



## **Bioethical Education and Attitude Guidance for Living Environment**

# **EDUCATIONAL MATERIALS**



**Erasmus+**

## EDUCATIONAL MATERIALS

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# 1. HOW TO USE EDUCATIONAL MATERIALS

In your hands you're holding the result of the second intellectual output of the project BEAGLE – Bioethical Education and Attitude Guidance for Living Environment. Project gathers partners from Croatia, Slovenia, Italy, and Greece, under the umbrella of Erasmus+ platform, with a common goal of promoting bioethical education, developing critical thinking, and overall changing of attitude towards better understanding of our environment.



In this document, you will find the division of educational materials according to age groups of children and young people, and according to the educational methods used in materials. All materials are described in detail "step by step" and created in a way to promote interactive discussion and critical thinking among young people on bioethical topics.



The materials have an indicated age group of children, duration and number of participants, and are designed as independent educational aids with specific methodological guidelines. **This does not mean that you have to strictly stick to what is written, but you can adapt the materials, activities and offered questions to the needs and possibilities of the group.**



The materials can be used in different educational circumstances and contexts as well as in different national curricula because they deal with issues that have no boundaries, but are universal.

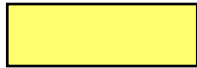


We hope that these educational materials will encourage you to be creative and give you a dimension in working and teaching bioethical topics in a simple, creative and fun way.

