are helpful for memorising a new or unfamiliar word. Each word must be heard 60–80 times and experienced in different contexts before it can be actively used.

- Repeat new, unknown words frequently and meaningfully in different contexts.



Many repetitions make it easier for me to remember new contents.

## 7. Use appropriate and rich language

Adult language use can be very efficient in everyday life, whether out of habit or other reasons, such as stress or challenging situations. The most necessary information is conveyed with little effort and as briefly and succinctly as possible. This can be efficient and reasonable in everyday life, but it is not appropriate for the professional context described here. Children who are in the middle of the language acquisition process need adults to act as role models, using rich language by finding the most appropriate words and describing things in a differentiated and detailed way. Precise word choice and explicitness in formulations are just as important as detailed descriptions in grammatically complete sentences. Instead

of 'Put that in there!' use a formulation such as 'Put the birch leaf next to the oak leaf.', which is a detailed explanation and a much better language model. This literal precision strategy is especially important for children on the autistic spectrum.

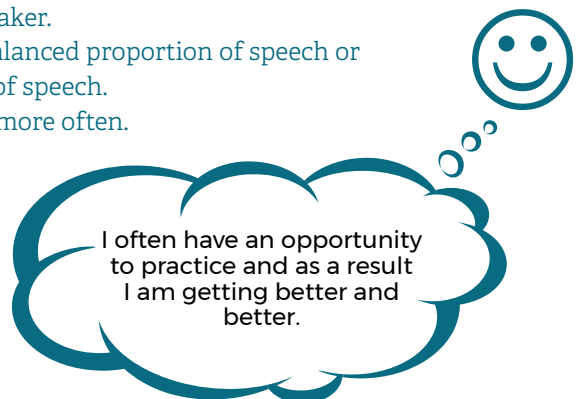
- Use well-formulated, detailed language.
- Avoid abbreviated statements.
- Use a maximum strategy of verbalisation instead of a minimal strategy.



## 8. Turn-taking – pay attention to reciprocity in dialogue

Children do not learn to speak just by listening. They need to be able to try things out, use language actively on a frequent basis, and receive constant feedback. Only with sufficient practice do they have a chance to further expand their linguistic competencies. Dialogue partners must therefore pay attention to enable a balanced or even bigger share of children's contribution to a conversation. They must also offer them necessary feedback in a dialogue to expand their competences and will to speak. If a dialogue is kept going with all language-stimulating means, several changes of speaker become possible, which sets diverse learning processes in motion.

- Pay attention to reciprocity in dialogue.
- Create several changes of speaker.
- Pay attention to enabling a balanced proportion of speech or increase the children's share of speech.
- If necessary, take a back seat more often.



## 9. Focus on quiet children

Children who are very eager to speak receive frequent attention and correspondingly more linguistic support due to their high level of initiative in communication. They actively demand their practice opportunities. Quiet children may need more active initiative from a dialogue partner who initiates a conversation so that they also can experience sufficient language learning opportunities.

- Recognise which children are sociable and communicative and which are not.
- Take initiative and actively seek contact with quiet children.



I can say something even though I wouldn't have dared on my own.

## 10. Avoid imperatives

A child's linguistic development requires a conversational partner who supports the child's activity in the process of language acquisition and accordingly promotes a high level of participation and independence. In contrast, instructions, especially imperatives such as 'Go over there!' or 'Leave it; we discussed this!' do not increase a child's autonomy or independent thinking and acting. They do not invite children to talk to each other and negotiate things. If a child is often only instructed to do something or not to do something, this can have an inhibiting effect on language development.

- Encourage children to think for themselves instead of issuing prohibitions.
- Allow a child to come up with his/her own ideas and to act independently; discuss consequences with each other.



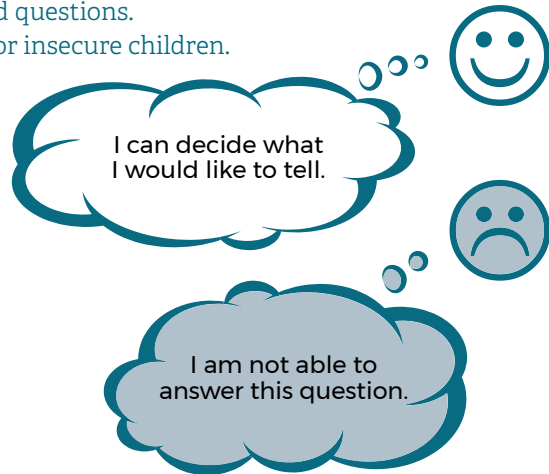
I only have to function and am not allowed to contribute.

## 11. Asking questions

In many relevant studies (as explored in more depth in our theoretical handbook), the strategy of asking open instead of closed questions is frequently presented as being conducive to language development. However, this strategy is not univer-

sally valid and must be considered in a more differentiated way. Every question requires an answer and, as such, places a certain demand on a child. Children with low language skills may not be able to meet these demands because they cannot formulate an adequate answer. They may feel incompetent and lose the courage and self-confidence to try out their language skills - and stay silent. Dialogue partners should reflect on how often and how many questions they ask during a conversation. In contact with linguistically less competent children, we should use strategies that can linguistically accompany a child instead of just questioning or interrogating him/her. In such situations, alternative questions are more helpful because they make it easier for a child to answer actively by saying two alternatives. Children who are eager to speak tend to benefit more from open-ended questions, as they can have a language-stimulating effect on these children.

- Use questions in a measured way because they are not stimulating for all children.
- Ask fewer questions and accompany children more linguistically.
- Ask open rather than closed questions.
- Use alternative questions for insecure children.



### Key literature for this chapter:

Sachse Steffi, Bockmann, Ann-Katrin and Buschmann, Anke (eds.): *Sprachentwicklung. Entwicklung - Diagnostik - Förderung im Kleinkind- und Vorschulalter*. Springer, Berlin, 2020.

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Grimm, Hannelore: *Störungen der Sprachentwicklung: Grundlagen - Ursachen - Diagnose - Intervention - Prävention*. Hogrefe Verlag, 2nd Edition, Göttingen, 2003.

The Hanen Centre YouTube Channel:

Why Interaction Matters Part 1: <https://www.youtube.com/watch?v=KAFcJVJHLCU>

Why Interaction Matters Part 2: [https://www.youtube.com/watch?v=QJAgWdYM\\_og](https://www.youtube.com/watch?v=QJAgWdYM_og)

Fostering Language Development: <https://www.youtube.com/watch?v=wVBij5IL6to>

**For more relevant analyses, studies, and literature on this subject, also check *ELaDiNa - Theoretical Handbook*.**







Chapter II

**ELaDiNa**  
in practice!

# General recommendations and overview of selected activity plans

## General recommendations for ELaDiNa outdoor activities

In the outdoors, many new stimuli are offered. The child's curiosity is increased. They are in action and movement all the time. There are many occasions in which children inspire each other.

