Go Green in Schools

"Good Practices of Environmental Education for Sustainable Development"

Funded by the European Union

Erasmus+ cooperation with six countries

Welcome
to try out green activities

This **Go Green in schools e-book** introduces you the best green ideas what eight primary schools in six countries realized in their Erasmus+ project about sustainable life. Our project was called **Take Care! Sustainable children - sustainable Earth.** We wanted to learn about what kind of environmental challenges our planet is facing and what we could do to help it and how to bring hope. Both pupils and teachers were motivated and excited to try out different green activities in nature, inside the schools and even in the surrounding society. As a result, attitudes towards nature protection changed for better and the relationship with nature was strengthened.

The activities in this book are organized by topics and countries. Each country, Belgium, Cyprus, Finland, Greece, Romania and Spain/Catalonia has created activites related to **recycling, biodiversity, water, energy, transport, food, climate change or global citizenship.** Most of the activities are overlapping and cross-curricular and can be realized with students of different ages.

Much more than this was done but here we want to share the most practical and influential activities. We had lots of fun realizing these, so go ahead, enjoy and try out some of these! Feel free to make any adaptations.

If you need more information on these activities or would like to try out more, you may contact our schools, you can find contact info on the last page.

Enjoy!

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Make something new out of your old clothes or things!

Students, teachers and parents collect trash and recyclable items and make art crafts. Plastic, glass and aluminum bottles, plastic lids, old clothes, fabrics, plastic cups and dishes and any useless items become the raw material for our students to make artwork, useful objects and Christmas ornaments.

Students make improvised looms using cardboard and plastic trays. Old clothes are woven into small carpets, bracelets and various decorations.

We also made mini looms with our 3d printer

Finally, we participated to the **European Week for Waste Reduction** (**EWWR**) a campaign that encourages all Europeans and not only to carry out awareness-raising actions about sustainable resource and waste management **during a single week** in November.

Green art – Eco crafts

Short Description
The learning cycle focuses on promoting eco-friendly crafts and green art. The children study Cypriot and international artists, who use recycled or reclaimed material to create art. Then they create their own green artefacts to present their favorite books.

Our learning cycle step-by-step

- *Step 1: Raising the issue of sustainability and waste management*

The children watch videos concerning the climate change and the need for waste management. In order to better understand the situation, the children engage in Virtual Reality activities and simulations. The need for sustainability is discussed with the focus on the aspect of waste management.

- *Step 2: Studying 'green' artists*

The children go on line and gather information about artists from Cyprus and other countries who use recycled or reclaimed material for their art work. They post all their findings in a collaborative Padlet. Then they give their own definition of the term 'green art'.

- *Step 3: Gathering recycled and reclaimed materials*

The children search their homes and the school yard for waste that can be used in their artifacts. A special corner is set up in the school's makerspace.

- *Step 4: Announcing our competition*

A competition between all the students of our school is announced. As the International Children's Book Day is coming up, the theme of the competition is "My book lives in a box'. The children have to recreate their favorite book in a box i.e. an old shoe box. They can get help from their parents at home, as well. When their artefacts are ready, they bring them to school and an exhibition is set up.

Step 5: Sharing our work with our schoolmates and our community

Finally, the children present their work to their classmates. All the students get to visit the exhibition and vote their favorite three boxes. All the votes are counted and the three first winners get their prizes: books of their choice. All the boxes are photographed and the pictures are posted in our school's official website. Also, an exhibition is organized for all the parents in our school's gymnasium.

Eco arts and crafts in the curriculum

Recycling waste, reusing it, and transforming it into study objects, toys or simple decorations are activities that the students of our school always carry out. They are closely related to the content of the study lessons, but they have the role of raising awareness among students about the positive impact that recycling has on the environment and also people.

Thus, the second grade B students collected and used recyclable materials such as glass, plastic, paper, and cardboard, and materials from nature, which they used in different lessons.

In the hours when they learned about outer space, they used their imagination and made of paper, cardboard, old C.D.s, aluminum foil and wooden sticks, various objects in space, but also the planets in the Solar System.

Another lesson in using recyclable materials was Living in the Forest. In the first hours, the students went on a short trip to the forest, observed it, collected information, made projects based on the information, presented it to their fellow students, and at the end, they created their own forest from recyclable materials such as paper, cardboard, plastic (C.D.)

School yard: making a compost, protecting nature

We made our compost because:
More food reaches landfills than any other material in our everyday trash.
Food waste in our landfill creates methane gas, one of the worst greenhouse gases in the environment.
Compost retains moisture and nutrients, protects plants from extreme temps, and improves soil structure. Healthier soil means healthier plants. Healthier plants means healthier people.

The team in charge informed all the students to collect the peels of the fruits they eat during the break in the small green bucket and created similar posters. At the same time, some students bring fruit or vegetable peels from home, while the neighborhood greengrocer makes sure to bring us fruits and vegetables every morning for our composter.

Finally, we created posters with message for all students in our school **"Don't throw bites"** with 3 options (sharing with friends, keep for later, compost)

NIUBOOKS PROJECT

The objective

«Niubooks» is a project to foster reading and the reuse of old books. It is like a free library. You can find it in many different places like villages, streets and squares around the world. You just have to take a book, sit down, relax and enjoy reading time.

The idea came up in a Viladrau council plenary session and the education counselor asked our help to build, maintain and disseminate them.

We accepted the proposal because we thought it was an interesting project because all of us have books at home that we do not read and it is an opportunity to give them a second life. Moreover, it is a good way to promote reading outside.

HOW TO CREATE A NIUBOOK

Step 1: design it

In Viladrau we made 3 Niubooks, which are placed in different parts of the village. Students in small groups designed each of the Niubooks with the help of an engineer and then they built them using natural and reusable materials.

Step 2

Students created the niubooks using different materials, especially natural ones such as wood, ceramics and glass. Students needed the help of teachers or adults to make the niubooks. We needed to order the tiles to a ceramist because this work cannot be done by students and also the glass to make the niubook's door.

Step 3

Students with the help of teachers and parents made the niubooks.

Step 4

Students wrote the instructions about how to use the niubooks in different languages so that everybody may understand how to use them. They invented some riddles about the niubooks!

How it works

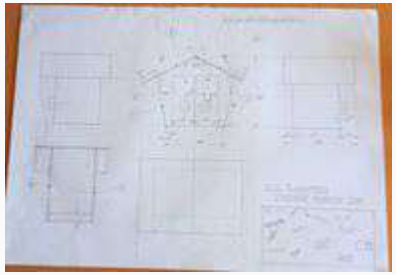
You must take care of all the books.
If you want to pick up one book you have to leave one of yours.
You can take a book to your home for some days and you can give it back to any Nivbook.
You can bring a book that you do not use in order to share it.

Riddles about Nivbooks

--> Take care of books and love them if you want to pick them again and again!
--> If you want to get a book, bring it back to any NIUBOOK.
--> When I return a book, I make sure it is good!
--> You can share your books and put them in any NIUBOOK.
--> Give one, get one!

Conclusion

Last but not least, it is a project in which students are motivated to contribute to their own village and to give a second life to their books. It is a public service for all the inhabitants of the village and also for the tourists.



Plastic waste and recycling

The aim of this project was to find out how plastic is made, what happens to plastic waste and how we could re-use the plastic waste. Here are the 4 steps of the project.

Step 1: We discussed about how much plastic waste we produce. There is plastic everywhere, in the things we buy and in the wrappings. What can we do to diminish the amount of plastic? Is it possible to buy less or is it possible to recycle plastic? Many students told that they recycle different waste at home but they don't recycle plastic waste.

Step 2: We visited the recycling centre in Orivesi. We found out that there is a test going on about how to recycle all the plastic waste of households in Orivesi. All kinds of plastic is collected in the same bin and then it is brought to a big plant where scientists and entrepreneurs try to find a way to re-use it. This is a unique test in whole Finland. Usually plastic has to be separated into different bins, because there are many types of plastic. We will see what the scientists will make out of this mixed plastic - will they find a solution?

Step 3: We studied the topic further by searching for information and videos and then we made posters about recycling of plastic. How plastic is being made, how plastic waste influences nature and what is micro plastic.