## 2. DIVISION OF EDUCATIONAL MATERIALS



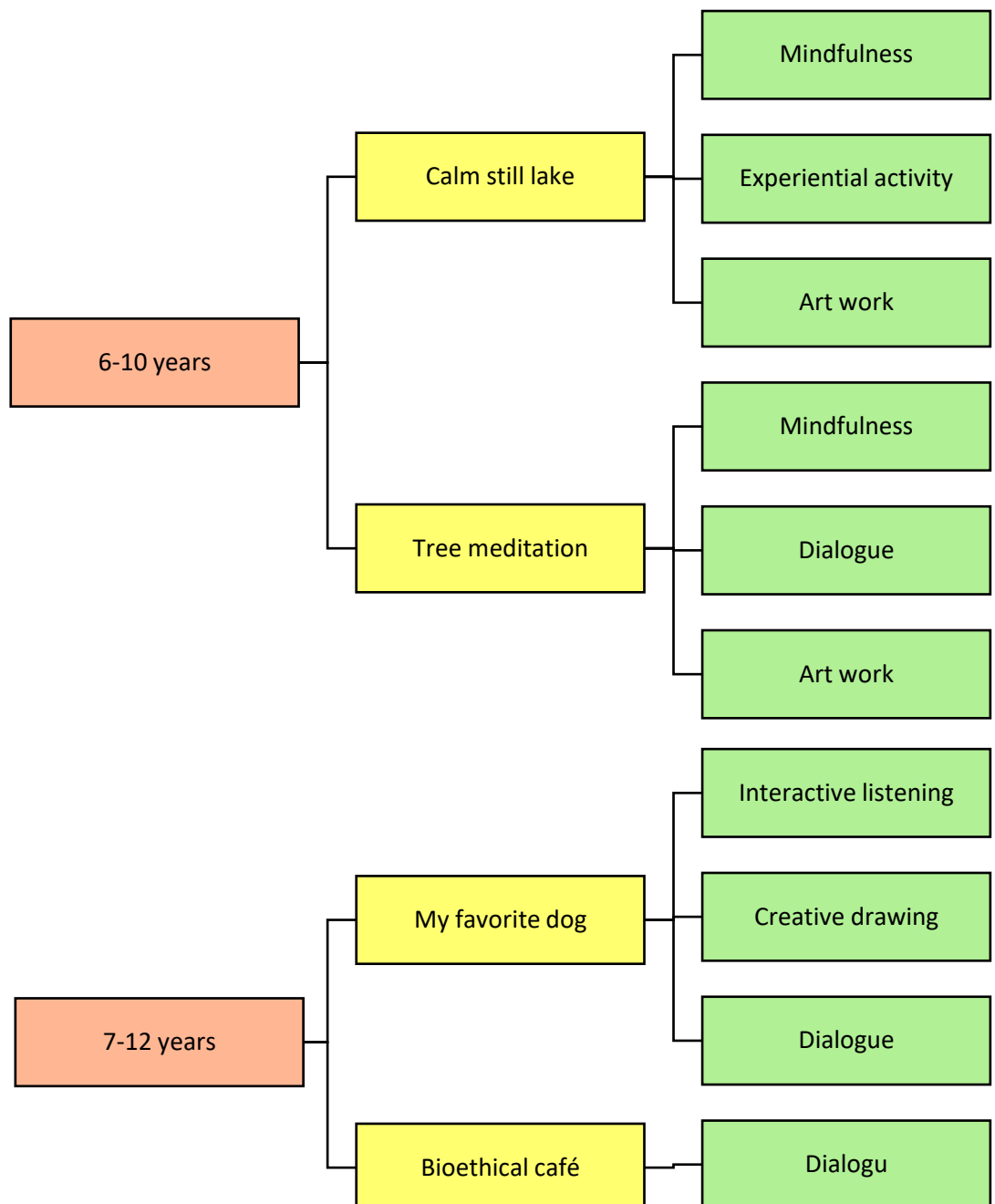
Age group



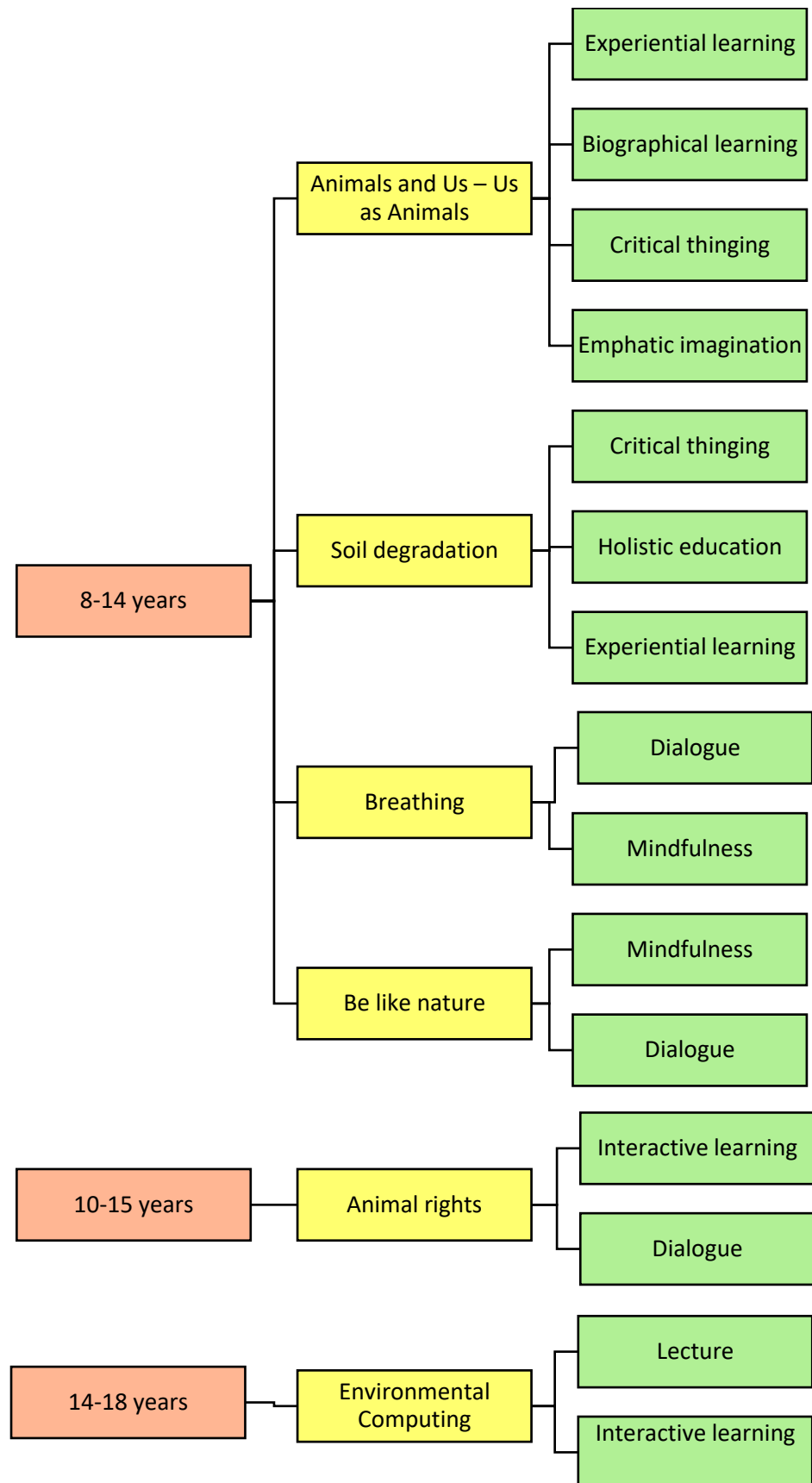
Name of the educational material



Method









## Tree Meditation

**Environmental issue:** Human beings use wood for their own needs: as construction material for furniture, building, health, food, fuel, paper, etc.. In order to do so, human beings destroy forests and woods. But forests and woods are very important for the ecosystem and for human beings themselves. **Should human beings continue to clear cut forests for the sake of human consumption?**

**Age range:** 6 to 10 years

**Time:** 105-120 minutes

**Group:** 4-20 participants

**Materials and tools:**

- a green area with different tree species. Educators must locate a park or a green area close to their schools and accessible to children
- pencils, coloured pencils, crayons, markers (enough for all the students)
- large white paper sheets (A1 format, one sheet of paper every two students)
- vegetable/natural elements collected by students during the workshop + boxes/ bags/ baskets where children put what they collect
- 4 sheets of A4 size cardboard in various colours. You will cut out of them approx. 48 smaller cardboards, approx. 10 cm x 5 cm size, glue, tape


**Educational methods:** mindfulness + dialogue + art work

**Key learning points:** The workshop aims at raising students' consciousness about:

- importance of trees for life on Earth
- ecological implications of human activities
- how to balance human's needs and conservation of biodiversity and nature preservation
- the importance of biodiversity
- facilitating clarification of personal goals and values
- the interconnection between all natural elements (human beings, non-human beings, environment itself)
- rise empathy and compassionate attitudes and conducts towards the non-human world
- the workshop is also intended to develop critical thinking in children.

**Keywords:**

- trees, forests, woods
- deforestation, human consumption, consumerism
