Co-funded by the
Erasmus+ Programme
of the European Union

INTELLECTUAL OUTPUT O3

SCENTIFIC CREATIVITY

4 Creativities Project
№2019-1-BG01-KA201-062354

Co-funded by the
Erasmus+ Programme
of the European Union

INTRODUCTION

The aim of FCREATIVITIES project is to improve the teachers' abilities to generate a creative education, leading to the creation of students who are able to think, analyze and solve daily problems. We ***will develop new scientific skills*** and competencies through the incorporation of new proposals, spaces, methodologies, and resources that will increase the students' ability, creativity and the skills for innovation. These activities will be used ***with 10 to 12 years old students,*** promoting their motivation and creativity. The activities will be composed for ***several working activities*** which will contain the different activities that we will elaborate with our students.

With the **scientific creativity** promotion we will improve the thinking capacity of our students and the ability to go from basic notions to more complex ones; they will learn to resolve problems in a real situation; they will practice the construction of their own learning; they will train their **deductive capacity** and this will take them to create strategies and solutions of their own and they will get better with their physical environment and their appreciation from different spaces, shapes, parts and the group in general. Scientific creativity will take place inside the classroom through scientific experiments workshops.

All the **experiments** will be presented in an experiment manual. The format will be a paper card, it will contain all the material that we will need to accomplish the experiment, how you do it, **how it is related to everyday life** and other relevant details.

The experiments that will conform the manual will be the following ones: **bacteria everywhere. Cells. Let's make a periscope. Light and air. Prehistoric illumination. Can we imitate a heart? Global warming.**

Scientific activity will be **boosted through observation, manipulation and resarch.** That will lead students to discover their immediate environment. Experimental and research activities will offer students the opportunity for learning in an independent and significant way.

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Title of the experiment

Eggs, water, milk, and juice - Let's become little scientists

Description and application in everyday life

Science experiments help students grow and boost their creativity. Through experimenting students are able to ask questions, make assumptions, and then seek solutions. Using small known or unknown experiments, students will be able to learn more about the world around us. The experiments help children to make predictions and discover what happens when using different things/options.

Free image on Unsplash

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Aims

1. Stimulating children's creativity and curiosity

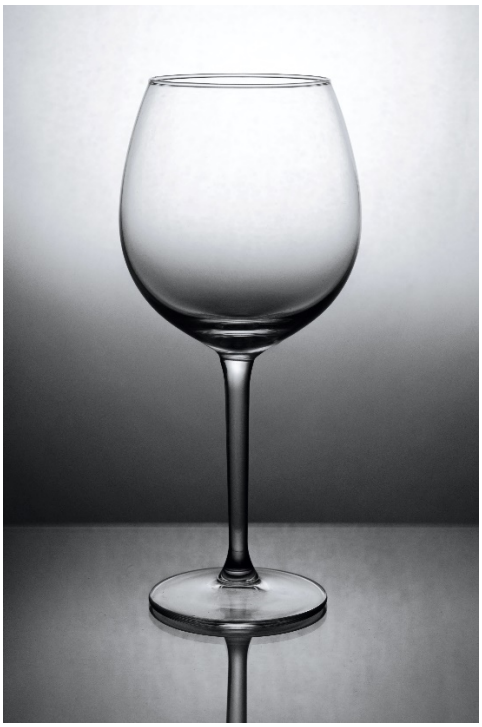
2. Increasing the students' interest for science and fun experiments

3. Enhance the teachers' abilities to build a friendly classroom relationship

Steps we must follow

The following steps are required to carry out the experiment in an attractive way:

1) It is well known that the calcium content of eggshells makes them a great stand-in for teeth. Let's try and convince together! In groups, take 3 glasses of the same size and:
- fill one with water
- fill one with juice (preferably cola or colored juice)
- fill one with milk



Free image on Unsplash

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

2) Put an ''unbroken'' egg in each glass. Use eggs to explore how different liquids can stain teeth and wear down the enamel.

Free image on Unsplash

3) Leave the egg in the glasses for a few hours (you can continue the school activity in the meantime) then start analyzing the condition of each egg in each glass.

4) At the end teachers ask following questions:

- What happens when you add the egg in the water, then milk and finally juice?

- How does the egg look in the glass of water? But in the one with milk? What about the one with the juice?

- What do sugary drinks do to your teeth? Why?

Materials needed

In order to achieve the maximum benefits of the experiment the following materials are needed:

- Empty (plastic) glass
- Water
- Milk

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

➢ Juice (cola or a dark-colored fruit juice)

➢ Eggs

☺ *Curiosity and motivation!*

Tips

➢ *Please make sure there is an experienced teacher-facilitator to ensure the safety of students when working with glasses (it is preferable to use plastic glasses to avoid breaking glass ones).*

Free image on Unsplash

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.