

**GUIDELINES**

**FOR CREATING**

**A LESSON PLAN**

*#litterlessplus*

**This document provides teachers with guidelines on developing a lesson plan on the subject of pollution. To improve your chances of winning the Litter Less Plus Competition, please fill-in as many details as possible and bear in mind that your lesson plan needs to address one or more of the following topics:**

* + Reduction of litter and waste
	+ Promotion of responsible production and consumption
	+ Increasing knowledge and taking actions to reduce invisible pollutants
	+ Promotion of the circular economy model

**We thank you in advance for your participation and will do our best to share it with our network.**

**- Foundation for Environmental Education**

1. **AUTHOR DETAILS**

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 | / Eco-Schools, YRE |  |
| 1. Would you like to receive monthly updates through our Newsletter? Yes/No
 | No |  |
| 1. Submission date (dd/mm/yyyy)
 | 31/08/2023 |  |

1. **THE LESSON PLAN**
2. Theme – Ecological Footprint
3. Introduction – Improve understanding of the underlying concepts of sustainable development through examples of ecological footprint and human influence on changes in all ecosystems.

Why is an important ecological imprint and how can we change it? What Does All Include Sustainable Development?

Consideration of sustainability raises the following questions:

- Are the resources of an area sufficient for the life of the human community that inhabits it, given the number of communities, lifestyles and resource consumption?

- Is the capacity of a particular area sufficient to accept all community waste without harm to the quality of life and human health?

PS. Calculation of an ecological footprint attempts to provide answers to these questions, enabling an individual, family, community, state to measure sustainability. Excessive ecological footprint, either because of excessive consumption, either due to waste production or for both reasons warns that necessary changes in lifestyle and management are necessary. Calculation of ecological footprints also points to the direction and nature of the necessary changes, and they may need to go from individual to family to the largest societies and states.

1. Age Group – Age 14 to 16
2. Objectives or Learning Outcomes – By the end of this lesson, students will be able to:

- get to know the term "ecological footprint"

- calculate your ecological footprint, the footprint of your family and school

- propose measures to reduce the personal and family footprint if there is a need for it

-work on the development of students' awareness that with small changes in behavior they can reduce their personal ecological footprint and the footprint of the school, so they further develop this main project with various projects and learn about sustainable development through everyday examples.

- collaborate, discuss and share ideas in the classroom

1. Time required to deliver the lesson plan – If more than one class session (30-45mins), please indicate the time required.

120 min

1. Remote preparation - (if any) Anything that you (or the students) need to do BEFORE the lesson. (e.g. collect and bring to school 3 items labelled as hazardous)

In the previous lesson, the students were given the task to research the concepts of biocapacity and ecological deficit at home on the Internet and in literature. Students will learn about what is meant by ecological debt and why the International Ecological Deficit Day is celebrated as an important international date. In this way, he will address the difficulties that accompany humanity (how to produce food and how to supply energy). The goal is for students to master the basic concepts of the ecological deficit and to understand the problems that arise as a result of the ecological debt.

Additional information can be obtained at:

<https://www.wwfadria.org/sr/novosti/vesti/?uNewsID=11429441>

<https://www.overshootday.org/>

1. Planning considerations - (if any) such as (i) ‘warnings’ about misconceptions students might have about the lesson’s topic and how to deal with them; (ii) safety precautions; (iii) tips and other useful information

Students were given links that can help them in their research. Students are free to look for other opinions in the literature and on the Internet, but if they decide to support opinions that climate change does not exist, etc., they must explain and present the facts to the rest of the class.

1. Resources Required to deliver the lesson plan – Material, equipment and reading resources needed

On line resources mentioned in the lesson

Offline: Paper A4, Crayons, Flomaster

1. Activity – Steps or description of how the lesson will be conducted/facilitated by the teacher.

Structure your description using these main headings:

* 1. Introduction - In the classroom, the teacher will work with the students on the concept of ecological footprint and its purpose (what information and insights it provides to the individual, family and society). Then students calculate the ecological footprint on an online dedicated calculator: <https://www.footprintcalculator.org/>

 In pairs, they make tables in which they will enter data for their own ecological footprint, but also the ecological footprint of imagined personalities, which they will classify according to pre-designed criteria. It is very important that they design, that is, choose the criteria independently, i.e. in agreement with your partner. For example, if the criterion is transportation to work, they can compare the ecological footprints of people who use their own car, public transport or bicycle, or, if the criterion is diet, to compare people with healthy eating habits, with people who eat at fast food restaurants , vegetarians, etc. The data they have obtained is presented to the department in tables and with the help of graphics, and together they draw conclusions, as well as suggestions on how to reduce the ecological footprint.

Additional information can be obtained at:

<https://www.footprintnetwork.org/>

<https://csienvisci.files.wordpress.com/2012/09/lab-1-ecological-footprint-activity.pdf>

 <https://www.homeworkmarket.com/questions/lab-10-11-12-13>

* 1. Development- Achieving the outcome is realized in workshop work to reduce the ecological footprint. In groups, students find visual representations of the ecological footprint (example: <https://i.pinimg.com/564x/45/9d/d5/459dd5aa24b7c7136670b97564771b1f.jpg>

), and then they themselves should come up with and realize their idea of how to make that ecological footprint reduce (through correction of one's own diet or by avoiding substances that cause addictive diseases). They can paint their work and make it into a billboard or create an online infographic, like: <https://www.canva.com/design/DAEXi7I_bXk/oIvzsCio7wy_uJTxKIq9jw/view?utm_content=DAEXi7I_bXk>

* 1. Conclusion - The right to the environment belongs to the basic human rights, and so is the basic right of the child. Students can watch a video where they get basic knowledge about environmental law: <https://youtu.be/A6w3f0zbD70>

 There they will find out what are the goals of sustainable development prescribed by the United Nations. Teachers can also use the Green Pack manual (<https://www.scribd.com/document/385438654/Green-Pack-MN-pdf>

). Students should form pairs and each pair should choose one of the objectives and research stories from life or media related to it. Then they will present that story to the whole class and then a debate is organized: one half of the class advocates the position that human rights were violated, and the other advocates the position that they were not and argue their positions. Groups can compare the development of the sustainable development goals of a highly developed country and a low-developed country, high and low living standards, and find out which of the goals is developing the slowest in those countries.