- biodiversity
- sustainability

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- interconnection, — empathy, compassion, kindness, — caring, non-dualistic consciousness

**Notes:** Be sure that number of participants, time and level of discussion are adapted to the group age.



### Workshop step by step - How to do it?

This workshop is composed by 5 parts:

1. a mindfulness practice
2. nature observation
3. proposition of an environmental ethical issue and short discussion
4. activity aimed to reflect upon the issue proposed and aimed to consolidate the new concepts learnt
5. conclusion

#### PLEASE NOTE:

- Depending on the time available, the workshop can be held in one session in the same day, or in different sessions split in different days. In the latter case, the mindfulness practice must be repeated at the beginning of each session.

#### Part 1 – Mindfulness practice - “Tree meditation”<sup>i</sup>

Students are invited, through a mindfulness practice, to prepare their senses, body and mind to get in contact with the natural world.

Educator and students are located open air in a park/green area with different tree species. Educator will identify a quite area of the park, possibly next to trees.

The natural world, especially trees, can be a great source of beauty and inspiration. Tree meditation uses the power of trees to centre and ground students. Using tree meditation for grounding will allow students to connect to the natural world and feel the strength and spirit of a tree within themselves<sup>ii</sup>.


**Activity 1:** Educator invites students to choose the tree they prefer (preferably a tree they feel a “spiritual” connection with, or a special “friendship” with, or one they feel has a strong grounding presence).

Meditation begins with students standing in front of the tree. Then educator invites students to relax their arms, shoulders and back. Then invites students to take a soft gaze/focus and not really focus on anything in particular.

