STEM Education for Sustainable Development



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Bioeconomy for a Sustainable Future

In this period, as humanity faces the climate crisis, the increase of the human population has led to numerous problems such as rapid consumption of resources, environmental pollution, and climate change. Different solutions and alternative methods are needed to deal with these problems and save the world from the climate crisis. The most effective solution proposal for a sustainable future is the concept of bioeconomy.

This project aims at the concept of the bioeconomy learned by all the students. Moreover, they discover how to contribute to the circular economy by transforming organic household waste into different products.

The starting point of the project:

How can we utilize organic household wastes produced in our homes in different ways instead of throwing them away?

Implementation of the project:

- Getting acquainted with the concept of bioeconomy
- Educational games (Biowhats, matching, puzzles)
- Product design that will contribute to the circular economy from household waste
- Preparation of brochures, banners, posters that will promote the products
- Sharing the various product examples
- Evaluation (Bookwidgets, Quizizz)



As a result of the project, students and their families created bioeconomic products such as disinfectant, surface cleaner, fertilizer, vinegar, cream, air freshener, flytrap, and candle holders made of fruit peels and other organic household wastes.