TEMPLATE for BEST PRACTICE EXAMPLES



- 1. Name of the project: Vertical plant wall
- 2. Subjects covered from STEAM areas: Biology, Arts, Technology, IT.
- 3. Target group (age range and size of the group): 13-14 years, up to 60 students.
- 4. Duration of the activity: at least 10 lessons (or 5 weeks).
- 5. Key words: biology, arts, technology, IT interdisciplinary excellence, environmental protection, sustainability.
- 6. Key sentence describing context of the activity, followed by short description: The project focuses on developing students' interdisciplinary competencies in the fields of environmental protection and sustainability. As spring is coming, and everyone is longing for life and greenery, the Year 7 pupils discussed how to "bring" life to school. Since indoor flowers are commonplace, it was decided to grow a variety of herbs (at least 6 types). It was decided to collect and analyze information about herbs and discuss their characteristics in biology lessons; decorate pots for herbs in art lessons; design and make a vertical shelf suitable for growing herbs in technology lessons and create herbal QR codes in IT lessons.
- Description of the activity environment, including the list of materials and tools needed: Herb seeds, potting soil, pots, materials for vertical construction (wood, plastic), decoration tools, tablets.
- 8. Step by step, detailed description of the activity, including teaching and learning strategies: In biology lessons, Year 7 pupils discussed how to "bring" life to school and how to grow and care for plants sustainably and responsibly at school. The pupils decided to grow a variety of herbs (at least 6 species). The discussion focused on which plants the pupils would plant. Before buying the seeds, the pupils had to find out about the particularities of growing herbs. The seeds were first sown in small, already-used containers (from meat, mushrooms, and other products). The pupils watered and observed the sprouting plants. Later, the herbs were put into larger pots. During art lessons, the pupils decorated the pots (plant theme). Paper pots were chosen for sustainability reasons. During the technology lessons, the pupils chose a suitable location for a vertical spice wall through discussion, measured it, and started designing the wall/shelf. The pupils had to prepare the wood (cut it into the right lengths and sand the pieces). The prepared wood was used to make a vertical wall/shelf and fixed in the biology room. During the nutrition lessons, the pupils learned about herbs that are suitable for flavoring dishes. The pupils will then be able to use the herbs in their cooking. In the IT lessons, pupils had to find information on the internet on the use of herbs, growing conditions, etc., knowing which herbs are sown. They prepared descriptions using Word. Some pupils managed to create QR codes.
- 9. Learning objectives/competencies:
 - Biology collect information about herbs and discuss their properties. They will decide which herbs to plant, buy seeds, sow, and water the herbs, and watch the herbs grow and water them daily.
 - Art decorate the pots chosen for the herbs with the tools of their choice.

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Technology - design a vertical shelf suitable for growing herbs, prepare the wood, and make the shelf. They will use the herbs they grow to flavor the dishes they prepare, having first found out which herbs are most suitable for which dishes.

Information technology: they will search the internet for information on herbs and create descriptions of herbs using Word and QR code creation software. They will prepare a project presentation.

Interdisciplinary competence - environmental protection, sustainability.

10. Evaluation/Assessment guidelines:

The educational activities in the classrooms were summarized and the results and conclusions of the study were presented.

11. Lessons learned:

The project tested the integration of different subjects in practice. Students were delighted to see that even several different subjects were working towards the same goal, deepening their knowledge of biology, sustainable plant cultivation, and consumption, and learning to create QR codes.

12. Additional information/Links:

https://docs.google.com/presentation/d/1V_T5laLuZi_ljl2zuEVoNwTOGh53Rvpnbx_RKC R9KIQ/edit?usp=sharing

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VERTICAL PLANT WALL





- Students in grades 7b and 7c;
- Biology, Nature and Human teacher Irma;
- Art teacher Galina;
- Technology teachers: Vitalija, Audronė, Vygaila;
- Information Technology teacher Ramutė.





The Goal:

Make a vertical spice wall to use the spices you grow to flavor different dishes.









The instruments and tools used for project implementation:

















SOWING SEEDS

Activities

SEEDLING





PLANT SEEDLING SPROUTING









Vertical shelf of herbs

Result







with 8 types of herbs





THANK YOU FOR YOUR ATTENTION

Kvapnusis rozmarinas

Tai yra krūminis augalas, jis yra ganėtinai vešlus. Vėsesnio klimato srityse dažniausiai žydi balandį-gegužę. Tiek sausi, teik džiovinti naudojami žuvų prieskoniai, mėsai, daržovių sriuboms, paukštienai, grybams, marinatui.

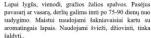


Sėjamosios petražolės



Petražolės lapai garbanoti, kvapnūs. Gausu vitaminų bei mineralinių medžiagų. Tinka vartoti šviežias, šaldyti, džiovinti. Petražolės geriausiai auga lengvoje drėgnoje priesmėlio ar priemolio dirvoje. Ankstyvam derliui petražolės sėklos sėiamos iš

petrazoles sektos sejamos is rudens arba anksti pavasarį, rudens derliui - gegužę. Augalai vidutinio aukščio, plačiai išsikerojantys, tankia lapija.







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