Educator invites students to pay attention when they breath in and out: students shall just breath in and out, without modifying their breath, the quantity of air they inhale or the rhythm of their breath. Just pay attention to the air entering their lungs through the nostrils and nose, at their belly moving up and down, at their bodies naturally and slightly reacting to the breath (e.g. while breathing in and out, you can perceive little movements in your shoulders or arms, in your chest, neck, on your back, etc...). Give students a couple of minutes to practice this and to become comfortable with the process of paying attention to their breath.

Then educator will invite students to close their eyes and to imagine to be in a forest full of trees, and to imagine they are the tree they have chosen. Then educator will continue:





“Find your roots in the ground while standing up tall. Imagine that you are becoming really stable, starting from your feet, just like the roots of a tree connecting you down to the earth.

As you breath in and out, imagine that you are growing taller and stronger, up into the sky.

Move your attention from your feet, up through your legs and into your arms. Notice how your body is feeling along the way.

Once you are get up to your arms, imagine they are like branches spreading wide as you grow taller, connecting you to the other trees in the forest. This part of the trees is called the canopy. It is the part where all the branches connect and animals can make homes in.

Beautiful things can grow in the canopy when the trees in the forest are all connected.

As you breath in and out, imagine the animals that might live in your forest canopy.

Maybe you have some butterflies on your branches, or baby birds.

Maybe you even have little caterpillars on your leaves.

What do you want to live in your canopy?

Follow your breath again. Now begin to leave the canopy by traveling up your trunk, moving your attention up out of your arms and to the top of your head.

Travel all the way up to the very top of your tree, beyond any branches.

Take a moment here to see whatever you would like to see.

What does your forest look like? Is it tropical, or in the mountains? Is it sunny outside?

Are you somewhere familiar?


You can imagine anything that you want to see.” iii

At last, educator will invite students to pay attention once again to their breath, and then will invite them to re-open their eyes.

Total time for Activity 1: 10-15 minutes

Tips:

1. Educator: use your intuition to figure out how long to spend on each part. The whole exercise can last between 10 and 15 minutes depending on your students. Do not rush, allow students enough time for their bodies to accommodate, for perceiving their breath and to visualize the images you are evoking.
2. Educator will talk with a very natural, smooth, calm, soothing voice; the tone will be gentle and inviting.
3. Before teaching this, it is good if you have time to go outside and practice the exercise yourself.
4. “Since mindfulness is not a religious or spiritual practice, when teaching mindfulness sessions it’s important to avoid using terms or materials or developing rituals that might have spiritual connotations. None of these are relevant to the



practice of mindfulness and may present an obstacle to students from certain groups. Because mindfulness is an evidence based attention training and awareness technique that is not intended to explore religious beliefs or attitudes, it neither conflicts nor overlaps with any spiritual practice or religion”<sup>iv</sup>.


## **Part 2 – Observation of the non-human world**

Students are invited to observe some particular aspect of nature around them. Depending on the age of children and their previous knowledges, educator shall propose one of the following two activities.

**Activity 2.1.A** - Educator and students are in a park/green area with various tree species. Students are invited by educator to choose a tree they like and to observe it, any aspect of it, e.g.:

- ✓ how tall is the tree you’re observing?
- ✓ how large is the trunk and what’s the shape of the trunk? (e.g. straight, bent, gnarled)
- ✓ is there one trunk or does it split into multiple trunks?
- ✓ how long are the branches?
- ✓ what does the shape of the tree look like?
- ✓ is the tree deciduous or evergreen? do you know the difference?
- ✓ does the tree have leaves or needles?
- ✓ what does the shape of the leaves look like?
- ✓ what’s the colours of the tree (trunk, branches, leaves)?
- ✓ are there flowers, fruits, nuts, cones on the branches?
- ✓ have the leaves fallen already ?
- ✓ shall students imagine the roots of the tree? are they thick or thin? how deep into the ground?
- ✓ is there any nest on the tree?
- ✓ is there any bird sitting on the branches or flying among the leaves?
- ✓ is there any insect on the trunk/leaves?
- ✓ shall students say if any animal live among the trees?
- ✓ how does the ground looks like around the trees?
- ✓ can students hear any sound from the nature (birds, insects, animals, the wind, a river, ...)?
- ✓ the educator can invite students to touch the trunk and leaves and to describe what the texture is
- ✓ the educator can also invite students to smell the trunk, the leaves, the fruits and to compare the smell to other smells they know. And what about the roots? shall student imagine if they smell of something?