Learning in nature with games and language-stimulating strategies encourages children to become more creative. Sometimes just being outdoors and left to free play is enough.

Outdoors, children need to combine observing and using all five senses (to feel and to touch, to smell, to taste, to see, to listen).

We attempt to include all the children so that everyone has a chance to participate.

### *Location*

We look for a quiet place without disturbing factors (traffic, factories, etc.) and where many natural materials can be found in natural surroundings: forest, meadow, beach, stream.

If a forest or meadow is not close to the school, the activity can also be carried out in the school garden, schoolyard, or urban areas with different natural materials to use in the activities.

It's better not to stay static in one place; new stimuli occur when moving around.

### *Duration of activities*

When we are in the forest, we should take our time! There should be no hurry!

There are different activities, but it's good to plan for each activity to last about 30 minutes and more, plus the time to go to the place and to come back.

The activities can be repeated at different times of the year, and the children gain new knowledge about changes in nature.

### *Size of a group*

Different activities need different approaches and organisation of the group. It's best if children work in small groups. The number of children can vary and depends on the age of the children and the location.

Close attention is necessary to have a good view of all the social interactions between the children.

Some children may create arguments that need more attention to solve or dissolve. Conflict can be positive and add experiences for their social skills, but it can disrupt planned activity. Try to allow disagreements to be resolved by the children themselves with your support whenever possible.

### *Material*

We can prepare a discovery box or rucksack to take with us when going outdoors. It can contain different tools or objects to explore the surroundings. For example, mirrors in different sizes, magnifying glasses, binoculars, small containers, water frames, brushes, paper, sketch pencils and sketch pads.

These tools help us to 'sharpen the eye' and to help focus on what the children ask questions about. Having tools for what you encounter in nature can support exploration, discovery learning and language development.

To take care of the natural environment, we should use them in a cautious way and leave nothing but footprints.

### *Safety is important!*

We need to choose a suitable place where children can move freely and safely. Use part of the forest, meadow, or park that you have risk assessed. We must ensure that any dangers for the children are recognised and managed.

Name the rules (which area, border, time limits, etc.).

We tell children how far they can go, so they won't become lost.

We warn the children not to taste things if they are not familiar with them or to consult with the teacher before.

Children should be dressed appropriately regarding the weather and the season (sun protection during summer and warm clothes and gloves during winter).

## Overview of selected activity plans

The following overview of the selected activity plans helps you to select the most appropriate and relevant activities more easily in regard to your goals for language development, your skills, and possibilities in your surroundings. All the selected activity plans are divided into six different colour-coded categories, taking into account the most relevant stimulus in the support of an early language development in nature.

Nr.	Title of activity plan	Age range
1	Search for the treasure	3+
2	Nature treasure bag	3+
3	Touch it	5-9
4	A detective	5-9
5	Find the right leaf	5-9
6	Name me	5-9
7	Discover with a mirror or a frame or with binoculars and magnifying glasses	3-5
8	The letter game	6-8
9	Searching for letters	5-7
10	Forest branches	4-6
11	Forest colours	3-6
12	Find me	3-7
13	On a discovery tour with a magnifying glass	4+
14	Find and describe similarities between things found in nature	7-9
15	Dance of autumn leaves	4-7
16	The wooden cards	4-7
17	One thing must go	7-9
18	Numbers	3-6
19	Mandala	5-9
20	Sort	6-8
21	Pattern! Go as I do!	6-8
22	Mathematics challenge	6-8
23	Use of small everyday moments: Painting with mud	2+
24	Build your own housing	5+

<b>Nr.</b>	<b>Title of activity plan</b>	<b>Age range</b>
<b>25</b>	Imaginary elf house	5-9
<b>26</b>	Marble run	5+
<b>27</b>	Imitate an animal	7-9
<b>28</b>	Storytelling stones	3+
<b>29</b>	Making a book	3+
<b>30</b>	Discover with a brush and water	2-5
<b>31</b>	Fairy-tale heroes made of natural materials	5-9
<b>32</b>	Snow mask	4-9
<b>33</b>	The ducks	3-6
<b>34</b>	The longest sentence	5-9
<b>35</b>	The magic stick	7-9
<b>36</b>	Our ritual: Listen, join in, be part of it!	5-7

Observation, description
Argumentation
Mathematics
Creativity
Storytelling
Music

# Selected activity plans in natural environments

## 1. Search for the treasure

### Description

We gather with a small group of children.

Meanwhile, an adult goes ahead with the winning prize/treasure. He/She leaves traces/clues for the children so that they can find and follow his footsteps or his walking path. After a while, he/she buries or hides the treasure and marks it (e.g., with a red cross).

We give the children information about the hidden treasure and how to search for it in the given environment. We motivate them to get a little surprise at the end.

Then the search for the treasure is ready to start.

In the beginning, they might need some help to seek out hidden clues or traces.

After the treasure is found, we can enjoy the win and recap the walking path and experiences in a group gathering.

**Appropriate age:** 3+

**Location:** any natural environment

### Material

- sticks, leaves, and pinecones to create arrows
- string to mark areas

### Purpose

- Connection of a small or larger group of children, social contact, and social connection,
- Encouraging the communicative skills of each child,
- Extending social skills (e.g., cooperation in a group,
- Expansion of vocabulary (e.g., description of directions).

### Variations

- It is possible to switch the adult, who is hiding the treasure, with a second group of children. In that way, they can experience both ends and maybe play the game twice, so each group can win a prize.
- Depending on the environment, the clues/traces can differ.

- In the forest, we can use real signs, like footprints, or make arrows with sticks.
- In urban areas, we can use chalk to mark areas or draw arrows and hints.



## 2. Nature treasure bag

### Description

We ask children to find small natural treasures: stones, sticks, nuts, acorns, chestnuts, flowers, leaves, and similar.

We collect them on a tree stump.

Each child may describe his or her natural treasure. We help them to find the words with questions: What colour is the treasure? How does it feel - hard, soft, warm, cold? What does the object smell like - musty, fresh, like a forest? What makes the treasure so special?

We ask children to give these natural treasures special names: the elongated, very rough stone gets the name 'lizard stone'.

We put three of the treasures into the natural treasure bag.

The next day, we take the natural treasure bag and ask one child to touch one object in the bag. He/She needs to describe the object with words so that the other children can guess which treasure is being described. We can help with questions.

We ask the children to name the treasure: everything is correct. Another child describes the other natural treasure.

