



Bioethical Education and Attitude Guidance for Living Environment

EDUCATIONAL MATERIALS



Erasmus+

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Cover photo: Pixabay

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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.**

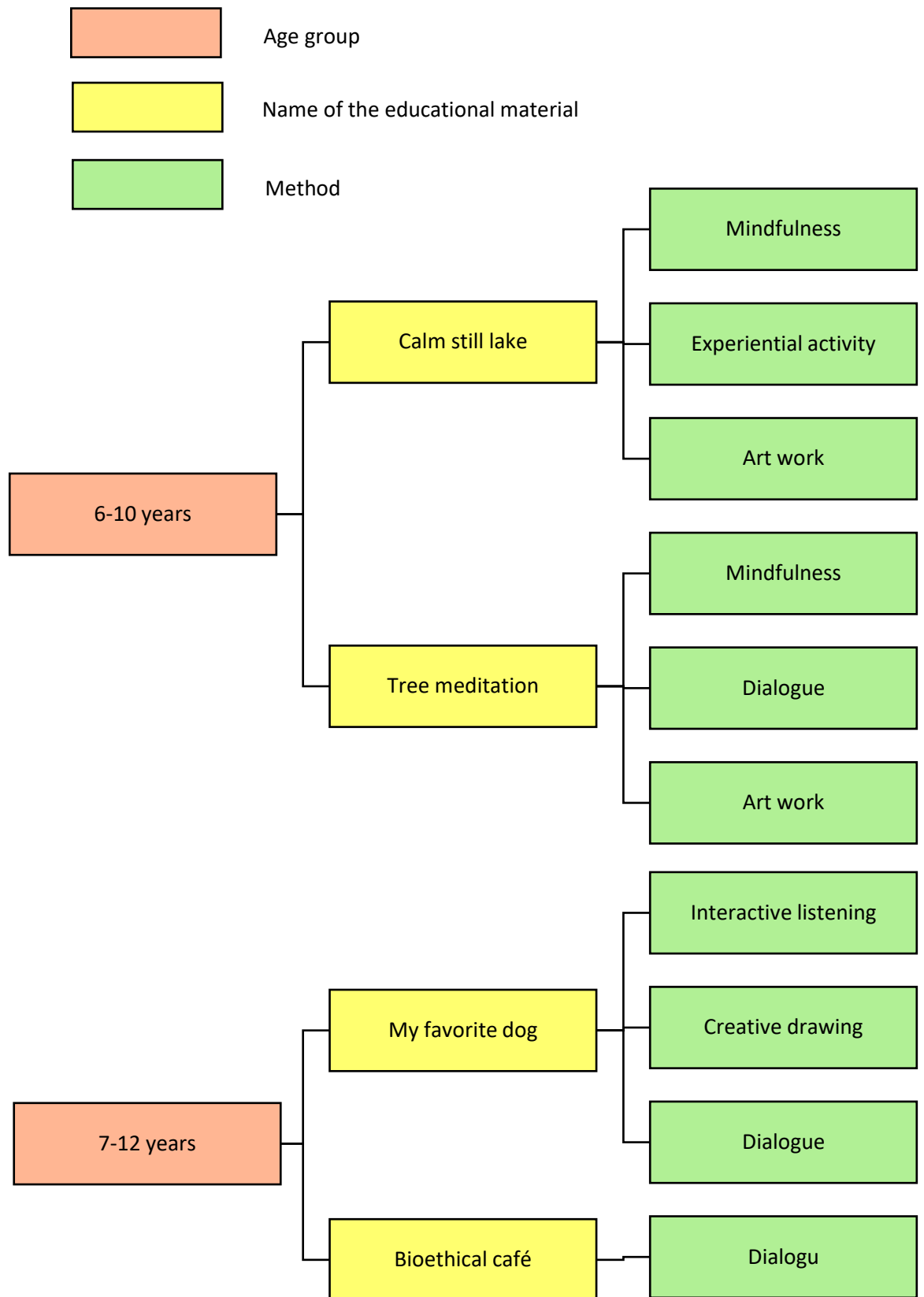


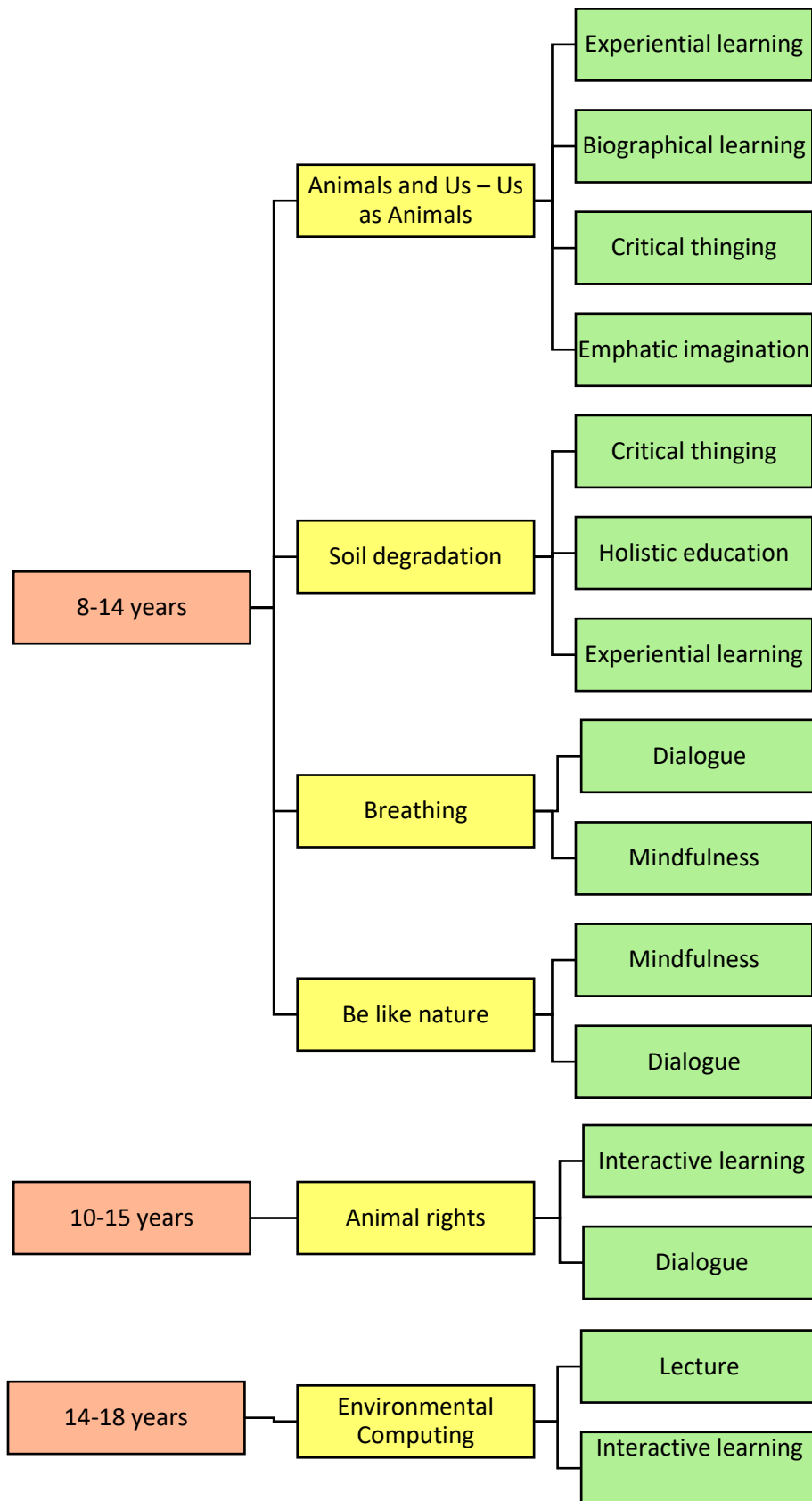
The materials can be used in different educational circumstances and contexts as well as in different national curricula because they deal with issues that have no boundaries, but are universal.



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







Be Like Nature

Environmental issue: Human beings need space to build up houses, factories, roads, motorways, hospitals, schools, nurseries, farmland, etc., and 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. **How shall we find a balance between humans' needs and the conservation of forests and woods?**

Age range: 8 to 14 years

Time: 80-110 minutes

Group: 4-20 participants

Materials and tools: none. Workshop can be held indoor or outdoor.


Educational methods: mindfulness + philosophical dialogue with children

Key learning points: The workshop aims to rise students' consciousness about:

- importance of trees for life on Earth
- ecological implications of human activities
- how to balance human's needs and the necessity of conservation of biodiversity and nature preservation
- social and individual dimensions of deforestation/good practices
- how to balance human's needs and the necessity of conservation of biodiversity and nature preservation
- importance of biodiversity
- facilitating clarification of personal goals and values
- support a transition toward sustainability
- 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 philosophical and critical thinking in children.