Total time for Activity 2.1.A: 15-20 minutes, according to age and number of participants



**Activity 2.1.B** – In alternative to Activity 2.1.A (especially if children in the group are elder children), educator shall propose students to observe nature by asking them what they know about a tree's life, e.g.:

- ✓ do you know what a tree lifecycle is during the year?
- ✓ how do trees born?
- ✓ how much oxygen do trees produce?
- ✓ what time of year do trees grow?
- ✓ how long does a tree live?
- ✓ how does a seed grow into a tree?
- ✓ how long does it take for a tree to transform from a little seed into a tall plant?
- ✓ do trees ever stop growing?
- ✓ can a tree die from old age?
- ✓ did you know that the age of a tree can be measured by the rings inside of its trunk?
- ✓ shall you name some fruits that grow on trees?
- ✓ do you know how much the roots of a tree spread in the ground? (it is said to be the same width as the tree crown)
- ✓ do you know what are the different functions of roots, trunk, branches, tree crown, leaves?
- ✓ can students guess how old the trees they have looked at are? how old is the student himself? shall the student imagine what he/she will do/be when they'll be same age as the tree now?
- ✓ do they know any person having the same age of the tree?
- ✓ shall students imagine how the tree looked like when it was a "baby" tree? and do students know the tree has "been born" by a seed only a few millimetres long?

Students take turns to propose their answers.


Total time for Activity 2.1.B: 15-20 minutes according to age and number of participants

Tips for both Activity 2.1.A and 2.1.B:

- The idea is that students establish an intimate relation with the trees, feeling a connection with them, wondering at the "magic" of a little seed transforming into a tall, powerful living being. They should feel that trees are a wonder of nature they must respect and take care of.
- To do so, it is desirable that students maintain the state of calmness and quietness reached during the mindfulness exercise.
- Also, educator will talk with a very natural, smooth, calm, soothing voice; the tone will be gentle and inviting.

**Activity 2.2** – To deepen the experience of observing nature, students will be asked to collect some vegetable/natural materials they like and that they will later use for an art





activity. They can pick up leaves, little pieces of tree bark, moss, sprigs, twigs, pebbles, flowers, blades of grass, acorns, pine needles, seeds, cones, etc.

Provide children with boxes/ bags/ baskets where they will put what they collect.

Total time for Activity 2.2: 15 minutes

Tips:

- Also when collecting natural materials it is desirable that students maintain the state of calmness and quietness reached during the mindfulness exercise. Invite them not chatting between them, not to scream and not to run around.

### **Part 3 – Educator proposes a specific environmental ethical issue**

After the time for observation is over, students are invited to sit in a circle, taking the seat they prefer next to the educator (they can sit on a rock, on the grass, on a fallen branch, on a bench, etc...).

**Activity 3.1** – Educator will propose an environmental ethical issue connected with trees. In the case of the present workshop, educator will propose the issue of **balancing human's needs and the necessity of conservation of biodiversity under the perspective of consumption of goods by human beings / perspective of consumerism**. Educator shall propose students the issue in terms such as: "Human beings use wood for their own needs: as construction material for furniture, building, health, food, fuel, paper, etc.. In order to do so, human beings destroy forests and woods. But forests and woods are very important for the ecosystem and for human beings themselves. **Should human beings continue to clear cut forests for the sake of human consumption?**"


PLEASE NOTE: there is no "good" or "no good" answer to this question. Children are just invited to think about the issue and to consider the different points of view.