**Appropriate age:** 3+

**Location:** natural spaces where natural materials can be found: forest, meadow, beach, stream

### Material

- a small jute bag or a sewn bag
- a tree stump or a frame made of sticks on the forest floor.

### Purpose

- To observe natural material,
- To describe the natural material in many words,
- Create their own word creations and make associations,
- To reproduce what they hear,
- Frequent repetition,
- To stimulate curiosity, observation, the joy of collecting, imagination, and the senses.

### Variations

- Natural materials can change over time: sticks and leaves dry out, for example. This can also change the description, and new words can be found.



- Let the nature treasure bag grow and gradually fill it with more and more treasures. We exchange the treasures together with the children.
- At the age of 5-6 years, we can let the children take over the guidance of the nature treasure bag game. If we play it often enough, the children will want to take the lead role and can guide the younger children.
- For a group of 3-4-year-olds, the game can end with finding the words to describe the treasures.



### 3. Touch it

#### Description

One of the children (initially, it can be the teacher) gives instructions on what his/her classmates should touch. For example: Touch something cold, Touch something smooth, Touch something rough, Touch something green, and so on.

Other children find something according to the instructions and describe what they found.

Then they switch so that each person has a turn to lead.

**Appropriate age:** 5–9

**Location:** forest, school garden, field

#### Material

- natural material: sticks, branches, stones, grass, leaves, etc.

#### Purpose

- Development of language skills (sentence syntax, vocabulary, etc.),
- Training in the use of all senses,
- Training in observing details,
- In a familiar environment, they observe changes in nature (trees, undergrowth, animals, all-natural material) with all their senses.

#### Variations

- The activity can be repeated at different times of the year, and the children gain new knowledge about changes in nature.
- The activity can also be carried out in the school garden, where we can also include taste, but we warn the children not to taste things if they are not familiar with them or to consult with the teacher before.



## 4. A detective

### Description

Children look for one piece of any natural material in the forest, which they must not show to others.

They take turns asking each other questions, trying to figure out what his/her classmate found in the woods.

The questions must be formulated in a way that his/her classmate can answer 'Yes' or 'No'.

The child who is the first to figure out what his/her classmate has in hand is the winner.

**Appropriate age:** 5–9

**Location:** Forest, school garden, field

### Material

- natural material: sticks, branches, stones, grass, leaves, etc.

### Purpose

- Training in observing details,
- Development of cognitive abilities,
- Development of language skills (sentence syntax, vocabulary, questions, etc.),
- In a familiar environment, they observe changes in nature.

### Variations

- Children can play the game in pairs or in groups.
- The activity can also be carried out in the school garden, where we can also include taste, but we warn the children not to taste things if they are not familiar with them or to consult with the teacher before.

## 5. Find the right leaf

### Description

Children work in pairs.

One child describes as accurately as possible one leaf without naming it. His/her classmate must find it. It is important not to name the leaf but just describe it (what shape it should be, how the veins run, what the edges are like etc.).

When a classmate finds the right leaf, they also name it (beech leaf, oak leaf, etc.).

**Appropriate age:** 5–9

**Location:** natural space with diverse trees: forest, school garden, field

### Material

- tree leaves

### Purpose

- Development of cognitive abilities,
- Development of language skills (sentence syntax, vocabulary...),
- Training in the use of all senses,
- Training in observing details and describing,
- In a familiar environment, they observe changes in nature.

### Variations

- We can play this game in the school garden, where they look for certain vegetables or fruits; where we can also include taste, but we warn the children not to taste things if they are not familiar with them or to consult with the teacher before.
- The activity can be repeated at different times of the year, and the children gain new knowledge about changes in nature.



## 6. Name me

### Description

In the forest, the children look for any plant they don't know yet.

According to its features, they make up a name for it.

The name must represent the characteristics of the plant.

Later, with the help of the teacher or independently with the help of an encyclopaedia, they name this plant correctly.

**Appropriate age:** 5–9

**Location:** forest, school garden, field

### Material

- plants

### Purpose

- Training in observing details,
- Development of language skills (description, sentence syntax, vocabulary, etc.),
- Training in the use of all senses.

### Variations

- The activity can be repeated at different times of the year, and the children gain new knowledge about changes in nature.
- The activity can also be carried out in the school garden, where we can also include taste, but we warn the children not to taste things if they are not familiar with them or to consult with the teacher before.



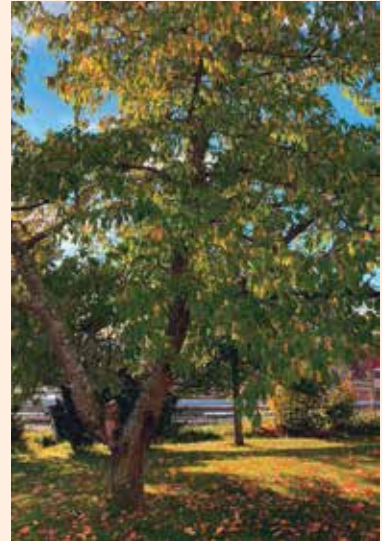
## 7. Discover with a mirror or a frame or with binoculars and magnifying glasses

### Description

We bring outside the material and present the activity by showing the mirrors, frames, binoculars, and magnifying glasses that children are going to use and describe what the purpose of exploration is.

We ask children to use them and then ask the questions: What do you see? Where do you see it? What do you feel about your observations?

We ask children to make a sketch of their observations.



**Appropriate age:** 3–5

**Location:** outdoors - forest or a park

### Material

- mirrors, frames, binoculars, and magnifying glasses
- sketch pads, paper, and pens

### Purpose

- To explore interactions with nature through what we see in the surroundings,
- To discover and become enchanted by the extraordinary, familiar and everyday,
- To develop vocabulary on words for positions (far away and near) and words of description (name what you observe),
- To come closer to small objects or to observe the horizon or reflections with the sun, the trees, or the sky,
- To encourage curiosity, observing, using senses when observing the surroundings or vegetation,



- To encourage dialogue,
- To frame and to find focus in nature, to screen the environment and target what's of interest.

### Variations

- We can make some comparisons through seasonal changes or differences in weather.
- We can make a sketch and make a big painting together with inspiration from the children's sketches. A painting that clarifies that everything in the world is interrelated.
- We need to be careful about the objects we observe.



## 8. The letter game

### Description

We label the box with a letter.

We divide the group into pairs.

Children must find three things that start with a letter in a box or contain the letter.

We conclude by having all the pairs report how they thought.



**Appropriate age:** 6–8

**Location:** all outdoor environments

### Material

- one box per pair

### Purpose

- We learn letters, we listen for different sounds, we learn new words and concepts,
- We train phonological awareness.