Keywords:

- trees, forests, woods
- urban human settlements
- deforestation, land loss, land consumption
- biodiversity
- sustainability
- 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 3 parts:

1. a mindfulness practice
2. proposition of an environmental ethical issue + reflection upon the non-human world + philosophical dialogue with children
3. conclusion

NOTES:

- Workshop can be held indoor or outdoor in a green area or park (if held outdoor, the seminar will be more effective because it will develop a deeper sense of unity between children and nature).
- 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 - “Be like Nature”ⁱ

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

“This approach to sharing mindfulness draws on the elements of nature. Often, we reflect on the beauty and serenity of the natural world *out there*, and overlook our own beautiful nature. This exercise introduces children to ways of seeing the strength and beauty of nature within themselves, offering a short practice to help relax and observe their experience. Teacher invites children to think about that when we go outside we can see and feel so many wonderful things. Things like trees, and the wind, and the clouds, and the sun. In many ways we are like these beautiful parts of nature, and for this exercise we’ll be like the **tree** and the **wind** and the **sun**”.ⁱⁱ

Activity 1: Depending on where the workshop is held, educator invites children to take a seat on a chair, a rock, a trunk or tree branch, or on a bench. They shall seat in a stable, comfortable, balanced posture. It is preferable to sit for meditation without leaning onto the back of the chair.


Educator will invite children to maintain their chin slightly tucked to keep the cervical spine aligned, and to sit in a such a way that their spine follows natural curvature: upright, yet natural. At the beginning of the practice, arms are parallel to the torso, palms fall naturally on the thighs. Then educator invites children into the practice:

“Our body is like a tree. It grows and it is strong.

Our breath is like the wind. It flows in and out.

And the sun is like the part of us that is warm and kind.

So let’s lower or close our eyes and sit tall like a tree. We extend our hands way out and stretch our fingers, like branches and leaves. Let’s squeeze our fingers



together and then let go and feel them wiggle, like they are blowing in the wind.

And now, with the wind blowing, let's be like the wind and take a two big, slow breaths. Breathing in . . . and breathing out, blowing out the wind. Breathing in . . . and breathing out, blowing out the wind.

And now the sun comes out and warms the tree and the wind. As it shines on the tree, we feel our body. Can you feel fingers and feel your toes? What else can you feel—just by noticing?

And as the sun shines on the wind, we feel our body breathing. Can you feel your belly moving up and down? Can you feel the air flowing in and out of your beautiful body?

And with the sun up high in the sky, brightening and warming the whole world, you too can warm the world—with your kindness!

Think of someone who can use a little kindness—like your sister or brother, or a friend, or your teacher. And as you think of them, wish for them, “May you be happy,” imagining them smiling like the sun.

You deserve happiness, too. So now wish for yourself, “May I be happy,” and smile like the sun.

And as you smile like the sun, feel your body sitting tall like a tree and feel your breath blowing like the wind.

And then gently open your eyes and look around. You are amazing!”.ⁱⁱⁱ

Total time for Activity 1: 10-20 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 20 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”^{iv}.



Part 2 – Educator proposes a specific environmental ethical issue - Reflection upon the non-human world - Philosophical dialogue

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, etc...).

Activity 2.1 – 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 consuming soil for human urban settlements**. Educator shall propose students the issue in terms such as: "Human beings need space to build up houses, factories, roads, motorways, hospitals, schools, nurseries, farmland, etc., and 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. **How shall we find a balance between humans' needs and the conservation of forests and woods?**".

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 2.1: 5 minutes to introduce the issue by the educator

Activity 2.2 – Then educator will ask students why trees are important and useful for human-beings, for animals and for the environment itself (soil, air, climate, water, ecosystem). Possible answers:

AIR:

- ✓ trees provide oxygen. During the process of photosynthesis, trees take in carbon dioxide and produce the oxygen we breathe. One large tree can supply a day's supply of oxygen for four people
- ✓ trees improve air quality (reduce ozone levels in urban areas)
- ✓ trees store CO₂

CLIMATE:


- ✓ ameliorate climate (control climate by managing the effects of sun, rain and wind; they lower air temperatures and humidity; they can also influence wind speed; evaporation of water from trees has a cooling effect)
- ✓ soften the forces of nature

WATER AND SOIL:

- ✓ help in water conservation by preventing water evaporation
- ✓ preserve soil (prevent soil erosion and increase nutrients in the soil)
- ✓ help prevent flooding

ANIMALS AND BIODIVERSITY:

- ✓ support wildlife (trees are used for food, shelter, and sites for reproduction. Many animals also use trees for resting, nesting and for places from which to hunt or



capture prey. When the trees mature, animals enjoy fruits and foraging opportunities)

- ✓ bolster fish and fisheries
- ✓ increase biodiversity
- ✓ increase resilience (greater biodiversity increases resilience to pests, diseases, as well as climate change)

HUMAN-BEINGS:

- ✓ surround us with beauty and life
- ✓ trees are amazing in their own right
- ✓ trees play an important role in the world's myths and legends

Students take turns to propose their answers.