Step 4 : At the end of the whole project we made art from plastic. The purpose of the art was to influence on people's attitudes and raise awareness about plastic waste. We invited other classes to our plastic art exhibition.

This project was really interesting and we all learned a lot. Some students told that **thank to this project they had started to recycle plastic waste at home.**

Biodiversity: forests and plants

Students get familiar with herbs and spices. They see, smell, taste them and, above all, realize their usefulness in cooking as well as their unique beneficial properties in our health. **They also learn to distinguish dangerous chemicals, as aroma substitutes or flavor enhancers** in packaged foods that are also their usual dietary choice

Essential ingredients of the Mediterranean diet are herbs. So we planted our own herbs at school, using our compost.

Finally, we visited a park near our school, discovered the plants and we planted aromatic plants and shrubs.

Biodiversity around us - The mushroom project

Lots of mushrooms grow in the Finnish forests in the autumn. There is good food in our forests, nature around us is actually full of food! We found out that many students didn't recognize any mushrooms and had never tasted them. We created a broad project around mushrooms and handled the topic in different classes and subjects.

Here are some students' comments in the beginning of the project:
**** What do you think about mushrooms?***
- I hate them!
- It's nice to pick them in the forest.
- They look nice!
- They smell bad!
- Some mushrooms are delicious.

Some parents like to pick mushrooms and they helped us. **Children brought many kinds of mushrooms to school.** Everyone chose one mushroom and tried to draw it very carefully. So they really got to know that mushroom: how it looked like and how it smelled. Then we made **an exhibition about mushrooms, drawings and mushroom books.**

Next day we made a trip to the forest to learn the names and types of mushrooms. The forest close to our school was quite dry so it wasn't a perfect place to find mushrooms. Luckily we found some mushrooms and berries. We checked the names of the mushrooms in the guide books and on Internet. We learned that you should never pick up mushrooms that you don't know because some of the mushrooms are poisonous.

At school we checked the names of the mushrooms again and cleaned them. **Then we started to bake mushroom pies and berry pies**. Children made a dough, cut the mushrooms and everyone made their own pie ready.

After that we celebrated our mushroom project together. We ate the mushroom pies and berry pies. Here are some comments:
- What did you like?
- It was delicious!
- 5/5
- I didn't like them at all.

In the music lesson we sang a **song** about mushrooms and in handicrafts we made mushroom **wall decorations**.

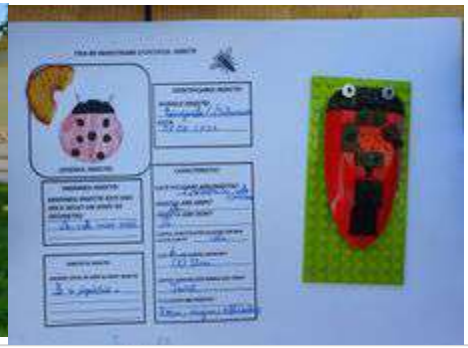
During this project children **used many senses** to study, feel and taste the mushrooms. They opened their eyes to the biodiversity around us and learned the names of mushrooms and how to use them for food. Through art and songs they formed **emotional ties** to them. **They will certainly remember mushroooms!**

Biodiversity - Insects

The wonderful world of insects

Learning about insects

4th graders did an insect research project. Using double magnifying glasses, tweezers went into the school yard and each student was tasked with discovering an insect, taking it carefully and putting it in the double magnifying glass, carefully analyzing it and completing the investigation sheet.



Insects and STEM

The investigation of the insects did not end with their analysis in the school yard, the students continued with the help of LegoWedo 2.0 kits and Ozobot to create them and program them to move. They created a bee, a fly, a butterfly that flies from flower to flower using color coding.

Hotel for insects

The students considered that all the research activity created a state of oppression for small insects, so they decided to build small hotels for insects, with special spaces for them, where the insects can find shelter and food.

Biodiversity- Green garden

Biodiversity- in school

The fourth-grade students of the "Elena Doamna" Gymnasium School, Tecuci, Romania responded affirmatively to the challenge of being actively involved in the activity of the Take care! Project - biodiversity.

Our great vegetables!

We organized a greenhouse in which we planned vegetables: tomatoes, cucumbers, eggplants, peppers, and strawberries. The planting activity of the vegetables took place at the beginning of April; it was an intense but rewarding activity.

After the planning stage, we are going to take care of the plants by watering them, and spraying them against pests with organic substances, obtained in the households of some children in the class, whose parents deal with vegetable growing.

Good taste!

You can't imagine our joy when we discovered the fruits of our labor: plants bear fruit.

Of course, the care for the vegetables in the greenhouse continues and we are looking forward to the moment when we will taste them..

Involving students in gardening projects brings many benefits to self-esteem and reduces overall stress levels.

These children can thus show better results at school and develop an interest in healthy eating if they are surrounded by their grown vegetables, but they also improve their confidence, teamwork, and communication skills.

GARDENING WORKSHOP

The objectives

The school year 2021-2022 in Els Castanyers school a gardening workshop started in order to offer the students new experiences related to the school environment.

The objectives of this workshop are:

to make our students conscious about taking care of the planet, the environment, the surroundings

to encourage students in maintaining the school surroundings and green parts of the school clean and safe.

Step 1

Students chose the plants they would like to grow. They decided to grow aromatic herbs and they made a list of them.

Step 2

School ordered the plants to a garden shop and they prepared the soil and necessary tools to start the work.

Step 3

Students in small groups grew the aromatic herbs in different pots and made the labels in different languages.

Conclusion

The gardening workshop we did at school may be adapted to a bigger scale such as natural parks, taking care of parks, forests and ecosystems that students will be surrounded by all their lives.

PLANTER WORKSHOP - DIY PROJECT

The aim of this workshop

In January 2022 some students of Els castanyers school started a planter workshop (do it yourself project) in order to make a couple of planters to grow small trees and bushes and make the school greener and charming. The plants could also feed some insects and thus add to the biodiversity.

Step 1

The students created the drawings, they designed the structures and they made a list of the materials they needed taking into account the size and measure of the structures. The school got the materials and then students cut the pieces of them.

Step 2

As soon as materials were ready, kids made the planters using the required machinery. Then, they varnished the structures with a special outdoor varnish and finally they put a roofing tar in order to protect the wood and protect the soil.

Conclusion

The school also offers a gardening workshop during the school year and students are responsible for filling the planters with soil and to grow the trees or plants they prefer. The students take care of the plants of the school and they are responsible and committed to do it.

Transport

SUSTAINABLE transport: the road to a green tomorrow

Students of class IV B from the Elena Doamna School in Tecuci studied materials about the environmental impact of public transportation and sustainable transport solutions to decrease pollution. They debated on the topic, answered quizzes and asked questions to further clarify the topic.

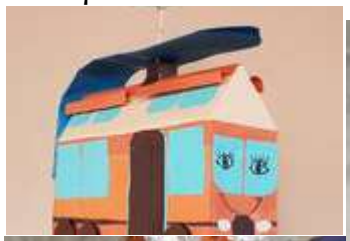
Transport means were then presented and students identified the images that depicted ecological transport means: the cart, the electrc car, the air ballon, the hang glider, the boat, the sailboat, the bicicle, the velocipede.

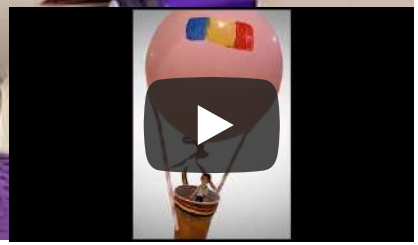
Green transport, healthy living

Students proposed transportation solutions for pollution mitigation:
-Buying and using electric cars
-Using public transportation instead of individual cars
-Car sharing
-Walking instead of driving to school where possible
-Walking in the park or driving to work, to shopping areas and so on by bike\electric vehicles

Engineers of tomorrow – transportation into the future

Towards the end of the activity, students created and presented their models of environmental friendly transportation means.





