

Europeana Learning Scenario

(Teachers)

Title

Save the animals. Take action!

Author

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Abstract

We are living on a very friendly planet which seems to be a paradise with different types of animals, plants, and other organisms. Scientists estimate there are 7 to 10 million species on Earth. The sum of all these species is called the Earth’s biodiversity. Biodiversity includes an incredible range of living organisms—from centipedes to dolphins to rattlesnakes. How did there get to be so many species? It didn’t happen overnight.

Dodo Birds, Sabre-toothed cats, and Tasmania Monsters are already extinct. We need to do more about other animals. Elephants. Tigers. Gorillas. Pandas. Blue Whales. What do these amazing creatures have in common? They are some of the biggest, coolest, and most loved animals on the planet. They are all also endangered species. An animal or plant is endangered when there are so few left alive on the planet that the entire species is in danger of vanishing forever. When a species is completely gone—and not even one survives anywhere on Earth—it is considered extinct. Unfortunately, one out of every eight species of birds, one in four mammals, one in three amphibians, and one in five plants are endangered.

In this STE(A)M integrated learning scenario I will bring endangered animals’ issues into the classroom using PBL.

Keywords

Awareness of Nature, Biodiversity, Ecology, Endangered animals, Extinct Animals,

Table of summary

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Subject	Interdisciplinary- Science, Geography, English, ICT
Topic	Endangered Animals, Extinct Animals, Causes and Solutions
Age of students	12
Preparation time	Preparation: 30+30 minutes:



	<ul style="list-style-type: none"> • 30 minutes for the teachers to prepare teaching materials and define activities. • 30 minutes for students for brainstorming
Teaching time	<ul style="list-style-type: none"> • STEM Subject 1 Science 90 minutes • STEM Subject 2 ICT 45 minutes • STEM Subject 3/non-STEM subject English: 45 minutes • Art: 45 minutes
Online teaching material	Online tools: Pictochart, Students Worksheets, Maps, Crosswords, Google Classroom, Europeana Pixabay Photos
Offline teaching material	<ul style="list-style-type: none"> • Tablets or PCs with the Internet connection • Internet • Recycled plastic, plastic detergents, plastic bottles, some nails, wires, cables to design endangered animals.
Europeana resources us	Extinct animal 1 Extinct animal 2 Extinct Animal 3

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Integration into the curriculum

Turkish National Curriculum includes several interdisciplinary topics. One of them is Endangered Animals. Therefore this lesson entirely fits into the national curriculum. This one is intended for seventh grade students.

7th ENGLISH LESSON LEARNING OUTCOMES

UNIT 4: WILD ANIMALS

Listening

- E7.4.L1. Students will be able to understand past and present events in oral texts.
- E7.4.L2. Students will be able to identify the names of wild animals in simple oral texts.

Spoken Interaction

- E7.4.SI1. Students will be able to ask people questions about characteristics of wild animals.

Spoken Production

- E7.4.SP1. Students will be able to make simple suggestions.
- E7.4.SP2. Students will be able to report on past and present events.

Reading

- E7.4.R1. Students will be able to understand past and present events in simple texts including explanations and reasons.
- E7.4.R2. Students will be able to spot the names of wild animals in simple texts.

Writing

- E7.4.W1. Students will be able to write pieces describing wildlife.

Aim of the lesson

Conceptual: Get acquainted with some topics such as: Biodiversity ,endangered animals, interesting facts of these animals, habitats of endangered animals.

Factual: Get data about the numbers of animals who are endangered and in the red list of threatened species in the world.

Meta-Cognitive: Learn how to process and turn data into an infographic.

Social, Communication and artistic competences: Develop social competences which show awareness about endangered species.

Express opinions through art crafts made by themselves at home. Discuss (in English) possible solutions as to what we should do in order to reduce the number of species.

Outcome of the lesson

Students will raise awareness of the endangered animals, extinct animals and their effects on the environment. Students will be able to identify possible solutions for different causes of extinction. They will be able to write a short infographic about the topic and will present it to the class. They will improve their digital competence and be able to surf the Internet for specific information.

Trends

- Project based learning – students get a problem and in teams they are working on finding solutions.
- STEM Learning – they use technology to solve problems

Key competences

1. Critical Thinking: Students will analyze the data collected through the internet in all STEAM lessons, they will reflect on the data and they will conclude.

