Co-funded by the European Union
Erasmus+
NATIONAL AGENCY FOR EUROPEAN EDUCATIONAL PROGRAMMES AND MOBILITY

Exploring Water Conservation

SUBJECT AREAS:

Natural sciences

ACTIVITY DESCRIPTION:

Water, conservation, cycle, energy

OBJECTIVES:

Students will understand the importance of water conservation for environmental sustainability.

MATERIALS:

Pictures illustrating the water cycle, Examples of water conservation practices, Drawing materials, Videos about water conservation, Paper and markers.

GRADE/LEVEL:

Elementary School

DURATION:

Preparation time: 1 hour

Activity time: 40- 60 min.

PLACE:

Classroom, outdoors

AUTHOR:

SYNTHESIS Center for Research and Education

INTRODUCTION:

Begin by discussing the importance of water and its role in supporting life on Earth. Introduce the concept of the water cycle and how water moves through the environment.

Show pictures or diagrams illustrating the stages of the water cycle and explain how water is constantly recycled in nature.

BACKGROUND:

Water is a precious resource essential for all life on Earth, yet it is finite and vulnerable to depletion and pollution. Teaching primary school students about water conservation is crucial for fostering environmental stewardship and instilling sustainable habits from a young age. Understanding the water cycle and the interconnectedness of water sources, such as rivers, lakes, and oceans, provides students with the foundation to appreciate the importance of conserving water. By exploring the impact of water wastage on ecosystems and communities, students develop empathy and a sense of responsibility for protecting water resources.

Procedure:

1. Understanding Water Conservation (30 minutes): Present examples of water conservation practices, such as turning off the tap while brushing teeth, fixing leaky faucets, and using water-saving devices. Engage students in a discussion about why water conservation is important for the environment and future generations. Show visual aids depicting the impact of water wastage on ecosystems and communities.

2. Storytelling and Discussion (20 minutes): Read a story or show a video about water conservation and the importance of protecting water resources. Discuss the key messages and lessons learned from the story or video. Encourage students to share their thoughts, questions, and ideas about how they can contribute to water conservation efforts.

3. Group Activity: Water Conservation Poster (30 minutes): Divide students into small groups and provide them with poster paper and markers. In their groups, have students brainstorm and create a poster illustrating ways to conserve water at home, school, and in their community. Encourage creativity and collaboration as students design their posters, emphasizing the importance of clear messaging and visual appeal.

4. Reflection and Conclusion (15 minutes): Ask students to reflect on what they learned about water conservation and their role in protecting water resources. Have students share their posters with the class and explain the conservation practices depicted.

FUN FACTS:

- *A dripping faucet can waste up to 20 gallons of water per day, or over 7,000 gallons per year. Fixing leaks is one of the simplest ways to conserve water at home.*
- *The average American uses about 100 gallons of water per day for activities like showering, washing dishes, and flushing toilets. Being mindful of water usage can significantly reduce this amount.*
- *Water covers about 71% of the Earth's surface, but only about 1% of this water is accessible and suitable for human use. Conserving water helps ensure there is enough clean water for everyone.*
- *Turning off the tap while brushing teeth can save up to 8 gallons of water per day. Encouraging small changes in daily habits can lead to significant water savings over time.*

ASSESSMENT:

1. **Observational Assessment:** Teachers will observe students' engagement, participation, and understanding during class discussions, activities, and group work. They will assess students' ability to identify examples of water conservation practices and understand their importance.
2. **Written Assessment:** Students will complete written assessments, such as quizzes or worksheets, to demonstrate their comprehension of key concepts related to water conservation. This may include identifying water-saving strategies and explaining their significance.
3. **Group Activity Evaluation:** The group activity, where students create posters illustrating water conservation practices, will be evaluated based on creativity, clarity of messaging, and inclusion of relevant information. Teachers will assess students' ability to collaborate effectively and communicate their understanding through visual representation.

EVALUATION:

Evaluation of students' understanding of water conservation will be conducted through a multifaceted approach. This includes observation of students' engagement and participation during discussions and activities, written assessments to gauge comprehension of key concepts, and evaluation of group activities such as creating posters illustrating water conservation practices. Additionally, peer and self-evaluation will be encouraged to promote reflection and self-awareness. The lesson will conclude with a reflection and discussion session where students will share their thoughts and ideas about water conservation, providing further insight into their understanding and commitment to conserving water resources.