Reducing the energy footprint

Our school participated in the programme **OPEN SOCIETIES AND SCHOOLS IN CLIMATE PROTECTION AND ENERGY TRANSITION (CLIMATE SCHOOL Be.At)**
It constitutes a collaboration between the **Municipality of Athens**, the educational community, the Social cooperative "**Wind of Renewal**", the citizens initiative "**Respect for Greece**" (Berlin) and **Unabhängiges Institut für Umweltfragen** (UfU)
It aims to the mobilization of the local communities and municipalities for climate protection and energy transition as well as to the energy efficiency of the schools with the substantial participation and collaboration of the teachers, students, parents and local authorities.

During our participation in the program, the energy team was created, which consisted of representatives of students from the upper grades. The energy team was responsible for planning, implementing, disseminating and evaluating actions aimed at reducing our school's energy footprint.
After the end of the program, the energy team established the institution of energy Wednesday.

The energy team announces every Monday what action the school will take to reduce our energy footprint. The whole educational community, the families of our students and sometimes the local community are involved in the action. The energy team reminds the users of each classroom daily with their reward labels for their energy consistency.

At the end of each month, the students of the classes that participated in all the activities of "Energy Wednesday" are rewarded as they took care every day to reduce their energy footprint in the school area.
So we established ten energy Wednesdays (see the PPT).

Energy Wednesdays.pptx

WINDMILL CREATION

The second cycle students of Els Castanyers school were interested in renewable energies. They discussed this topic and they decided to start the climate change project. They had some questions about the weather, the atmospheric phenomena, the sea levels and also they thought about the actions they could take in order to improve the climate change.

One school parent works in renewable energy and he came to school to give the students a lot of information about windmills. The kids were so motivated that they decided to make a windmill robot. The school owns a lego robotic kit and this project was carried out in the *robotix workshop*, two hours a week.

Objective

The objective of this project is to learn about climate change, to know what is happening on our planet and to take actions to solve the situation as much as possible. There is a specific objective which is to build a windmill robot.

Step 1

The students make a draft of their windmill on paper.

Step 2

Students create a windmill with lego blocks.

Step 3

Using the "lego robotic kit" and "lego we do app" students program the actions that the windmill has to do.

Conclusion

Students are conscious about climate change and different ways we can stop and fight against it. Through this project students will know different types of jobs related to renewable energies.

Sustainable Housing

Short Description

The learning cycle focuses on promoting eco-friendly housing as the best alternative to housing, with the ultimate goal of ensuring sustainability. It promotes solutions such as cheap and clean energy with the aim to tackle the issue of climate change. Through the implementation of this learning cycle, students study different types of housing, identify their energy characteristics and design their own sustainable housing model, which they use to inform and raise awareness of their school community on the need for sustainability. The project focuses on developing students' critical thinking, problem solving and collaboration skills.

Our learning cycle step-by-step

- *Step 1: Raising the issue of sustainability*

The children watch videos concerning the climate change and the destruction of our eco-system. In order to better understand the situation the children engage in Virtual Reality activities and simulations. The need for sustainability is discussed with the focus on the aspect of sustainable housing.

- *Step 2: Searching the web for relative information*

The children go on line and gather information about the most sustainable buildings in the world today. They post all their findings in a collaborative Padlet. Then they define the main technical characteristics and features of a sustainable house and put together a check list.

- *Step 3: Visiting sustainable houses in our community: a traditional Cypriot house / a modern house*

The children visit sustainable houses within their village, a traditional Cypriot house and a modern one. They take photographs and record their observations and comments with their smartphones. Using their check list they evaluate the houses and decide whether they could be considered eco-friendly or not.

- *Step 4: Talking with experts: an architect and a civil engineer explain how an eco-friendly house is built and the impact on the environment*

An architect and a civil engineer who specialize in the field of sustainable housing visit the school and discuss with the children. They present all the aspects that have to be considered when building a sustainable house and help the children to start making their own drawings of a sustainable house.

- *Step 5: Division in two groups: the Minecraft team/the Model team*

The children choose between building a model with recycled and reclaimed materials and designing a house in their Minecraft worlds. They are separated in two different groups. Each group is led by a teacher.

- *Step 6: Construction of our models / Minecraft houses*

The students craft their models based on the drawings they had prepared. The first team designs and creates a 3d model using eco-friendly materials such as reclaimed wood, carton, old toys, recycled paper, used plastic containers etc. The second team designs their virtual houses with the use of the Minecraft (Education Edition) app.

- **Step 7: Preparing our presentations of our models/ Minecraft houses: writing our scripts, making our presentation videos, uploading on YouTube**

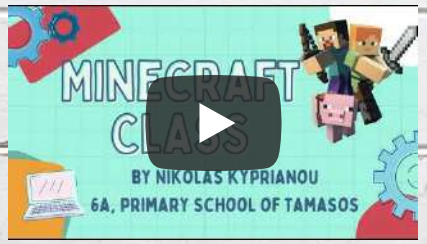
After completing their models, the students write their scripts and record their work. Then they produce short videos where they present their models and explain all the parameters of sustainability they took under consideration. The videos are posted in our school's website and YouTube channel.

- **Step 8: Sharing our work with our schoolmates and our community**

Finally, the children present their work to their classmates underlining the importance of adopting a sustainable way of constructing our houses.

Photos of our adventures



Conclusion

There was an evident change in the way the children see their own homes, after the visits to the sustainable houses and their conversations with the experts. The students were able to recognize and justify the choice of construction materials, the orientation of the house for ventilation, sun and shading purposes, as well as the importance of the garden and the animals of the yard. They used digital applications which helped them to record data, debrief concepts and document the process that was followed. The use of their own devices, the representation of mental map through the Mindly application, the use of Padlet and the screen recording to present their work were perhaps the main applications used. It was more than clear that the children enjoyed the whole process and gained a lot of knowledge and new skills.



ECOLOGICAL CITIES

We started to imagine what the ecological cities are like. Then we interviewed a city planning architect about ecological city planning and ecological construction.

She told us that ecological cities are dense: everything is so close that you don't need the car to move around. The houses are made of wood. There are bicycle ways and side walks, parks, recycling points, places to grow vegetables, even green roofs where plants produce oxygen.

If you need to go somewhere further, the public transportation is close and practical. There are ecological sources of energy and farms are close and produce the food to the city.

Then we found recycled materials and started to plan the ecological cities in groups.

We built two big towns with these guidelines:
- People live close to each other in buildings made of wood (wood ties carbon)
- Solar, wind and waterpower make the energy
- There is a tram and bicycle roads out of the town
- Good recycling points to sort out the trash
- Second hand shops to recycle object and clothes
- Green gardens around and also on the top of the houses
- Farms nearby to buy local food
- Green, nice parks in the town centre
- All necessary services

Children worked in groups and enjoyed the planning and construction. They negotiated a lot and sometimes voted, what the most ecological solution was. This project could have lasted weeks, it was so inspiring and the pupils had new ideas all the time. We also showed pictures of the ready cities to the architect and got positive feedback from her.

This city uses wind power near the sea where the river flows. Farmers produce food near the city and the green roof on the school produces oxygen and makes the school nicer. There is a second hand shop, recycling stations and a big park in the city. Everything is close and there is also a tram/train station. No cars are needed.

The project went on in real life: Ecological cities take also care of biodiversity and have houses for insects and animals. So we constructed real insect hides for bees and other insects and bird houses for different species and placed them around the school yard. Each pupils chose a certain bird species and prepared the house especially for that bird.

Bird houses by 4th class (left). An insect hide made by preeschoolers (right).

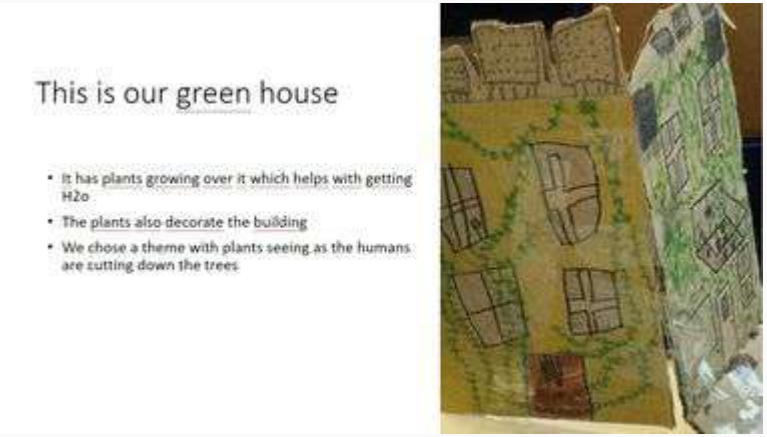
This city made energy with the river and wind. However, the pupils took care that the fish can still have a place to swim up the river by building a small river next to the power plant. Also some windmills were constructed.