Total time for Activity 2.2: 15-20 minutes according to age and number of participants

Tips:

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


Activity 2.3 – Educator will stimulate discussion among students in order to rise their consciousness about: the importance of biodiversity; the interconnection between any natural element (human beings, non-human beings, environment itself); the importance of nature preservation; human beings' needs and rights for food, housing, studying, moving, health, etc.; how to balance humans' needs and nature preservation.

To rise their consciousness and to stimulate dialogue, educator shall pose questions such as:

- ✓ what happens when we destroy forests and woods?
- ✓ what happens to the animals and birds living in those forests? where will they live? what will they eat? will they reproduce?
- ✓ what happens to the insects?
- ✓ what happens to the air we breath?
- ✓ what happens with carbon dioxide?
- ✓ what happens to the soil where the forests grew, if we dig the soil and build buildings, roads, factories, hospitals, schools, etc?
- ✓ can we live without trees?

But will also suggest questions such as:

- ✓ in which house/flat do you live? where would you live if you hadn't a house/flat?
- ✓ where do you go to school? where would you study if your school wouldn't exist?
- ✓ where do people go when they get ill and need a doctor? what would happen if hospitals wouldn't exist?
- ✓ do you know if any woods or forests where destroyed to build the city/area where you live?



Students take turns to propose their answers.

Total time for Activity 2.3: 15-20 minutes according to age and number of participants

Tips:

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

Activity 2.4 – At last, educator will stimulate children to discuss about the following points (possible answers):


- 1. What can I as a person do? (Ethical values)
 - ✓ plant a tree
 - ✓ visit a forest or woods
 - ✓ reduce the risk of fires
- 2. What can we as a society do? (Democratic values)
 - ✓ reduce the risk of fires
 - ✓ promote sustainable forestry. Sustainable forestry balances the needs of the environment, wildlife, and forest communities, supporting decent incomes while conserving our forests for future generations. Actions:
 - establish protected areas and conserve biodiversity
 - management plan that specifies the number of trees that can be harvested per acre, and the frequency at which this can occur, based on the growth and regeneration rates of the species found in that ecosystem. The goal is to harvest in such a way that allows these species the chance to regenerate, and ensures that the forest's overall ecological health is maintained, restored, or even enhanced ^v
- 3. How to live in harmony with the nature? (Environmental values)
 - ✓ protect "high conservation value forests." This term is used to describe forests that contain significant concentrations of biodiversity; are located in or include rare or endangered ecosystems; are critical providers of ecosystem services; or are fundamental to meeting the basic needs or defining the cultural identity of forest communities ^{vi}.
 - ✓ many people associate logging with the image of a bulldozer leaving behind a denuded landscape, but it is possible to harvest timber without causing collateral damage to other parts of a forest. Reduced-impact techniques allow loggers to fell and extract trees in a manner that reduces damage to other trees in the stand. This approach also minimizes erosion, waste, and carbon emissions ^{vii}

Students take turns to propose their answers.

Total time for Activity 2.4: 15-20 minutes according to age and number of participants

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.
- The aim is to develop between children and educator a philosophical dialogue.
- The workshop is dialogue based; children take turns at expressing opinions and suggesting answers/solutions, providing examples, constructing criteria and building on each other's ideas with the aim of coming to a settlement regarding the initial philosophical question that stimulated the dialogue.
- Educator acts as both facilitator and co-inquirer.

Part 3 – Conclusion: express gratitude and describe your feelings

Activity 3 - After discussion ends, educator invites children to look at a tree in the park (if they are outdoor), or to think about a tree they like (if they are indoor). Then children are invited to thank respectfully the trees, saying out loud to the trees and to the rest of the children what they are grateful for (e.g.: I am grateful for your beauty; I am grateful for you hosting the birds; I am grateful for the oxygen you provide us; I am grateful because your roots protect the soil from erosion; I am grateful for your fallen leaves transforming into humus and fertilizing the soil; I am grateful for the shadow you provide us in summer; I am grateful for your fruits; I am grateful for the sound of your leaves when the wind is blowing;)

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 3: 10-15 minutes

ⁱ Acknowledges: the form and steps of this exercise are develop by: ROGERS, S. *A Mindfulness practice for pre-schoolers that connects kids to nature*. Available at: <https://www.mindful.org/mindfulness-practice-preschoolers-connects-kids-nature/>

ⁱⁱ ROGERS, S. *Ibid.*

ⁱⁱⁱ ROGERS, S. *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>

- v Source: <https://www.rainforest-alliance.org/articles/what-is-sustainable-forestry>
- vi Source: <https://www.rainforest-alliance.org/articles/what-is-sustainable-forestry>
- vii Source: <https://www.rainforest-alliance.org/articles/what-is-sustainable-forestry>