Total time for Activity 3.1: 5 minutes to introduce the issue by the educator

**Activity 3.2** – Then educator will ask students if human beings use trees for their own needs, and what they produce with trees, e.g.:

- ✓ tree wood can be turned into paper. Shall you name some objects made out of paper?
  - think about objects in your bedroom/classroom: e.g. school books, school exercise books, picture books, comics, newspapers, magazines, dictionaries, ...;
  - think about objects in your kitchen: e.g. instructions leaflets for electronic devices or domestic appliances, milk/fruit juice carton boxes, calendars, fruit/vegetable cardboard packaging, snack packaging, ....
- ✓ tree wood can be turned into furniture. Shall you name some furniture made out of wood?
- ✓ tree wood can be turned into building material. Shall you name part of the building/flat you live in made out of wood? or some part of your school? e.g. roof,



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- ceiling, floor, windows, doors, veranda, porch, .....
  - ✓ tree wood can be turned into fuel.
  - shall you name some human activity that uses wood as fuel? e.g. cooking, heating
  - shall you think about some tool/instrument that uses wood as fuel? e.g.: fireplaces, wood stoves

As children give their answers, educator will ask them to write down on the coloured cardboard (approx. size 10 cm x 5 cm) the name of the objects that are made out of wood.

Students take turns to propose their answers.

Total time for Activity 3.2: 10/15 minutes

Tips:

- The issue and its related implications will be formulated in a form adequate to students' age.

**Activity 3.3** – Then educator will stimulate children to discuss about the following points (possible answers):

1. What can I as a person do to consume less wood? (Ethical values)

- ✓ use paper wisely, use less paper, e.g.: print on both sides of the paper, before printing think if you really need to print, buy reusable napkins, .....
- ✓ borrow, share and donate books/magazines/....
- ✓ use reusable containers
- ✓ use cutlery instead of paper/plastic cutlery/dishes
- ✓ play and create with trash
- ✓ buy second-hand furniture
- ✓ plant a tree
- ✓ visit a forest or woods


2. What can we as a society do to consume less wood? (Democratic values)

- reduce the risk of fires
- regulate and plan cutting of trees
- find out which areas require reforestation
- create urban forests
- establish regional or national parks

3. How to live in harmony with the nature? (Environmental values)

- encourage people to live in a way that doesn't hurt the environment
- forests should be protected by chemicals, fungi, development of diseases and parasites, ....

Students take turns to propose their answers.



Total time for Activity 3.3: 10-15 minutes

Tips:

- The issue and its related implications will be formulated in a form adequate to students' age.
- Educator shall adapt the level of discussion to the group age. In case children in the group have different ages, educator shall involve the youngest children into the most simple questions and shall ask the eldest children to develop the answers or topics proposed by the youngest.

**Part 4 – Art work**

Children are now invited to play with what they have observed, touched, found, experienced, talked about, guessed, learnt, discussed. This part of the workshop can be held either outdoor or indoor.

**Activity 4** – Divide the group of children in pairs, and give each pair an A1 (or larger) white paper sheet. Then ask them to draw/paint the trees they have observed. They shall use pencils, coloured pencils, crayons, markers and will also use the vegetable/natural elements collected during the workshop (they will need to use glue and tape to fix them onto the paper sheet).

Ask students to glue on the paper sheet also the cardboards containing the names of the objects made out of wood they have written during Activity 2.2. If there is enough time, they can also draw/paint the object itself.

Total time for Activity 4: 30 minutes

**Part 5 – Conclusion: express gratitude and describe your feelings**


**Activity 5** - Now invite children to stand up and stretch their backs, to cup their hands, to smile, and to bow at tree they have chosen and to all the other trees in the park. Breathing in, they will say “you are a beautiful tree”, and breathing out they will say: “thank you, tree”.

At last, educator and students have a brief exchange about what they just experienced together. Discussion topics might include:

- Does anyone feel more like part of the Earth?
- Which one of the elements did the students connect with the best?
- What did this feel like?

Students take turns to propose their answers.

Total time for Activity 5: 10-15 minutes

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- i Acknowledges: the form and steps of this exercise are based on the practice developed by: MENDEZ, K. *Tree meditation*, April 27, 2015. Available at: <https://mindful.stanford.edu/2015/04/tree-meditation/>
- ii <https://www.daoistdrops.com/inspiration/tree-meditation>
- iii MENDEZ, K., *Ibid*.
- iv Smiling Mind. (2018). *Evidence based guidelines for mindfulness in schools - A guide for teachers and school leaders*. Australia.  
<https://static1.squarespace.com/static/5a2f40a41f318d38ccf0c819/t/5b28988170a6ad07781bee9/1529387171804/smiling-mind-mindfulness-guidelines-for-schools-whitepaper.pdf>