2. Creativity: They will design an endangered animal art craft that they chose by using recycled materials and raise awareness by presenting them to the class.
3. Collaboration: They will collaborate between groups at the English Class and each group will present an animal they choose.
4. Communication: They will communicate for finding solutions and investigations for the topic.

Activities

Name of activity	Procedure	Time
1. Brainstorming and Discussion	<p>The teacher will present the topic, Extinct animals' photos on Europeana site and then explain the aims, summary of the project to the class. In project-based learning, they begin by thinking about the end that they want to get to.</p> <p>In our endangered animals project, the big problem was that there are so many animals on the endangered list, and we do not want them to become extinct.</p>	30'
2. Discussion and preparation for the next lesson	<p>The students will be divided into four groups (5 students per group)</p> <p>The teacher will create groups by using Google Classroom.</p>	30'
STEM Subject 1: Science	<p>Extinct animal photos are shown to the class. Students will discuss the differences between endangered animals and extinct animals. They will look at what the term <i>endangered animals</i> mean. While finding endangered animals, They will learn about the endangered rating scale, which categorizes animals as "extinct," "extinct in the wild," "critically endangered," and so on.</p> <ol style="list-style-type: none"> 1. As a class they will select six endangered animals that they feel really need our help. 2. As a group one student will investigate the endangered animal fact on the map. 	45'
STEM Subject 2: ICT	<p>As a group, they will use the data they have investigated. They will make an infographic by using Piktochart. They will get a free account on Piktochart. Create an infographic using the ready to create templates.</p> <p>Infographics should be <i>CLEAR, CREATIVE, and INFORMATIVE</i>.</p> <p>They will brainstorm what information they will need to put on their infographic to be an effective and informative tool.</p> <p>They will participate equally and report their findings periodically. They will discuss what resources would provide them with the best information they need and how to look at resources critically for authenticity. Providing information from reliable organizations could help them intelligently inform the public with science-based research from credible sources.</p>	45'

Name of activity	Procedure	Time
STEM Subject 3/non-STEM subject: English and ART	Students will collect recycled materials and design an endangered animal by using materials. They will bring their craft to the class. As a group, they will present it in English by telling facts about it. Where does it live? How many numbers of animals are left? How can humans help? What does it eat? etc.	45'+45'

Assessment

Students will solve a vocabulary quiz with some questions about the animals.

Initial assessment

- Finding an endangered animal and adopting it.

Formative evaluation

- Analyzing the students' answers on [Padlet](#).
- Analyzing the quiz results

Final assessment

- The evaluation of the Presentation (craft-infographic)
- The final quiz with questions related to the topics covered.

***** AFTER IMPLEMENTATION *****

Student feedback

Students will learn about the following animals, and why the scientific study of natural populations is important. Students will take an important outside problem or question and research to try to solve the problem or answer the essential question. Students will collaborate, research, and create as they learn about and work on the problem. They will raise awareness of endangered animals.

Teacher's remarks

Since the real-life questions and STEM career paths that were illustrated in this learning scenario revolve around the topic of endangered animals and the environment. Students will produce a wide variety of learning products including infographics, art crafts, presentations, quizzes, crosswords and worksheets.

About the Europeana DSI-4 project

[Europeana](#) is Europe's digital platform for cultural heritage, providing free online access to over 53 million digitized items drawn from Europe's museums, archives, libraries and galleries. The Europeana DSI-4 project continues the work of the previous three Europeana Digital Service Infrastructures (DSIs). It is the fourth iteration with a proven record of accomplishment in creating access, interoperability, visibility and use of European cultural heritage in the five target markets outlined: European Citizens, Education, Research, Creative Industries and Cultural Heritage Institutions.

[European Schoolnet](#) (EUN) is the network of 32 European Ministries of Education, based in Brussels. As a not-for-profit organization, EUN aims to bring innovation in teaching and learning to its key stakeholders: Ministries of Education, schools,

teachers, researchers, and industry partners. European Schoolnet's task in the Europeana DSI-4 project is to continue and expand the Europeana Education Community.

Annex 1

[Endangered Animals Crossword Puzzle](#)

[Piktochart -infographic](#)