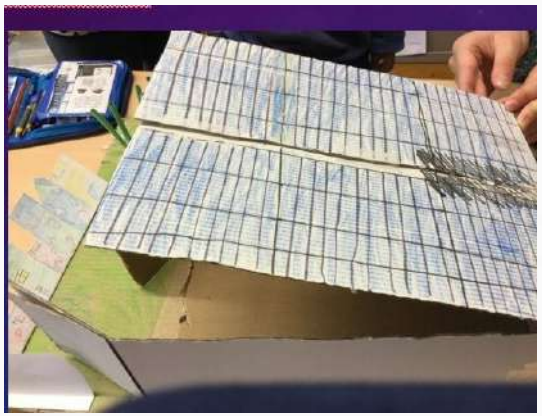
Green roofs and trees produce oxygen and the people can grow their own vegetables on small fields. **Everything is close.** Even though there is a road, there are no cars in the street in this city, only a bus or a train and bicycles.

ECO-cities and future transportation

Students are aware that global warming is a big problem. So they tried to design a city in which ecologically friendly modes of transportation are used and at the same time they proposed various solutions to reduce the amount of CO2 in the air.

Students shared their ideas with presenting them and explaining each part of their eco-cities.





Ecological food

What kind of food is healthy and ecological? Where does the food come from? How can we produce less carbon dioxide and save the planet with food choices?

We looked for information and learned that locally produced food and vegetarian food is environmentally healthier food. We can replace meat with other products and try new veggie inventions, like bean or oat products that look like meat. The half of the food on the plate should be vegetables. "That's a lot!" said the kids. ;-)

We visited a local food store. We found out about **local food and the alternatives to meat that they sell.** We found for example bean and oat products, Härkis and Boltsi, that looked like meat but weren't. We also learned about the **symbols and labels** that tell about local food and **environmentally good food, like organic** food.

The students made leaflets about ecological and healthy food.

We also looked for vegetarian food recipes. The students made a healthy and **ecological dinner as their homework.** It was an inspiring homework! Students showed their food pictures or videos in class and shared their cooking recipes. They were surprised how delicious a vegetarian meal can be, especially when they had made it by themselves!

- More vegetables, please! :-) said the kids now.

Food - PicNic Basket

PICNIC BASKET is an innovative educational experience, designed to change students' eating habits in a fun and creative way, through experiential learning and play. The "Picnic Basket" is aimed at students aged 5 to 12 years and, starting from school snacks, focuses on 3 days of sustainable nutrition:

On Monday, the cooking day, students cook simple recipes in class, learning through collaboration that homemade food is best for our health. At the same time, students discover the value of homemade food, its taste, its cooking and its ecological footprint.

On Wednesday, Fruit Day, through three different games, students learn that fruits and vegetables have their season and become familiar with the Mediterranean diet. They are also beginning to realize that food coming from afar has "mileage" and a high carbon footprint.

Friday is the day we do not throw food away! Our little friends learn through play that when we throw away food, we are actually throwing away not just a few bites but also the natural resources and energy it took to produce it. Apart from being environmental, this is also a moral issue as, although necessary, food is not a given for everyone.

WWF Picnic Bask...

After we participated in the pilot application program with our students we also:

- made our own PICNIC basket
- enriched it with new activities and games.
- made a recipe book from our students' countries of origin
- planted a flowerbed with aromatic plants
- built a small greenhouse in which we grow traditional seeds

What can we do to reduce food waste?

The students and teachers were brainstorming about how they can reduce waste and food waste not only at school, but also at home. Then we tried to make a few steps to reduce our waste.
The aim was to make the students aware of the problems all around the world and understand that even one person can make a big change.

Step 1
Brainstorming
The students and their teachers were talking about how muchwaste they produce at home. Whether their parents buy only as much food as their families eat or whether they produce a lot of food waste.

Step 2
Questionnaire
The students answered some questions about food waste in their household in cooperation with their parents.

Step 3
Evaluation of the questionnaire
Based on the questionnaire, the students agreed on the biggest problems regarding food waste at home and suggested several steps, for example, how they themselves can prevent it.

Step 4
Action
After discussing the biggest problems, the students proposed their own solutions.
One of the solution was that the students would take the food to their plates themselves. Each time everyone takes only the amount he is able to eat, not more.
Students started to be also more involved at home to prepare food to help to the parents and to avoid food waste.
Students started also to grow their own food. They re-used plastic bottles as planters. They started the school vegetable garden in cooperation with secondary students and started their own composting place.

Step 5
Results
The amount of food waste at school has decreased significantly. The amount of other waste has also decreased, because children bring their snack in lunch boxes and don't use so many disposables anymore. Children also spread the information on posters in the school corridors and share with their families.

Healthy food-healthy life

Students from 3rd class from School Elena Doamna, Tecuci study about food.

Learning about piramid of aliments, students learn about the importance of healthy food and healthy life. Each students must bring an aliment from home, and after presenting a correct piramid of aliments, students must add his object to the right pleace.

Happy fruit-happy students

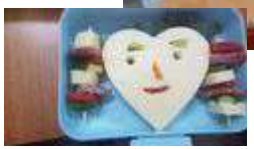
Students write happy words for their colleagues on bananas and read and learn about bennefits of eating fresh fruit and vegetable every day

Eat a rainbow

These activity was one of the most interesting one on this study project. Students lean that is very importnat to eat aliments of all colors. each food has different properties and is importnat for our body.

Sugar from aliments

It was very important to find out that just about any food you eat has sugar. Using a scientific study, the students found out how many sugar cubes were in a flute, in a packet of oreo biscuits, in a can of Coca-Cola or in a Mars bar. The activity was carried out together with the partners from Finland in a mini-group and awarded in the Stem Discovery Week 2019 Campaign.



Vegetable and fruit design

3rd graders understood the importance of healthy eating and a healthy lunch at school. With the help of their parents, some of them created the most beautiful and delicious food packages for school. Food, fruits and vegetables seemed to come to life, they were cheerful and attractive, to give energy and attention to children at school.. ■

The Life of Water

Students study about water. They learn about the water cycle, suggest ways to save water and make posters.
Learning through experiment materials dissolvable or not in water and water pollution.
In our computer lab they set the scene for the water drop's journey.
They dressed up our robot as a drop, they programmed it and enjoyed our drop's journey!
It started from the clouds above, and reached the Earth. It travelled through the mountains, the rivers, the lakes and reached the sea. The sun warmed it, it climbed up the clouds and fell back to Earth again.
At the end they evaluated the project using the Kahoot poll.

Water explorers.pptx

Students suggest ways to save water!
- repair the dripping taps
- wash fruits and vegetables in a bowl of water
- use the water we washed fruits and vegetables to water the flowers in the pots
- turn off the tap when we brush our teeth
- to brush our teeth we use a glass of water
- when we soap ourselves, we turn off the tap

The Green Water Book

Read our Green Water Book here:

Green Tips2.pdf

The goal of this project was to find out how important water is for us in everyday life. There are thousands of lakes in Finland and we can enjoy them in many ways. So it's really worth protecting nature and reducing the use of water.

First there were two questions: where do we need water and how can we save water? The pupils worked in groups and tried to find out as many answers as they could. After that we discussed a lot, searched for information on the internet and did some experiments like melting the snow and measuring the amount of water we use for washing the hands.

The next step was to learn how to use Book Creator. First the pupils learned it in pairs and every pair made their own book. Pairs presented their books to the whole group. Then we started to make the Green Water Book together. We decided together that there would be a Finnish family and Green Waterman in the book. We voted about their names and planned what they are like.

Each pair chose a couple of pages from their own book to the common Green Water Book. Then the teacher translated it into English. In the end we made a video from it so it was easier to share it with others.

Water study

The students from the Preparatory class A from the "Elena Doamna" School studied the lake water of the "Lady Oltea" park in our city.