### Variations

- We can finish by having the children form words from the letters in the boxes.



## 9. Searching for letters

### Description

In the forest, we ask children to go around and find different subjects that remind them of a letter they already know.

When they come across such a subject, they bring it and place it on the ground and explain which letter it reminds them of.

Now they have to find more words that start with the letters in the forest. Children report words to each other.

**Appropriate age:** 5–7

**Location:** forest, meadow

### Material

- natural material: sticks, branches, stones, grass, leaves, etc.

### Purpose

- Learning letters using what is around us (sticks, stones, leaves, branches, etc.),
- In connection with curiosity, movement and observing, we improve vocabulary.

### Variations

- When they find a word starting with a specific letter, they can use it in the sentence.
- They can write those words in the snow, mud, or sand during the winter. They can also use a stick or their hands.
- They can construct letters from branches, sticks, and grass and then describe what they used to construct them.
- If there are many children, they can be divided into groups, and each group can prepare a short story that uses a specific letter.

## 10. Forest branches

### Description

We ask children to observe branches on trees and on the ground.

Each child should find one branch and bring it to the circle.

We divide children into groups of five, where they compare the branches with each other by size.

They sort them from largest to smallest.

Then they compare the layout with other groups.

Together they try to find the longest and the shortest branch.

**Appropriate age:** 4–6

**Location:** forest or a place with trees

### Material

- branches

### Purpose

- in connection with nature and movement, children are encouraged to observe closely,
- we combine language, nature, and movement in an interdisciplinary manner,
- children must compare the branches with each other and talk about them,
- children need to find out that the branches are of different thicknesses and lengths and thus learn new words (thinner, longer, the longest, the shortest, etc.).

### Variations:

- Children can also compare branches by thickness, and they sort them from thickest to thinnest.
- They can try to find a branch that is the same length as their shoes, index finger, palm, and so on.

## 11. Forest colours

### Description

We prepare different coloured paper sheets of A4 format paper. If we use them many times, we can laminate them.

We place the first coloured paper on the ground. Children name the colour. We instruct the children to find and bring back a natural object that is the same colour as the paper. We start with the easiest colour to find (e.g., brown).

When the child brings an object of the right colour, he names it.

When we collect the objects of a certain colour, we name the object together.

We continue with the next colour (grey, brown, green, yellow, black, red, orange, etc.).

We continue by naming all the colours and collected objects together.

We sort tree leaves from lightest to darkest. Children should use the words *more, best, less, least, bright, lighter, lightest, dark, and darkest* when putting them in the right place in order.

We sort branches from shortest to longest using the words *short, shorter, shortest, long, longer, and longest*.

We sort stones or stumps from lightest to heaviest using the words *light, lighter, lightest, heavy, heavier, and heaviest*.

**Appropriate age:** 3–6

**Location:** forest

### Material

- coloured paper sheets (grey, brown, green, yellow, black, red, orange, etc.)
- natural objects from the forest.



### Purpose

- using curiosity to develop vocabulary and communication skills,
- expanding vocabulary, communication,
- using all senses.

### Variations

- Children can do the same activity in the meadow or in the park.
- The activity is suitable for all seasons without snow.
- We can link it to art and create something from collected items.
- We can link it to mathematics by counting similar items.

## 12. Find me

### Description

In the meadow, we tell children to take some time to observe flowers and grass.

During observation, they have to choose a plant, which they will describe.

They observe that plant in detail; they can also smell it and touch it.

After a couple of minutes, we gather all the children into the circle.

We choose one child to describe a plant to other children, but he/she is not allowed to tell the name of a plant.

All the children go into the meadow, where they are searching for that plant.

When the first child finds it, the game ends. Then another child begins by describing his plant.

**Appropriate age:** 3–7

**Location:** meadow

### Material

- flower, plant, leaf, grass

### Purpose

- In connection with movement, observing, senses, and curiosity, we encourage vocabulary and communication,
- To observe and recognise plants in the meadow.

### Variations

- We can play this game also in a forest or garden.
- After the game, we can name plants with the online application.
- Children can make an herbarium.
- Instead of plants, they can also search for small animals.
- We can also play the game in groups in which each group describes one plant.

## 13. On a discovery tour with a magnifying glass

### Description

We gather the group and say some motivating sentences for the 'explorers'.

We explain how to use a magnifying glass and what to search for.

When they bring the findings and collect them in a tray, they describe what they found.

Others can add their observations to the object.

**Appropriate age:** 4+

**Location:** anywhere in nature, meadow, forest, dirt road, etc.

### Material

- magnifying glasses for each child

### Purpose

- The children discover new, perhaps curious things, and they try to find words for it,
- They practise descriptions; they expand their vocabulary,
- They communicate; they give and get feedback from the others in the group,
- The magnifying glass supports the feeling of being a discoverer or explorer.

### Variations

- The children can draw selected findings (but this is a quiet activity without speaking!).
- They can describe something, and the others have to draw it without having seen it.
- We can vary the task of what they have to collect: something green, black, something dry, a round shape ...



## 14. Find and describe similarities between things found in nature

### Description

Children work in pairs and need to decide together what kinds of different natural things they want to collect.

They put nature things on a cloth on the ground.

We gather all around a cloth where all the things are spread.

In pairs, children need to find two similar things lying on the cloth. They can use all their senses (how they smell, how they feel and so on) when they are deciding. When they find them, they describe the similarities of the two things to the other children.

We give the children 'starting words' in a sentence like; *We think that ... and ... are similar because they ...*

One pair at a time shows their things and describe in what way the things are like each other.

When all the children have done their presentation, we name the nature things that we have noticed that the children don't know the name of, and we repeat the words together.

Then the children do the same thing again (talk, choose, prepare, describe), but they must choose other things from the cloth than they did before.

**Appropriate age:** 7–9

**Location:** outside, where the children can find various things from nature on the ground

### Material

- some kind of cloth to put on the ground
- different things from nature that can be found on the ground.

### Purpose

- To let the children's curiosity guide them to find, explore, and collect different things from nature,
- Using language to separate and describe things from nature and to talk about them.
- The activity gives the children opportunities to observe and use their senses and use their language to describe things from nature.

### Variations

- The activity can be done at any season and at varied places.
- If desired, there can be a time limit or a limit on the number of things that they are supposed to collect.

## 15. Dance of autumn leaves

### Description

Each child picks up one leaf from the ground that seems interesting. They discover that the leaves fell from the trees.

Children throw the leaves and observe their falling. With their own movements, they try to imitate the movement of the leaves. When they move, they spontaneously describe the movement: *spin, swing, flip, go around*, etc.

We divide them into pairs and encourage them to compare their leaves. They can compare colour, shape, size, which tree the leaf is from, and other factors.