Additional information can be obtained at:

<https://www.unicef.org/montenegro/media/9106/file/MNE-media-MNEpublication502.pdf>

1. Evaluation and Assessment – How will you check that the Objectives or Learning Outcomes (listed in D) were achieved?

Here is no quiz, but through presentations and opinions students should come to the following conclusions:

 HOW TO REDUCE ECOLOGICAL FOOTPRINT?

Reducing, re-using, recycling and thinking about the products and waste that comes from them.

DISCOVER YOUR CONSUMPTION!

Buy products that are free from or with less packaging.

Buy long-lasting products.

Buy local, untreated and seasonal food.

 I am cultivating vegetables and plants if you have the opportunity to do so.

Buy only as much as you really need.

It protects energy at home.

It protects water at home.

Consider how, when and where you travel, and try to reduce the time spent in the car.

Buy products that are built using renewable resources and renewable energy sources.

Student feedback

• Discuss the following questions and answers with examples of everyday life:

- What happens if the needs of the community for natural resources are greater than what the relevant area (the territory occupied by the community) provides?

<https://padlet.com/OliveraOlja/8vasiswtbtjf>

- What happens when the environmental capacity in the area belonging to the community is not sufficient for natural elimination and neutralization of waste (decomposition)? <https://padlet.com/OliveraOlja/dpc4dpgrkhp0>

- Can you link the mass epidemic to the environment in which they came up and spread out in the examples of history?

<https://padlet.com/OliveraOlja/k0rutl4kor7c>

- In addition to the protection of the environment, what should the society that strives to survive live should still be taken care of?

<https://padlet.com/OliveraOlja/avh9kzmufd2t>

1. Dissemination – How will you communicate about the products of the lesson for awareness raising? If your lesson plan has already been implemented, attach a link of a product produced during the lesson (e.g., video, poster, presentation, URL link/website link).

The students, together with their housemates, made decisions about reducing the excessive consumption of resources.

We participated in the week of global education, where educated students spread knowledge about these topics to other students of the school- <https://www.facebook.com/ekonomskoUgostiteljskaSkolaNiksic/posts/pfbid02Us5qscJfMi7cS1C5p3QdqzBpNACKCSpynLbJ1uUtFtC1XRa1rjKp8X8mpwMLJtD9l>

We also participated in the Green Thinking for Greener Community project, where the students calculated the school's carbon footprint and presented it to the director, where together within the Eco School we proposed solutions to reduce the school's carbon footprint. The realization of our ideas is ongoing.

<https://www.facebook.com/ekonomskoUgostiteljskaSkolaNiksic/posts/pfbid0knM68x6RPX1TijKm4xf3F9NM7CUpLjBs9ZAfYhgPTKHyQtp8Pz3D6NzWHQsEaZnBl>

<https://www.facebook.com/ekonomskoUgostiteljskaSkolaNiksic/posts/pfbid02kpK4zcRJWQ1bZq9v5xEzb1LKJq7MwvLUVQmc5kz1YXxUvKQa8EV9oSquyHh8afpNl>

1. Follow-up activity - (if any) Suggest an activity that can build on what the students learned during your lesson

In the future, together with the students, we could change the worrying state of the planet for the better: by learning and developing sustainable mobility, reforestation and the energy transition to renewable sources.

1. Adaptations for students with learning difficulties – (if any)

Students with disabilities participate actively, eg draw their feet, color and say which resources they use the most. They suggest what can be reduced. They explore the interior and exterior of the school together with other students and calculate the carbon footprint.

1. Extension for gifted students – (if any)

The gifted students explained these concepts to the other students of the school, as well as proposed measures to reduce the school's footprint. They also find additional resources and debate with each other.

1. Background information for teachers - Include any website links and resources that would provide teachers with useful information about the lesson’s topic

<https://www.wwfadria.org/sr/novosti/vesti/?uNewsID=11429441>

<https://www.overshootday.org/>

<https://www.footprintnetwork.org/>

<https://far.rs/sr/2022/08/03/ekoloski-dug-prema-planeti-i-velika-potrosnja-prirodnih-resursa/>

1. References – Acknowledge the resources that were used while developing the Lesson Plan.

<https://www.wwfadria.org/sr/novosti/vesti/?uNewsID=11429441>

<https://www.overshootday.org/>

<https://www.footprintnetwork.org/>

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<https://www.canva.com/design/DAEXi7I_bXk/oIvzsCio7wy_uJTxKIq9jw/view?utm_content=DAEXi7I_bXk>

<https://www.unicef.org/montenegro/media/9106/file/MNE-media-MNEpublication502.pdf>

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<https://padlet.com/OliveraOlja/dpc4dpgrkhp0>

<https://padlet.com/OliveraOlja/k0rutl4kor7c>