

Didactic Scenario

1. Title

Familiarizing with the Peri-urban Forest

2. Keywords

Forest, Water, Reforestation, Peri-urban Forest, Experiential Learning

3. Basic Information

STEAM Subject: Technology-Environmental Studies

Typical interaction time with the instructional scenario in teaching hours for in-school work: 3 hours

General description of the scenario:

<u>Phases</u>	<u>Stage</u>	<u>Time</u>
What is the forest? Conceptual analysis of the term forest	Warm -up	25'
Baseplate construction	Implementation	45'
Forest fire - little firefighters in action	Implementation	45'
Walking into the forest	Evaluation	20'

Age group: 6 years, 1st graders Primary School

Estimated difficulty level:

Very Easy	Easy	Moderate	Challenging	Very Challenging
		X		

Teaching resources

Material: Student textbook and workbook for Environmental Studies, worksheets, field study in the suburban forest located right next to the school, and a Robotics program for the suppression of a presumed fire

School infrastructure: Computer connected to the internet, video projector, and display screen.

Additional material from external sources/online tools:

Indicative actions in the classroom

Group work: building a model that will be needed in the robotic program

1) Supposed fire in the nearby forest: put out with the robotic program

We Do 2.0

- Activation of the e-classroom as a tool for the Flipped Classroom. At home the three (3) previous days the students will watch the specific videos:

2) <https://www.youtube.com/watch?v=skxT3LBFXvY>

3) <https://www.youtube.com/watch?v=ryEmAkssl18>

4) <https://www.youtube.com/watch?v=Dn-ecuw8fg>

5) Activities and field study in the forest: organized excursion in the forest, we discover, observe, touch, smell, name trees, forest herbs, collection of forest materials, creation of improvised structures, etc. Games in the forest.

Differentiated Instruction for students of differing abilities and learning styles in the same class: N/A

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4. Educational Problem

What we want our students to learn:

1) What the forest is. What a forest ecosystem involves and if all forests are alike.

2) Flora (whether there are many species of trees) and fauna (whether the animals we encounter in the city forest are tame or not).

3) How can we protect the forest from fires?

4) Is there a way to revive the forest in case of a fire?

5) How important is the anti-flooding role of the forest for our city?"

5. Learning Objective (-s)

1. To familiarize themselves with the functioning of the peri- urban forest of Arta.
2. To identify human activities that disturb the relationship of people with their natural environment.
3. To get to know the great interdependence of the residents of our city with the Peranthi forest ecosystem and evaluate the important contribution of the peri urban forest.
4. To learn to collaborate, communicate, and self-manage
5. To develop critical thinking and express themselves creatively.

6. Phases of the Scenario

Phase 1

Title: What is a forest; Conceptual analysis of the term peri-urban forest

Indoor	Outdoor	Mixed
X		

Phase duration in minutes: 25'

Detailed description of the scenario phase:

The lesson will take place in the classroom of the A' grade, as there is a computer and a projector. During the assembly, students wondered what a forest is and whether the trees they see outside the window constitute a forest. They realize that the forest is within the urban fabric and understand the concept of the suburban forest. Following the link, they see related footage. Next, there is a discussion about the flora and fauna of the forest, and worksheets are given for painting and collage. They create the model of the forest (essential for the next stage).

Activity sheets: 2 worksheets about the 1st phase

Phase 2

Title: Activities with worksheets and computer program usage.

Indoor	Outdoor	Mixed
X		

Phase duration in minutes: 45'

Detailed description of the scenario phase:

The students are invited to collaboratively build the baseplate of the forest (necessary for the next stage). Use the worksheet after dividing into two groups.

Activity sheets: Baseplate construction instructions.

Phase 3

Title: Forest fire - Little firefighters in action

Indoor	Outdoor	Mixed
X		

Phase duration in minutes: 45'

Detailed description of the scenario phase:

Using the baseplate, they created earlier, students act out the forest fire scenario using the We Do 2.0 robotics kit. With the help of the teacher, they move the robot through scratch programming.

Activity sheets: Scratch instructions

Phase 4

Title: Walking into the forest!

Indoor	Outdoor	Mixed
	X	

Phase duration in minutes: 20'

Detailed description of the scenario phase:

Field study. Organized excursion into the forest, we explore, observe, touch, smell, name trees, forest herbs, collect forest materials, create improvised constructions, etc. Games and picnics in the forest.

Activity sheets: N/A

7. Evaluation Methodology

Initial: It takes place through guided discovery and discussion in the form of question and answer (What is a forest? Have you heard the term suburban forest?).

Formative: It occurs continuously in all phases, where questions are posed, and the progress towards students' learning is monitored.

Final: Evaluation questionnaire of the scenario, with students placing the corresponding satisfaction or dissatisfaction faces.

8. Additional Resources for the teacher

Folder: Familiarizing with the Peri-urban Forest_ Additional resources for the teacher