We let the children play with leaves and discuss whatever they want.

Children can also name the tree that leaves come from.

**Appropriate age:** 4–7

**Location:** autumn forest with leaves





**Material**

- different autumn leaves on the forest ground

**Purpose**

- With this activity, we encourage children to observe autumn leaves,
- It connects nature, language development, movement, and creativity,
- This is an opportunity to talk about different aspects of leaves: movements of a leaf, shapes, colours, size, and other factors,
- During the activity, children connect movement with a word for a colour with an actual colour on the leaf,
- There is a connection with movement, observation, senses, and science.

**Variations**

- We can bring leaves to the classroom or school playground and play the game there.
- For younger children, we can just let them play with leaves and make observations on their own.

## 16. The wooden cards

### Description

Pick up one wooden card and name the tree on it. Then find the tree in the forest and search for its fruit. Tell one characteristic of the tree or the fruit.

Pick up all the wooden cards with coniferous trees and find all types of conifers in the forest. Describe coniferous trees in the forest and describe the main differences and similarities.

Pick up all the wooden cards with leafy trees and find all species in the forest. Describe the main differences and similarities.

**Appropriate age:** 6–7

**Location:** in the forest with different tree species of deciduous and coniferous trees

### Material

- different tree twigs, with or without their leaves
- handmade wooden cards with the trees and their fruits or leaves.
- different fruits such as beechnuts, acorns, chestnuts and their cupules, cones

### Purpose

- To identify coniferous and leafy trees and describe their characteristics,
- To expand vocabulary, especially the differences and similarities,
- To touch, observe and describe leaves, nuts, cones, needles.



## Variations

- Put the cards and related leaves and nuts or cones from the forest in alphabetical order – thinking about the letters and sounds of the objects.
- Moving activity – show us how the branches are growing in the tree you picked.
- Storytelling - Pick up one to three cards and related leaves and nuts or cones from the forest and tell us an imaginative story about them. You can also add other characters to the story.



## 17. One thing must go

### Description

We gather the children in front of a cloth. Then we tell them that we will put four different things from nature on the cloth. We arrange them in the square.

We give names to the things on the cloth and let the children repeat the names of the four things from nature.

Children need to talk to each other in pairs and decide which thing must go. They must explain why they choose that thing. There are no right or false answers, just their thoughts and opinion.

We help the children with words to start their sentences: *We think that ... must go because it's ... the other things are.*

Let the pairs give their examples one by one while the other children listen.

When we do the activity again, we put new things and name them, and let the children repeat the names before laying them on the cloth.

**Appropriate age:** 7–9

**Location:** somewhere outside where you can easily find different things from nature

### Material

- a cloth divided into four squares with lines to put on the ground

### Purpose

- To let the children think, talk, and describe things from nature,
- They must argue and explain why one of the things must go away,
- We encourage their creativity when they decide the thing that must go away.

### Variations

- We can let the children do the same activity in small groups.
- We can let them decide what to put in the squares.

## 18. Numbers

### Description

We prepare tarpaulin with written and painted numbers from 1 to 5 (e.g., '1', plus ONE dot, ONE line/; '2', TWO dots, TWO lines; '3', THREE dots, a drawn triangle // etc...). We place them on the forest ground so that the tarpaulins are clearly visible and there is enough space around them.

We give the children instruction to look for things that correspond to a 1 (or 2, 3, 4, 5) or things that occur singly, in twos, in threes in nature (an acorn, a stone, a cone, a shamrock, etc.). The children work in groups.

They put objects on the tarp, and the children explain to each other why they have chosen each thing (we help to give names: *beechnut*, *pine needle*, *twig*, *maple leaf*, etc.).

All the children looked at the items on the tarpaulins and discuss and explain to each other why they were chosen.

**Appropriate age:** 3–6

**Location:** forest with as diverse vegetation as possible, ideally a mixed forest

### Material

- truck tarpaulin with numbers and symbols

### Purpose

- To develop language through dialogue and description,
- It is motivating to go on a 'treasure hunt', where no prefabricated objects are found in nature to correspond exactly to a number,
- To encourage all the children, even children who may have problems with numbers, can have a sense of achievement here.



### Variations

- The game works in all natural spaces (by a stream, on a beach, in a flower meadow, etc.), which brings new concepts into awareness.
- With guidance, a collage can be created, which is later exhibited in the kindergarten. We can fix the objects to cardboard with hot glue or adhesive tape. The game remains in the memory for the further possibility of viewing. It invites further dialogue when the children talk to each other about it or explain what has been presented to their parents.

## 19. Mandala

### Description

Children are divided into groups of 4 or 5.

We give the instruction that the mandala must consist of at least 4 or 5 different natural materials, and of which each natural material must contain at least 3 specimens.

Each group determines a leader who will give instructions on what material they should find and how many; 2 or 3 children are searchers and gatherers, and the other 2 are creating the mandala together with the group leader.

When the mandala is completed, each group presents and describes their product.

**Appropriate age:** 5–9

**Location:** forest, school garden, field

### Material

- different natural objects

### Purpose

- Development of cognitive abilities,
- Development of language skills (sentence syntax, vocabulary, etc.),
- Development of mathematical language,
- Development of orientation on the basis/floor,
- In a familiar environment, they observe changes in nature with all their senses.

### Variations

- The activity can be repeated at different times of the year, and the children gain new knowledge about changes in nature.



## 20. Sort

### Description

Children collect natural materials that are found right where they are. We put them on a plain coloured fabric or a large piece of paper.

We ask children to sort by:

- colour,
- shape,
- size.

Children give ideas about in what other ways it is possible to sort items.

**Appropriate age:** 6–8

**Location:** in all outdoor environments

### Material

- different natural objects

### Purpose

- To learn new words and concepts, to learn what goes together, to learn that we can think in different ways,
- To learn fundamentals in mathematics – sorting.





## 21. Pattern! Go as I Do!

### Description

We place a pattern on a paper strip and cover it with fabric.

We lift the fabric and show the pattern for a minute to the children, and then we put the fabric back.

Children use the empty paper strip to recreate the pattern.

We encourage them about how many items they can remember together.

**Appropriate age:** 6–8

**Location:** in all outdoor environments

### Material

- strips of paper to put designs on
- a fabric to cover the pattern.

### Purpose

- To learn a pattern (i.e., a regular repetition in mathematics),
- To understand patterns and their structure, distinguishing similarities and differences is the beginning of algebraic thinking,
- To motivate with moments of surprise, curiosity, and memories,
- To learn new words and concepts.



## 22. Mathematics challenge

### Description

We set the stopwatch for one minute and ask the children to collect as many cones as they can find. When the time is up, we count how many cones there were and ask the children:

How many points do you get if each cone gives 2 points?

