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Role Play Unit WP1 Eco citizens, eco friendly!

Wi-Mi (Open: Wide Minds will Find Eco Virtual STEAM Solutions towards Climate change!) Projekt broj: 2022-1-RO01-KA220-SCH-000084942



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Guidance for the teacher in preparation for the Role Play

Climate change is a long-term change in the average weather patterns that have come to define Earth's local, regional and global climates. These changes have a broad range of observed effects that are synonymous with the term. Changes observed in Earth's climate since the mid-20th century are driven by human activities, particularly fossil fuel burning, which increases heat-trapping greenhouse gas levels in Earth's atmosphere, raising Earth's average surface temperature. Natural processes, which have been overwhelmed by human activities, can also contribute to climate change.

The consequences of climate change are extremely serious, and affect many aspects of our lives. Both countering climate change and adapting to a warming world are top priorities for all. We need climate action now. The best way to tackle the problem is to work with students from an early age because they will be the ones handling the problem in the future.

Eco citizens, eco friendly! Role Play

In Eco citizens, eco friendly! Role Play students will explore how human actions can have both a positive and negative impact on the natural environment. The idea of the role play is for the students to become agents of change in their schools and local communities. During the first stage students will brainstorm a list of environmental problems caused by human actions (waste recycling and disposal, forestation and deforestation, flood control and erosion, clean air enhancements, pollution, etc). Students will be divided into smaller groups (4-5 students) and each group will select one environmental issue related to school or city environment that they wish to study more. Students will gather a range of information about their chosen issue using the technology.

During the next stage of the unit students will take an active role in becoming 'ecofriendly' citizens as they work together to identify and then rectify a local environmental problem. Students may decide to clean up the local beach, assemble a recycling station at school, plant more trees at the local park, or lobby the local council to install more rubbish bins in the town centre, etc. Students will then celebrate their achievements and promote an 'eco-friendly' message by sharing their learning and actions with other students in the school, parents and the wider community.

Learning Outcomes

Students will be able to:

- Describe a range of environmental issues that we face in today's world
- Identify actions that people can take to rectify/improve the natural world
- Participate in an environmental project within the school or local community taking responsibility for an allocated role
- Evaluate the success of the environmental project.

Eco citizens, eco friendly! Role Play main questions

- 1. What are the major problems that we are facing regarding climate change on the local level?
- 2. How can we make our school / local communities more eco friendly?
- 3. What can I do as a student to help prevent it?

Planning and execution of the Role Play Unit

Teachers are encouraged to see the prior knowledge of their students before implementing the unit so that they can provide personalised and meaningful learning opportunities. Teachers will need to adapt this unit to meet the needs of their students, school and community. The future focus issues of sustainability can be explored during this unit. The quality of our environment is important to our feeling of well-being. The more we can improve and respect our environment, the more benefits we create for all living things. Sustainability requires people to be responsible citizens and that is what we need to teach our students.

1. Introduction

To introduce the climate change topic to the students, teachers can use one of the lesson plans created for the WP1, watch a movie about climate change or find a newspaper article about the topic. The material will be discussed with the students to see the extent of their knowledge about the topic. Teachers can also take students for a walk in the school yard or in the city park and discuss the material giving them an opportunity to observe the surroundings they live in.



2. Research the topic

Students are divided into smaller groups (4-5 students). They choose a topic related to climate change that they would like to work on and that can make school or local community more eco friendly.

Students gather information about their selected environmental issue using a range of resources. Students should explore the following questions in their research:

- Why is the problem occurring?
- What is being done to remedy it?
- What further action is needed?

They work on a topic using a chart with 3 steps:

- What I know about the topic;
- What I have learned researching the topic online;
- What actions I want to do (concrete actions).

Students share their presentations with the class.

3. Planning and Taking Action

Students brainstorm a list of environmental problems that are occurring in their own school or local community with the intention of choosing one problem to improve or rectify. Problems might include: a polluted river, a muddy park, litter at the beach or in the town centre, damaged community gardens, etc. Students then identify ways that each environmental problem could be solved or improved.

Students make a plan chart that includes: the time it would take to solve/improve the problem; the cost of required resources; necessary manpower; the need for expert assistance, the number of people who would benefit from the improved situation, etc.

The teacher and students list all the different jobs that will need to be allocated so that the environmental project can be carried out. Jobs could include requesting parent help, seeking funding, asking for assistance from environmental groups, purchasing resources, taking photographs, gaining expert advice, etc.

4. Sharing and Evaluating

Students make a digital slideshow (using photographs) to show their project in action and to promote an 'eco-friendly' message. This slideshow can be shown to other students in the school, parents and the wider community. Students may also wish to write a newspaper article about their work and publish it on the school website.



5. Reflection on the work done and Impact

After the student projects are done teachers should do a reflection talk on the work done by the students to determine the impact. They can use questions:

- In what ways have people enhanced our environment?
- In what ways have people harmed the environment?
- What are people doing to try to help the environment?
- How has science and technology helped to improve our environment?
- What action still needs to take place to improve our natural world?
- What are the crucial steps you need to take to carry out environmental action?
- How well did we carry out our responsibilities when working together to improve/rectify an environmental problem?
- What do we need to continue to do to ensure the ongoing success of our environmental work?
- How do we feel about our actions?
- Would we do anything differently next time?
- Do we have any further ideas for environmental improvement in our community?

Materials and Links

https://climate.nasa.gov/what-is-climate-change/

This Role Play Unit is adapted and based on:

https://nzcurriculum.tki.org.nz/content/download/157510/1166843/file/Science%20Le vel%202%20Eco-warriors!.pdf

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