



Erasmus+

FutureMinds: Cultivating Innovative Leaders in STEAM and Active Citizenship

Project n° 2024-2-BE01-KA210-SCH-000286437

Activity Template **Applied STEAM and animal life**

School: Topelius School

Teacher Name and surname: Kaisa Lehtosalo

Activity objectives: In line with the STEAM principle we visited the University of Turku. We had a workshop in the laboratory and we also got to know the zoological museum. The aim was to learn biodiversity while working together in groups.

General framework: In the lab, microscopes are dug out and students learn to identify groups of invertebrates from real samples using a definition diagram. At the zoological museum, students are guided through the museum and the research conducted there, and they get to peek behind closed doors into the collection rooms.

Cross-curricular subjects involved: biology, science, zoology

Material needed to develop the activity: microscope, definition diagram

Timing: 2 hours all together (1 hour at the workshop and 1 hour at the zoological museum)

Groups: maximum of 20 people per group

Procedure to develop the activity:

Collect various soil samples and use a microscope to examine the soil organisms you find. Compare your findings with an identification key. Animal identification and the study of distinguishing features and species characteristics can be carried out at a natural history museum or even in the classroom, using materials selected by the teacher (such as the internet and picture books).

The evolutionary tree of life can be explored using concrete examples. Where do humans fit in, and where do bacteria or dinosaurs belong?

This should make it clear that all living organisms are related to one another—including humans and soil organisms.

Competences and skills to be acquired:

To guide students to understand the basic structure and function of an ecosystem, as well as to compare different ecosystems and identify species.

Help the student describe the structures and life functions of organisms and understand the structure of the animal kingdom.

To encourage the students to deepen their interest in nature and its phenomena, as well as to strengthen their relationship with nature and environmental knowledge.

Pictures:



Pitfalls and strengths: Pitfalls are that it is difficult to implement without an expert employee and necessary equipment. Strengths are that students get to know more about biodiversity and learn to work in groups.