The water for the study was brought to the classroom by the activity coordinator. We immediately started investigating.

1. First, the students looked at the clarity of the water. They noticed the appearance and color. Then they decided if it smelled. The students concluded that although the water was cloudy, it did not smell.

2. In another research phase, the students measured the water temperature. The temperatures found were around 10 degrees.

3. An attractive step was to measure the acidity of the water. The children could see how the color of the PH indicator paper changes.

4. Finally, they studied the water content under a microscope. They also discovered some small creatures in which they observed the shape and color.

The students were very pleased with the research. The use of specific tools, research results, the accumulation of information and the sharing of experiences between colleagues made the activity a real

Water studies at a lake

Pupils studied the condition of water at the nearby lake. There were six small workshops:

1. What is this water and lake like? Use your senses:
Take water into a cup. Smell the water. Does it smell?
Put a white disc inside the lake and see how far you can still see it. How transparent is the water in this lake?
Is this lake eutrophic or bare?
Are there too many plants or hardly any plants? If the lake is eutrophic, where do the extra nutrients come from? What could we do to it?

2. What is the temperature of the lake?
Use a thermometer.

3. What kind of insects are there in the lake?
Try to catch insects with a net.
Identify the insects with the help of the big insect identification sheet.

4. How is the ground of the lake?
Use the *water camera* to observe the ground of the lake.
What do you see? Sand, stones, fish, vegetation?
Is it dark or clear?

5. Floating experiments
Find different kinds of objects.
Guess whether they float or not.
Try them! Did you guess right?

6. How does water move?
Dig small channels on the beach and then pour water into the channels, making water move.
Make little boats from birch skin and observe how moving water carries little boats. Making the small boats of natural materials was also a lot of fun.

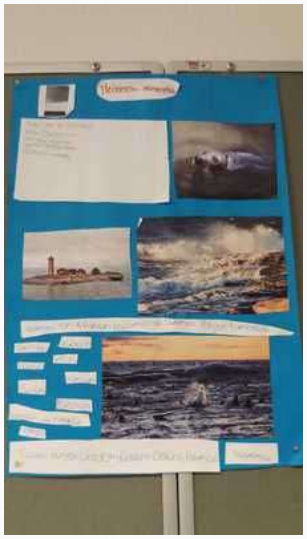
The Baltic Sea

We studied the state of the Baltic Sea (in Finnish and Swedish we call it East Sea, Itämeri). Baltic Sea lies between Finland, Sweden, Russia, Estonia, Latvia, Lithuania, Poland, Germany and Denmark.

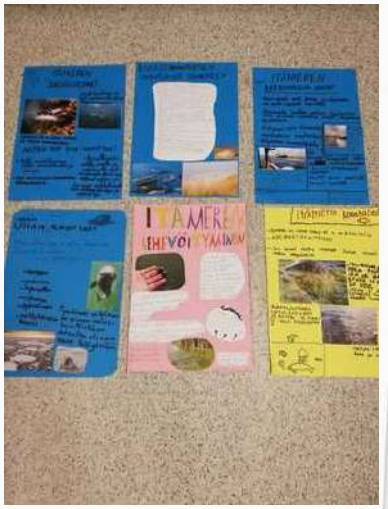
We found out that the Baltic Sea is the most contaminated sea in the world. That's horrible! The Sea is very fragile because of the small amount of salt in the water, the rivers bring lots of sweet water to the Baltic. The sea is almost a lake, because there is just a small access to the Atlantic Ocean. It is also very shallow. **The countries around the sea have lots of agriculture, industry and big cities, which means releases and contamination to the rivers and then to the Baltic Sea.** In the summer there are lots of algae in the sea, which makes the sea green and [illegible] flowing.

We studied for example fishing, animals, transportation, contamination and protection of the sea.

We must stop contaminating this precious sea!



We also studied the quality of the water in rivers and lakes that run to the Baltic Sea. We found out that the water is cleanest in Lapland and East Finland and dirtiest in the rivers and lakes near the coast. Fertilizers, industry and towns pollute the water and brings the pollution to the Baltic Sea. The Baltic is shallow, has only little salt and is thus very fragile.



We also studied how much plastic there is in the seas - it was shocking! Imagine double the weight of people on the planet in the seas. So much plastic we have in the seas!

We studied some devices that clean waters and then we invented our own devices to clean the waters: To pick up the plastic and turn it into fuel or toys. We also planned to prevent the fertilizers from going to the rivers and lakes by **building protective areas to the field sides** and devices that trap the fertilizers from the rivers before they flow to the lakes. These ideas are close to the reality, as well! Many new inventions are being made and tried to solve these problems.

Some students also visited the Baltic Sea museum Forum Marinum in Turku and studied more about the Baltic Sea there. Some students participated in **a virtual meeting with a Baltic Sea specialist,** where they could interview the specialist about the problems and ways to help the sea. Our Erasmus project in **Finland also donated our flight compensation to an association helping our Baltic Sea**.

The project was very inspiring and pupils could feel that they created solutions to the plastic and extra nutrient problem.

Oil spill on the sea!

This experiment simulates what happens when there is an oil spill on the sea. We realized this experiment in cross-cultural groups during a mobility in Finland. It is a good task for cooperating.

To make this you need:

- A large container
- Sand and stones
- Water
- Aluminium foil
- Sawdust
- Spoons
- Drinking straws
- Some cooking oil
- A sieve

Students put **sand, stones and water** on the bottom of the container to depict the sea. They place some **feathers depicting birds** swimming in the sea. They form **"an oil tanker"** from the aluminium foil and fill it with cooking oil. (A soundtrack with the sounds of sea and birds could inspire the imagination and deepen the experience.)

The students "play" that the tanker suddenly crashes against the stone and has a leak: the oil spreads around the sea. The "**birds" get oily** and cannot fly anymore. They are taken out of the sea and try to be cleaned. The pupils try to gather the oil with the straws and try to take it out with the spoons. **However, it is very difficult to get the oil out** with the spoons, especially if there is a storm on the sea.

Then they try sawdust: they sprinkle it on oil and **the sawdust absorbs some of it.** Then they can collect the sawdust with the spoons. However, they find that the job is not easy and **the sea cannot be cleaned totally**. At the end the sand is separated from the liquid with a sieve and washed.

The pupils learnt that effects of an oil spill are long-lasting. *To help the sea and animals we must build firm tankers to not cause oil spills and also learn new ways of cleaning our seas and birds. The experiment was very hands-on and real.*

WATER PROJECT EXPERIMENTS

In our schools pupils love doing experiments about water properties and their uses. All along the year we have done different experiments, some of them proposed by the teacher and some others by the students. We have learned about density, conductivity, transparency and refraction or reflexion. We have also worked on some aspects like the human print on water, the sustainable use of water and the importance of taking care about it. In order to work deeply on this topic, students did some digital activities like an interactive poster advertising the main aspects to save water, and some useful tips to keep water healthy.

Here we introduce a few experiments we did with water.

The Magic Arrow: An Experiment on the Refraction of Light

Materials: a crystal glass, Water and paper.

How do we do it:

Draw a horizontal arrow on a piece of paper and fill your glass with water. Keeping an eye on the glass of water, hold the paper behind it and slowly move it backwards.

Observe what happens to the arrow as you move the paper. You'll notice that after reaching a certain distance, the arrow seems to point in the opposite direction, as if it was magic!

Repeat the same steps, but without water. You will notice that there is no change in the direction the arrow is pointing.

FLEEING PEPPER

MATERIALS we need:
powdered pepper, liquid soap, a plate or recipient and water.

The first thing we have to do is pour enough water into a deep dish or recipient to cover the bottom. Next, sprinkle a little pepper all over the surface.

To get the pepper to "run away" quickly, all we have to do is place a drop of liquid soap on a finger and insert it right into the center of the plate or recipient. As we can see, the pepper rushes towards the ends of the plate, escaping from the fearful liquid soap.

MOVING COLOURS

With this experiment, Students will discover capillarity, a property of liquids.

As you can see, the experiment is very simple. We need 3 glass jars or recipients, food coloring, water and absorbent paper (from the kitchen). We must fill the jars/recipients on the sides with water and leave the center one empty.