How many points do you get if each cone gives 5 points?

**Appropriate age:** 6–8

**Location:** in all outdoor environments

### Material

- stopwatch
- a container to collect the cones

### Purpose

- To practice estimating time and practice adding and counting,
- To train number counting, addition, and time perception.



## 23. Use of small everyday moments: Painting with mud

### Description

A child stands in front of the educator, smiling and showing the muddy tip of his index finger. The educator takes up this situation and shows him his/her clean index finger, squats down and taps the tip of his index finger with the children's index finger so that both fingertips are full of mud. By naming what happened and responding attentively and approachably, the child will continue with painting because he/she feels accepted and likes to continue this exciting activity. Probably, this interaction brings in more children.

We show the children a way to paint on a washable surface, the bottom of a frying pan, a tree stump, and a fallen log.

Now let them paint a picture together and accompany their actions with language. They will also start agreement processes among themselves about the creation of their picture. 'How much more mud do we need?' 'The mud is higher there, and there is a hole here.' 'But my house still needs a chimney.' etc.

**Appropriate age:** 2+

**Location:** natural space with water and earth (can be near a stream, by the sea, by a lake, also works after a rain shower or after washing hands in the forest)

### Material

- water, earth, smooth, washable surface or a tree stump, a fallen tree trunk

### Purpose

- To apply the language learning strategies for educational professionals,
- To be attentive to small everyday situations,
- To move from non-verbal communication to verbal communication,
- To pick up on the child's communicative impulse,
- To expand vocabulary, using language and interactions,
- To encourage the child's interest/curiosity in mud/muddy water,
- To use the senses,
- To encourage the child's interest in attention, sharing, interaction, and dialogue.

## 24. Build your own housing

### Description

We gather with a small group of children and show them some pictures or examples of small natural habitats (e.g., animal habitats, teepees, and other human-built retreats).

Children decide which type of housing they want to build.

They need to find for a suitable spot and collect all the needed materials.

If needed, the educator starts to build the house with the children.

We name tools, materials, and objects.

When we finish the building process, the children present all parts of the house.

We can take a lunch break in front of the housing and document the final creation.

### Appropriate age: 5+

**Location:** natural places with a lot of natural material, such as sticks, leaves, long thin logs of wood

### Material

- pictures of natural habitats
- natural material: sticks, leaves, thin logs, soil, mud, etc.
- building tools, if necessary: rope, hatchet, spatula

### Purpose

- To encourage social contact and social connection,
- To encourage communication skills of each child,
- To expand the vocabulary via description and naming of certain objects,
- To expand grammar skills via description of certain actions and action plans,



- To stimulate language via motor actions,
- To motivate children to create something with their own hands from scratch,
- To engage in the adventure of having your own house and place at the end,
- To observe and experiment with the mathematical and physical properties/behaviours of natural objects.

### Variations

- The connection to animal habitats can be expanded with additional information and other projects.



## 25. Imaginary elf house

### Description

Children are divided into groups.

We give instructions that each group build an imaginary house for an elf living in the forest.

When the groups have finished their work, each one describes their fantasy residence.

**Appropriate age:** 5–9

**Location:** forest, school garden, field

### Material

- natural material: sticks, leaves, soil, mud, sand

### Purpose

- Development of language skills (sentence syntax, vocabulary, etc.),
- Development of mathematical language,
- Development of orientation on the basis/floor – space,
- Becoming used to working in a group,
- Training in observing details,
- In a familiar environment, they observe changes in with all their senses.

### Variations

- The activity can be repeated at different times of the year, and the children gain new knowledge about changes in nature.
- They can continue building for several days and connect all houses to elf city.



## 26. Marble run

### Description

We gather groups of 5–8 children per 1 adult.

We say some motivating sentences for the construction groups.

Preparation (10–15 minutes): One group prepares the slope area and cleans up small sticks, rocks, and leaves. They can scratch a gutter into the ground so that the ball can roll on later. The second group collects different materials like rocks, leaves, bark, sticks, etc.

Building the marble run (20–25 minutes): Is it necessary to push the marble? Is the group okay at building all in one, or is it better to divide the building sectors? Does the marble run or not? Should we make tests on which material is good for which element of the marble run? (e.g., bark is good for a jump, sticks for outlines.)

Implementation (10 minutes): Testing the different kinds of balls, marbles, etc.

Reflection: Children describe how it went.

**Appropriate age:** 5+

**Location:** areas with slopes or a hillside with a variety of materials

### Material

- sticks, rocks, bark, grass, mud, leaves, etc.
- blunt knives, blades, rakes
- various balls (marbles, golf balls, tennis balls, table tennis balls, rubber balls)
- baskets or buckets for transport of the collected materials

### Purpose

- Getting to know different materials (qualities, etc),
- Promoting social and emotional development in small groups,
- Promoting self-confidence through active collaboration,
- Increasing concentration capability,
- Cooperation and communication in teams,
- Communicative exchange during the construction phase,
- Learning new vocabulary (material, actions, etc.),
- Consciousness of nature and the environment,
- Getting to know different materials (e.g., mud, leaves, sticks, bark, grass),
- Acting in a group,
- In connection with motor skills, movement, exploring and senses,
- They practise describing what they want to do and prepare a plan.

Variations

- Depending on the age, there can be smaller groups; we can do preparation one day earlier.
- Maybe the children want to bring something by themselves to test if it's good for the marble run.
- We can test different areas: in the forest, on the grass, in muddy areas.





## 27. Imitate an animal

### Description

We gather the children and give them instructions that they are going to imitate animals that live in the forest in different ways.

Children move around between the spots where the pictures and instructions are and follow the instructions, for example:

- Hibernate like a hedgehog. Lay down in the leaves on the ground and use the leaves as a shelter. Name the months of hibernation together, starting with November and ending with March. Let the children give reflections on what it would feel like laying in hibernation for so long. What happens in nature during those months? Why do you think that the hedgehogs hibernate?
- Try to become as high as a moose/elk. How can you reach that height? How does it feel being that high? What can you see when you are high up from the ground?
- Collect cones like a squirrel. In one day, a squirrel must eat seeds from 25–30 cones. Find 30 cones and try to get some seeds out and examine them. How do the seeds look and smell? What do you think they taste like?
- Jump like a hare. Try to put your legs in front of your arms. How does it feel? Try to jump slowly and quickly. Try to jump short and long distances.
- Find food like a deer. What do you think they like to eat this season and other seasons? What do you think they eat when there is snow or ice on the ground? How do they get their food in winter?