We dye the water with two primary colors (yellow, red and blue), place a folded sheet of paper with one end inside the water and the other inside the empty jar and wait a few minutes until the water begins to "walk" through the paper .

Leak-proof bag

All we need to do for this experiment is:

A bag for frozen foods
Water
Very sharp colors
A very big bowl

Before starting the experiment, we looked at the materials and hypothesized what it would look like. We have thought of possibilities. Together we have thought of the next step. What can we do with colors? With a little help, we thought we could use them to puncture the bag.

Before trying to puncture the bag we thought about what would happen... Most have said that I would fart and we would wet everything.

We tried it and something happened that left us speechless: we were able to go through the bag from side to side without a drop of water falling !!! How could the water not leak through the hole we made in the bag? We thought about it and then we saw that the water was not leaking because the hole had a plug: the color!

When we had the bag full of colors we decided to take them out. Then we got wet! The bag peed!

Cloud experiment

To carry out this experiment, we will need the following materials:

a small amount of ethanol (alcohol for sanitary or cosmetic use can be used), a spray bottle (optional), a transparent polyethylene terephthalate soft drink bottle, with a capacity between 1 L and 2 L, a stopper that fits snugly in the mouth of the bottle, a needle to inflate balls and a bicycle pump, preferably with a pressure gauge.

The needle should pass through the stopper, in such a way that it fits as well as possible to minimize air leaks when the pressure inside the bottle increases.

Once the desired pressure is reached, the body of the bottle is held with the hand that activates the pump and, with the other, the stopper is released so that the air and ethanol vapor expand rapidly (generally, the stopper will jump up sharply as soon as it is released). As a result of this expansion, the bottle will cool and a cloud of ethanol will be formed.

Magic Pineapple

Materials:

3 glass bowls
Hot water
Cold water
Open and closed pine cones
shelled pine nuts
Nutcracker

Process:

-Pour hot water into a bowl.
-Pour cold water into another bowl.
-Put a couple of pine cones, one open and one closed, in each of them and observe.
-After the pine cones have reacted, remove the pine cones and leave them in the third bowl.
-See if they open or close.

Try to draw conclusions about its opening for the distribution of pine seeds, pine nuts.
Split the shell of the pine cones and taste them.

NOTE: This experiment also helps us to check the buoyancy of pine cones. Do the open and closed ones float in the same way?

Upside down glass experiment with non-falling water

There is nothing more surprising than turning a glass of water upside down and seeing that it does not fall out.

Materials: a glass, Water, A sheet of paper, better if it is thick. You can also use another object such as a card from a deck.

Non-falling water experiment:

-Fill the glass with water and place it on a surface that can get wet. With these experiments you never know what can happen!
-Make sure the edge is also wet.
-Now place a piece of paper over the glass.
-Turn the glass of water upside down and remove your hand.
You will see that, despite being upside down, the water does not fall.

Climate Change: The Forest of Promises

Our school participated in the campaign ***COP26 FOREST OF PROMISES.*** #PromiseToThePlanet is a campaign led by the World Organisation of the Scouts Movement, aiming to bring as many people around the world as possible on board with the mission of finding solutions to the climate crisis. On 5th November, the Friday of week 1 of COP, schools are invited to be part of a 'Forest of Promises'.

Students make leaves from paper or card and write a #PromiseToThePlanet that they wish to make on one side. On the other side, they write a promise they want to see made by world leaders, sending the message that we all need to be part of the change, but none of us can do it alone.

They saw the prasentation: Our Climate Our Future - School Climate Action Workshop and discussed it.

COP26 Climate A...

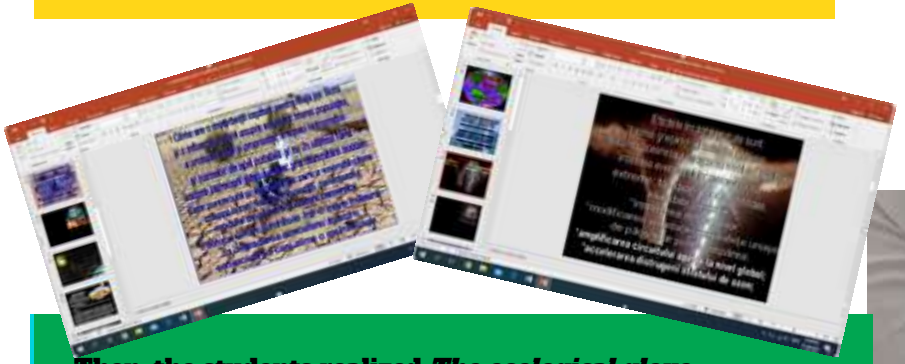
They discussed climate change using "Fact and Discussion Cards"

COP26-Discussion-Cards-Ages-9-11.pdf

Students of 5th and 6th grades created leaves with their promise to the Planet and a message that the leaders of world hear at COP26.

Climate change: Ecological gloves

I presented the students a PPT on Global Warming and the Greenhouse Effect. I explained to the students what are the reasons for global warming, what is the greenhouse effect, what experiments should be done to better understand these notions, what measures should be taken to stop these phenomena, to stop the drastic consequences on our planet.



Then, the students realized *The ecological glove:*

- for each action you already do, use the color green, for the actions you want to do in the future use a different color.
- If you like to spend time in the middle of nature, protecting the environment, color the white spaces between the circles the ecological glove with a different shade of green.

The gloves were cut out and pasted on a poster.

After that, students sent a messages of encouragement and salvation from the Earth, urging people to come to Earth 's aid.

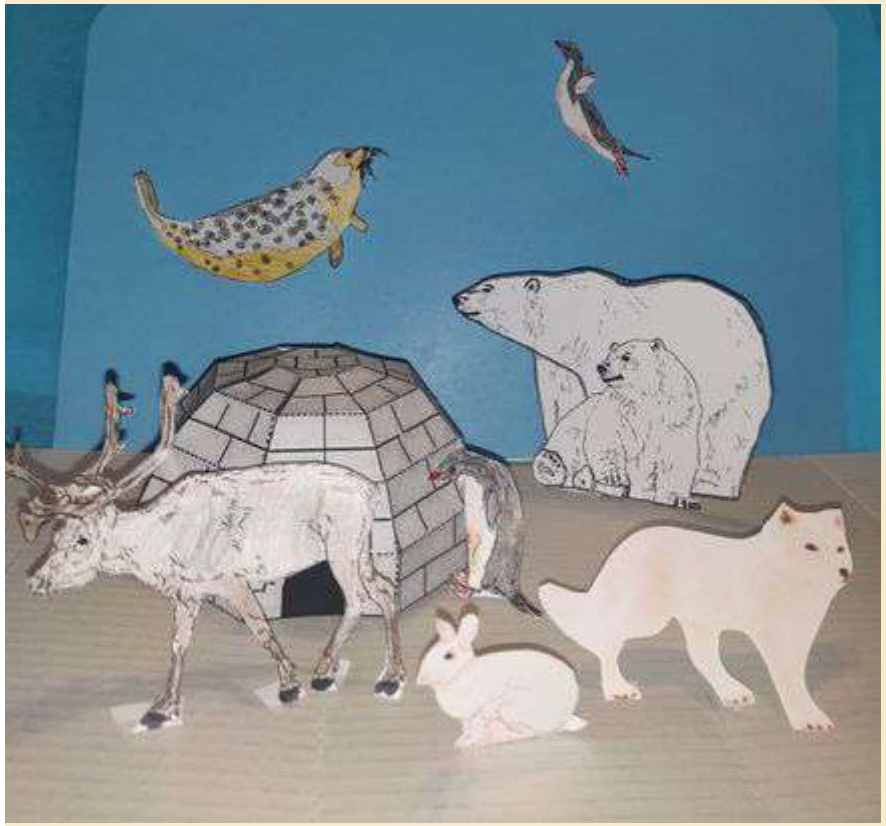
Global warming and Climate change
Endangered animals in the Arctic

Global warming caused by the intervention of men all over the natural habitats, the poluation, is a pressing matter of our days which results in the loss and degradation of food chains. There are thousands of species endangered. The climate is changing every day and we can see it for ourselves. For example in our country, in the same day can be spring, and winter and summer, because the air currents, the precipitations and temperature are fluctuating.

The global temperature rising every year caused the glaciers to melt alarmingly fast. The polar bears, the polar foxes, the polar rabbits, ringed seals, penguins Adelie and others remain without food or are hunted in excess.

I presented to the children of my class a few short educational movies from Youtube about the arctic animals. I chose to speak them about this matter because we live in a country with a temperate continental climate and because they have little knowledge of these animals.

The children worked on a diorama about endangered animals on Arctic area, in which they used different kinds of paper including recycled paper.



Every single little positive gesture from our part can make the difference now, between life or death of an entire species.

The melting ice and the rising sea level

How to depict the effect of the melting land ice to the sea level?

1. Take a container and build a sea bottom with clay or sand or simply by adding a big bowl in the water to depict an island.
2. Mark the sea level or measure it with a ruler.
3. Place ice cubes on the shore or on the island and wait them to melt.
4. The melting ice will raise the sea level, as the amount of water in the sea increases. You can check it with your ruler, the marking or simply by watching"the sea water" spill over the edges of the container. **What happened to the people and animals on the shore or on the island?**

See also in Youtube:

Global Citizen Activity

GURRI SCHOOL IS WORKING ABOUT THE MEANING AND GOALS TO BE A GLOBAL CITIZEN.

The students of Gurri School have carried out different activities related to the concept of global citizenship.
To begin with, there was some discussion about what students understood by global citizenship, and then there were various activities related to the topic.
Pupils have listened a video about global citizenship, concretely it was a storytelling about the meaning of being global. We have discussed its meaning, goals and we have talked about actions we already do to be global.

Finally, we have done a huge mural with differents labellings explaining the meaning of being a global citizen and ODS related to this topic.

They have looked for information in order to understand which are the correct actions to be done and so, be considered a good global citizen. It has been quite curious because of the fact that there has been some actions that weren't identified as so special as to be known "Global Citizen"

Global Citizenship: Travelling with the world citizen

Global citizenship is essentially linked to the concept of the active citizen, who recognizes global problems, the position he has and the role he can play in dealing with them, with the ultimate aim of promoting sustainable development.

We travel with **Mr. 2Π (Παγκόσμιος Πολίτης – World Citizen)**

What does each trip offer to us? Do we become ordinary tourists or do we give to and take from the place we visit? Is it our journey, new knowledge or are we just passers-by in a consumerist mood?

Mr 2Π gives students the opportunity to approach the concept of Active Global Citizen. Mr. 2Π, a doll who embodies the World Citizen and his travels, is the occasion to develop activities and to "start" the journey in the world. Together with Mr 2Π the children discover what is happening in the world and how it works, and they think about what their role is in it.

Our first stop is Kenya and the souvenir from the trip is an empty bottle of water. Students wearing the 6 hats of thought, talk about water on our planet.

2nd souvenir .... a cuddly toy dog from a shopping center in New York, America. We talk about consumerism in our lives. Do we really need all that we buy? How can we reduce consumption to help the planet?

Concerned reporters.docx

Global citizenship

Responsible consumption and production

Education for sustainable development

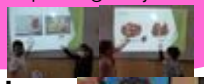
As **Education for Sustainable Development** (ESD) is a key element of the 2030 Agenda for Sustainable Development, students from the CP A participated at some activities in order to understand what is Global citizenship and what they could do to be active for sustainable development.

The main topic was **"Responsible Consumption and Production"** with the **cognitive learning objectives**:
1. To understand how individual lifestyle choices influence social, economic and environmental development.
2. To understand production and consumption patterns and value chains and the interrelatedness of production and consumption (supply and demand, toxics, CO_2 emissions, waste generation, health, working conditions, poverty, etc.).
3. To know about strategies and practices of sustainable production and consumption.

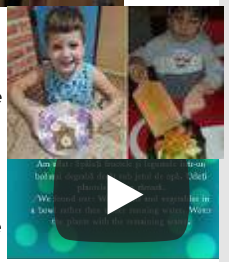
Socio-emotional objectives:
1. To be able to encourage others to engage in sustainable practices in consumption and production.
2. To be able to differentiate between needs and wants and to reflect on their own individual consumer behaviour in light of the needs of the natural world, other people, cultures and countries, and future generations.
3. To be able to feel responsible for the environmental and social impacts of their own individual behaviour as a producer or consumer.

The 1st activity was to learn about the climate change:
Children watched the video https://www.youtube.com/watch?v=S2ebdGxsI6E and then answered the questions about What led to climate change? Can children help reduce the impact on the environment?
Children from the 4th grade made a study about means of transportation on their way to school or back home. Their results were shown in this video:

The 2nd activity :They understood that our lifestyle choices influence social, economic and environmental development. Children learnt about how to :
- **Reduce environmental impact AT SHOPPING AND AT THE TABLE** Everything we buy, from a liter of milk to a pair of new shoes, has to be produced – and this generates CO_2 emissions. Many production processes are harmful to the environment and accelerate climate change. Transporting food by plane from one corner of the world to another generates 1 700 times more CO_2 emissions than transporting it by truck over a distance of 50 km.

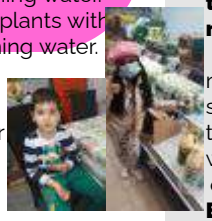


- **Make smart choices when shopping!** Beware of packaging: plastic packaging creates large amounts of waste and is often difficult to recycle. Try to avoid packaged products and look for refills for products like shampoo. When you go shopping, take reusable bags. Buy toilet paper and kitchen towels from recycled paper. Think twice before you change your phone or tablet.



Our activities in a video

- **Eat smart!** Do not waste food. Buy only as much as you need and keep the leftovers for later. Avoid non-seasonal products – growing plants in an environment other than their natural environment or in a season other than their natural growing season requires an enormous consumption of water, energy and other resources. Wash fruits and vegetables in a bowl rather than under running water. Water the plants with the remaining water.



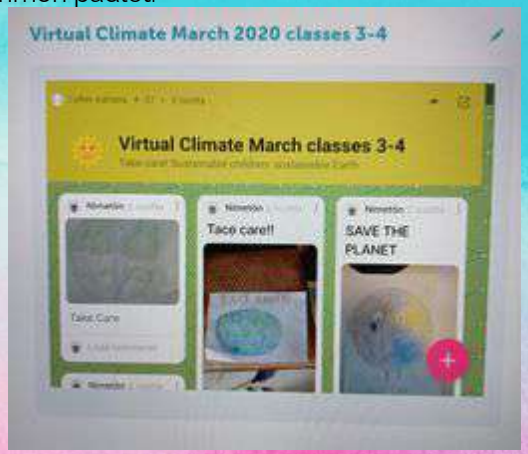
- **The eco-label**- The Eco-label identifies products and services with a low environmental impact. Look for this logo on the packaging of light bulbs, detergents and computers and on the label of the clothes you buy.

The 3rd activity- APPLICATIONS: a) In order to know if they understood and can apply, children play a game with emoji-es: happy face if it is responsible consumption , sad if it is not. They had to choose between pictures with fruit and vegetables in reusable bags/ plastic bags; toilet paper from recycled paper/ toilet paper made not recycling; Fruit we should eat in autumn in our country: strawberries/ pears.
b) **A FEW SMALL STEPS THAT EACH OF US CAN TAKE IN OUR DAILY LIVES AND THAT CAN PRODUCE BIG CHANGES IF WE ACT TOGETHER.** We plan a weekly menu and do not cook more than we need! We make our shopping list/ Pay attention to the shelf life!/ Let's organize the food correctly!/ -**FIFO arrangement method in the refrigerator: First In, First Out**./ Specifically, the rule is simple: we place the products according to the shelf life! Older products in the front, and what's new, in the back and so we will consume them in this order, especially if we happen to have several products of the same kind!
Let's be creative and use the leftovers of food for new recipes!
For this activity they had to make funny snacks or fruit salad using what they had in the fridge in order not to waste food.
c)Go shopping and find the ECO label and buy smart: Children went shooping .

Climate marches without marching

Climate change affects us all. Climate march is one way to express our worries and influence our decision-makers. We realised climate marches during the time when we could not gather and march physically together. We realised virtual and visual marches at the school. The virtual climate march came to stay. It became a tradition that will go on in future as well.