**Appropriate age:** 7–9

**Location:** an environment where the animals live normally

### Material

- pictures of the animals that children are going to imitate
- hang the pictures and the instructions for the activities in advance in the forest.

### Purpose

- The aim of the activity is that the children are going to imitate different animals to learn and repeat facts about them and how they live and adapt during different seasons in nature,
- Using fantasy and movement based on facts from the animals.

### Variations

- We can work with other animals that live in the woods and prepare different activities.

## 28. Storytelling stones

### Description

We make a circle and sit down.

The child, whose turn it is to tell the story, draws from the bag five stones on which there are symbols from two different stories known to children. He/she puts them next to each other.

Then he/she tells a story that includes these symbols.

The other children listen, and if the storyteller wants, they can help.

**Appropriate age:** 3+

**Location:** indoors or outdoors (forest, meadow, playground, classroom, etc.)

### Material

- storytelling stones with pictures from stories

### Purpose

- With the help of stones, the children independently tell a new story,
- They learn new words,
- They learn the difference between literary language and spoken dialect.

### Variations

- The game can be played at any time. We can draw any symbols of any stories on the stones (depending on the topic under discussion).
- Symbols from more than two different stories can be mixed together to increase the difficulty. We can adjust the number of narrators so that they complement each other.



## 29. Making a book

### Description

Children go and find an interesting object in nature.

We split children into smaller groups (when they are familiar with the concept, the whole group can participate), and each individual tells a sentence in the story, so all together, they create a story.

The child whose turn it is tells a sentence, which can include interesting objects from nature (even only words can be contributed if the children are younger).

The other children listen, and if the storyteller wants, they can help.

Then the task is passed to the next child.

Adults can write the story or can record it on digital media.

The final task is to present the story to each other, and all the children who participated in creating a story need to tell a sentence to the audience (other groups).

**Appropriate age:** 3+

**Location:** indoors or outdoors; forest, meadow, playground, classroom ...

### Material

- sticks, rocks, bark, grass, mud, leaves, etc.

### Purpose

- To learn new words,
- To learn the difference between literary language and dialect,
- To present a story to the others.

### Variations

- The game can be played at any time.
- We can make smaller or larger groups.
- We can read the story next time and change it or add some content.
- When we have the final version, we can write a book (draw the illustrations and print a copy or make an online version of our book).

### Example

Example of a book (2 times in the forest, drawing and colouring in kindergarten and making online version (made by an adult)).

The book is narrated by children telling a story. There is also a printed version of it.

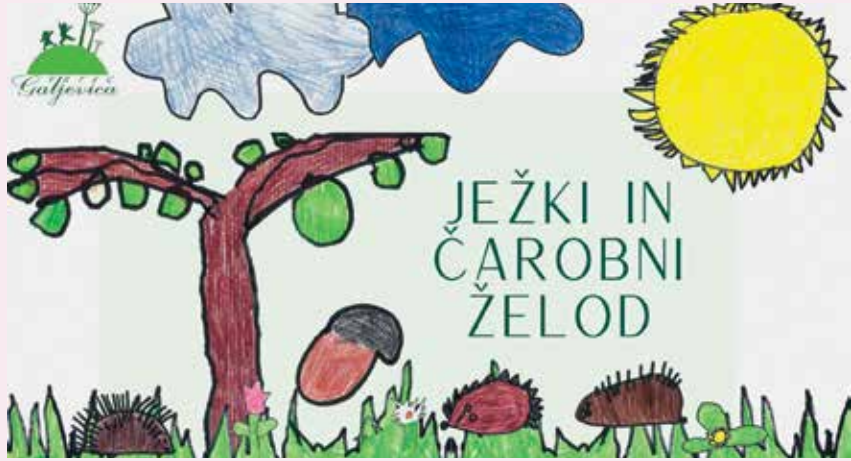


Figure 1: Book cover



Figure 2: Page 5 of the book



Figure 3: Page 16 of the book

## 30. Discover with a brush and water

### Description

We bring the discovery box outside and present the activity by showing what tools are going to be used.

We describe what the purpose of exploration is, adding the question: What happens when the brush and water meets the stones or other natural materials?

Children try to find nuances, words for the feeling of how the stone feels against the cheek, for example, the temperature of the stones, different textures, weight, size, sorting, balance, etc.

They explore the change with the water on the stone.

The stones come alive by painting eyes. The stones turn into different figures, and the children may tell a story about them. As the stones are constantly changing, the children make different associations with other experiences they carry with them and try them in this new context.

Children wonder when the water evaporates and then create questions about why this happens.



There is a testing of different theories: compare with painting on the hand and rainwear. What happens to the substrate in the encounter with the water and when the water 'disappears'?

Children also explore colours, patterns and appearance, size and shape, and look for comparisons and differences.

**Appropriate age:** 2–5

**Location:** outdoors, to explore a location in the city, for example, a park

**Material**

- a white sheet, stones, water in a jar, brushes, paper on sketch pads and pens

**Purpose**

- To develop language (specifically vocabulary and storytelling) through exploration of details of nature,
- To emphasise the importance of imagination and play for different discoveries in connection with curiosity, observing, senses.

**Variations**

- During wintertime, what happens to the water and stones outside? What happens if we use snow instead of water (snow is another form of water)? A variation of this activity is to add colours to the water or use watercolours.



## 31. Fairy-tale heroes made of natural materials

### Description

The teacher reads any fairy tale or song to the children.

Children are divided into groups.

Each group chooses one of the characters from the fairy tale/song.

Each group uses natural materials to create a chosen character from a fairy tale/song.

The groups present their character to the other group and repeat the previously heard fairy tale/song.

**Appropriate age:** 5–9

**Location:** forest

### Material

- natural material on the forest floor

### Purpose

- Children recreate a tale or poem that we read or tell the children with the help of natural material,
- Children explore the forest and learn about different objects,
- Children develop vocabulary and communication skills,
- Children develop social skills.

### Variations

- The teacher divides the children into groups; each group gets a different well-known fairy tale (Snow White, Little Red Riding Hood, The Wolf and the Seven Little Kids, etc.). Children create the main characters from the story from natural materials and can also create the surroundings. The other groups are told a fairy tale, and the members have to find out the title of the fairy tale.
- Children can do the same activity in the park.
- The activity is suitable for all seasons.



## 32. Snow masks

### Description

Children make a mask out of frozen snow. The holes are easiest to design with the help of a stick.

With the help of the mask, they transform it into an imaginary creature.

They give the creature an imaginary name.

They introduce the creatures to the others.

**Appropriate age:** 4–9

**Location:** a place with frozen snow

### Material

- snow

### Purpose

- They create a story using snow masks,
- They develop vocabulary and communication skills,
- They develop social skills,
- They explore frozen snow.