We had one climate march in TwinSpace. All the classes from different countries could add a picture to a common padlet.



There was a town-wide virtual climate march live on the net (Teams) twice during the project. All schools of Orivesi had the chance to show their own environmental work and climate demonstrations. Students presented pictures, animated videos and songs.

Hirsilä school realized a cute cuddly toy climate demonstration in Orivesi city library. Each toy had a message.

2nd graders made a cuddly toy climate demonstration all over the school. **The cuddly toys had each a poster reminding everyone of the importance of protecting nature.** Many of them had solutions: use your bicycle, eat more vegetarian food, don't litter.

Some classes made **posters on the walls of the school**. One class also made **a quiz** of the texts of the posters and the winners got a small prize.

Waste and litter: LET'S CLEAN UP EUROPE!

The 8th of May, students and teachers of the ZER Guilleries participated in the European action Let's clean up Europe.

The aim

The objective of this action is to make society conscious about the huge amount of litter that ends up in the natural environment and also to promote the awareness of the importance of taking care of the environment such as rivers, seas, forests and oceans.

Step 1

Students went to the school surroundings and collected rubbish with special bags and gloves. Once they arrived at school rubbish was spread into the playground, students in small groups classified it.

Step 2

They observed and separated the different types of rubbish into 4 piles.They collected 37 kg of rubbish that was classified into: plastic, paper, glass and others. There was 6kg of plastic, 4kg of paper, 2kg of glass and finally 25 kg of other types of rubbish such as metal.

Conclusion

In our schools these types of actions are promoted in order that future generations may be capable and committed to take care of the planet and take actions to make the world better for everyone.

The Wall of Kindness

The aim of this learning cycle is to develop the students' skills of recognizing problems in their environment and actively contributing to the organization of actions to improve school living conditions and consequently in their community. Through their involvement in the activities of the learning cycle, children become aware of the need to reuse, reduce consumption and recycle. Students are then asked to plan activities around the 6 R's: Rethink-Refuse-Reduce-Repair-Reuse-Recycle, as well as to inform and raise awareness among classmates and their family.
The children decide to create the "Wall of Kindness". On it the children of the school will be able to leave things they no longer want. Their classmates will then be able to take them home if they need them. This action has a social and environmental character. Children promote the idea of offering to others and of reusing.

Our learning cycle step by step

•**Step 1:** We raise the issue of garbage lying around in our school yard.

•**Step 2**: We collect the garbage, and we observe that we don't recycle many recyclable materials.

•**Step 3**: We search the web for relative material and studying the issue of the 6 R's.

•**Step 4**: We make a collaborative padlet with all our ideas to tackle the issue of waste in our school.

•**Step 5**: We set our criteria for the structure we want to make. We unanimously chose to create our Wall of Kindness.

•**Step 6**: We chose the most suitable spot in our school according to the specifications we set together.

•**Step 7**: We decide to paint the wall and we study the work of the ecologist painter and architect Hundertwasse. We apply his ideas in our drafts.

•**Step 8**: We use old bike wheels and recycled fabric to weave our wall hangers.

•**Step 9**: We collect used detergent containers and we cut them in order to make cases for small objects.

•**Step 10**: We paint the wall, and we transform an old bookcase into a bench.

•**Step 11**: We discuss how could our wall of kindness solve the problem and
make suggestions for improvement based on the criteria set.

•**Step 12**: We make posters to inform our classmates about the Wall of Kindness. We collect old books, DVD's, clothes, shoes etc.

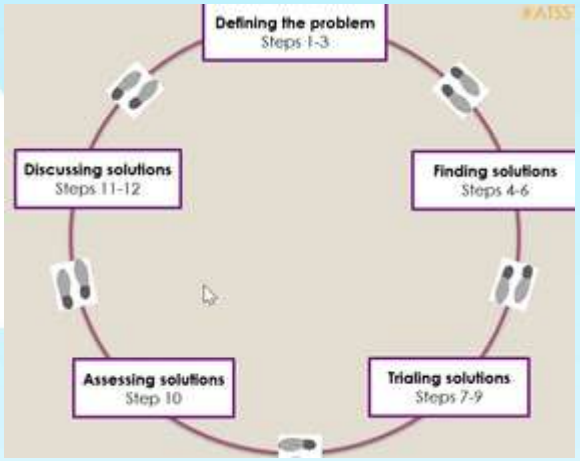
•**Step 13**: On Book Day we use our Wall of Kindness to exchange books, DVD's and decorative objects.

Photos of our adventures

Transforming our school yard

Short description

The aim of this learning cycle is to cultivate the children's skills of observing their environment, recognizing problems and shortcomings and actively contributing to the organization of actions to improve living conditions in their school and consequently in their community. Through their involvement in the activities of this learning cycle, children recognize the shortcomings and problems of their school's yard that affect their quality of life within the school space. The children are then invited to design the school yard as they envision it and to take action to realize their vision.



Our learning cycle step by step

- **Step 1: Raising the issue of the improvement of our school yard**

The children discuss in the plenary of their class about how they feel about their school's yard. They all agree that they love their school, but they wish they had more spaces to rest, interact and play. The teacher raises the question: "What would you do to improve our school yard"?

- **Step 2: Walking around the school yard and taking photos**

The children take a walk around the school yard. With their tablets they take photos of all the spots that they feel they need improvement.

- **Step 3: Sharing photos, ideas and feelings in a collaborative Padlet**

A collaborative Padlet containing photos and comments is created. All the students post their own contributions and suggest possible solutions.

- **Step 4: Searching the web for existing structures and brainstorming**

The children go online searching for existing structures in schools and playgrounds around the world. Then they share their ideas and brainstorm for possible structures.

- **Step 5: Talking with experts. Preparing a collaborative Padlet with all the questions we want to ask and inviting a designer of eco-friendly structures for an interview**

An eco-desiger is invited to speak to the children about her work with eco-friendly structures. The children gather questions they want to ask and post them in a collaborative Padlet. The designer answers the children's questions, explains how they design the structures, what parameters they have to consider and the material they use. In the end of the presentation, the designer and the children walk around the school to brainstorm.

- **Step 7: Drafting a list of the materials we will need to make our models and the steps we need to follow**

The children work in teams of four to draft a list of all the materials and the steps of the process they need to follow in order to craft a model of the structure they wish to build in the school yard. In the plenary they discuss their ideas and finalize their lists.

- **Step 8: Construction of our models**

The children design their models and construct those using recycled and reclaimed materials or the Minecraft Education Edition application.

- **Step 9: Presenting our models and unanimously choosing the structure we want to create in our school yard (Mentimeter)**

The students present their models to each other and vote for their favourite ones using the Mentimeter. They come down to two different structures. The eco-designer is given the children's proposals and manufactures the structures.

- **Step 10: Making a video presentation and writing a letter to our Headteacher and the president of the School Committee**

When the two structures are completed, the children prepare a video presentation for the Headteacher and the president of the School Committee. They explain that the structures are designed to be used both as an outdoor eco-classroom and as a space for play and recreation during the intermissions.

- **Steps 11-12: Sharing our work with our schoolmates and our community**

The children share their work to the school's official website and YouTube channel and invite all the students of our school to use the structures as they wish.

Photos of our adventures

Another recycling and reuse activity was during AVAP classes in December. Then, the students made decorations specific to the winter holidays, using glass jars, candles, fir cones, textiles, old C.D.s, and paper.

Contact

THE SCHOOLS FOR MORE INFO AND IDEAS:

BELGIUM
European School Brussels III
https://www.eeb3.eu/en/

CYPRUS
Tamasos Primary School
http://dim-tamasos-lef.schools.ac.cy/

FINLAND
Kultavuori school
https://peda.net/orivesi/perusopetus/kultavuoren-koulu

GREECE
21st Primary School of Athens "Lela Karagianni"
https://blogs.sch.gr/21dimath/

ROMANIA
Scoala Gimnaziala Elena Doamana
http://edschool.ro/index.php

SPAIN/CATALONIA
Zer Guilleries
https://agora.xtec.cat/zerguilleries/categoria/escola-castanyers/