### Variations

- The teacher divides the children into pairs or groups.
- Each pair makes up a story about a snow creature and presents it to others.





## 33. The ducks

### Description

The teacher finds a stick that is a bit like a duck. She sits down without talking to anyone first and starts carving. Children come by and are interested. They ask, 'What are you doing?' Educator: 'What do you think I am doing?' Children: 'Carving.' Then it's about the shape. The teacher asks if the children can see what she wants to carve. The characteristic 'beak' makes it easy to recognise a duck, but when the teacher paints the beak orange and draws eyes with the help of a pencil, the children know that they are looking at a duck.

The duck begins to talk to the children through the teacher. It tells them that it is lost in the forest or that it no longer wants to live on the river and is looking for new adventures. Besides, she says, she would like to have friends. Either the children offer to be her friend, or they suggest making more ducks.

In that case, the teacher instructs the children to look for 'duck sticks' themselves.

Children who can carve themselves then carve their own animals and paint them.

Children who are not yet able/allowed to carve (i.e., those under four years old) are helped by the teacher to carve the beak. They can paint themselves.

**Appropriate age:** 3–6

**Location:** forest, anywhere you can find sticks

### Material

- sticks (deadwood)
- carving knife
- camping mats
- pens (orange)
- sharpie marker (black and white)

### Purpose

- Children are given the opportunity to practice speaking through a 'transitional object'. It is often the case that speech-shy children do not like to tell a story or even talk, certainly not in the presence of adults (but also with other children).
- They communicate with the help of a doll or another object. The object serves as a communication vehicle to speak.

- A self-made, 'animated' object gives the children strength and self-confidence.
- The carved figures speak to each other through the children; communication is practised.
- The children want to do the same and make their own ducks.

### Variations

- The children take their ducks with them and include them in their free play.
- Some children stay at the craft area and start role-playing with the ducks.
- It is important to pay attention to the rules when carving (keep your distance, sit while carving, and carve away from the body).



## 34. The longest sentence

### Description

In the forest, children look for three things (natural material) of their choice. They compose a sentence in which they must include all three things. With the help of their senses (touching, smelling, listening, etc.), they add as many adjectives as possible to things and try to compose as long sentences as possible.

**Appropriate age:** 5–9

**Location:** forest, school garden, field

### Material

- natural material

### Purpose

- Development of language skills (sentence syntax, vocabulary, etc.),
- Training in observing details,
- In a familiar environment, they observe changes in nature with all their senses.

### Variations

- The activity can be repeated at different times of the year, and the children gain new knowledge about changes in nature.



## 35. The magic stick

### Description

We gather the children and tell them that we have a magic stick from a troll and some magic words to use when using the magic stick.

We ask the children if they know what a troll is (if not, show them a drawing of a troll).

When we swing the stick around, all of us are becoming trolls. We ask the children if they want us to do it.

We swing the stick around, say the magic poem (or some other magic words) and let the story begin.

'I sagans skog där snurrar sagans slända och spinner tråd så blank som solen är. I sagans skog kan nästan allting hända och allting händer också där' av Lennart Hellsing.

Start telling a story about your trolls living in the forest and let the children fill in the story with suggestions of:

- how do you look (eyes, ears, tail, colour, size, age),
- how do you move – make the moves that the children suggest,
  - what do you like,
  - what you don't like,
  - where do you sleep,
  - what do you eat.

Let the children pick ingredients for a troll soup and name the things that they give to you before you put them in the troll soup.

Let the children taste the soup, and let the children describe the taste of it.

End the story by swinging the magic stick and saying the magic poem again.

**Appropriate age:** 7–9

**Location:** anywhere outside where you can find a stick on the ground and get some inspiration from the surroundings

### Material

- sticks, natural material
- a drawing of a troll

### Purpose

- Storytelling by a teacher encourages a group of children to practice talking, acting, and listening to each other,
- Experience and develop language, fantasy, and storytelling together.

### Variations

- We can bring tails that the children can wear when they become trolls.
- Let the children find their own magic sticks and let them decide how they are going to be used and what they want to become and create stories about.

## 36. Our ritual: Listen, join in, be part of it!

### Description

#### **Making of rhythm sticks**

At first, we are looking for suitable wood (i.e., dead branches without hurting a living tree). The children can help to saw. They have to learn the right way of carving. When they peel off the wood's bark, they are instructed to use the right technique: Always move the knife away from your body! Close accompaniment by an adult is important.

In the last step, the children can decorate their rhythm sticks. The carving is part of the 'forest free time', meaning that it's up to the children whether and when they do the carving, alone or in groups.

#### **Singing and rhythm**

We use our instruments for singing. The drum is making a simple rhythm. The teacher uses rhythm sticks, and the children join in.

#### **Our ritual: Listen, join in, be part of it!**

1. We can sing the song 'Der Wald macht Musik': 'Listen, listen, forest children, what a fun, the forest, the forest is making music today, and we join in. We are singing, singing, singing is song.' The drum and the rhythm sticks do the rhythm and end the song together with three more rhythm beats. Silence!
2. We listen to the forest music for one or two minutes of silence.
3. At the end of the silence. More and more children lift their hands. With a look, a nod or another gesture, the teacher lets the children know that they can tell, one after the other, what they have heard or felt while listening. The teacher gives no comments and takes care that the children listen respectfully, even if some perceptions are unrealistic and expressions of a child's fantasy; for example, children sometimes hear the sound of running water, although there is no running water in our forest school.

**Appropriate Age:** 5–7

**Location:** a quiet place where the children can sit on trunks or a 'forest sofa' is much better than sitting on the ground

#### **Material**

- hand saw, carving knives for children
- songs and chants from all over the world, suitable for primary school children

## Purpose

- Experience nature as a place of solitude and harmony,
- Listening to nature,
- Learning melodies, lyrics, and rhythms with songs from different parts of the world,
- Singing with gestures and movements,
- Language development through the articulation of what we hear and feel while listening to the forest music and respectful communication within the group,
- The sound of nature stimulates the connection with our forest, the song 'Der Wald macht Musik' and the rhythm of the drum.

## Variations

- We can make our own forest music, imitating the sounds of nature we've heard. Our mouths can sing, whistle, hiss, whisper, smack, etc., and our bodies can be our drums. Simple instruments like bells, rattles, sticks, and stones can help to imitate weather phenomena or sounds of animals (e.g., the knocking of a woodpecker).
- Different songs about the seasons, nature or other topics can be sung with movements and gestures which are created by the children themselves. The children can decide whether they want to accompany the sounds with the beating of their rhythm sticks or with movements and gestures.
- Different songs can require different rhythms, and again it's up to the children how far we can go in developing our own forest music.

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