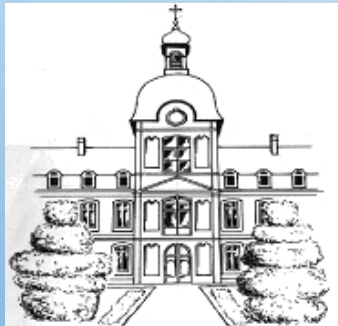


Co-funded by the
Erasmus+ Programme
of the European Union



SEEKING FOR ECOLOGICAL ALTERNATIVES

Seeking for ecological Alternatives



Erasmus+ KA229 (2019 -2022)

Institut de la Providence de Champion

Second lyceum of Kalamaria

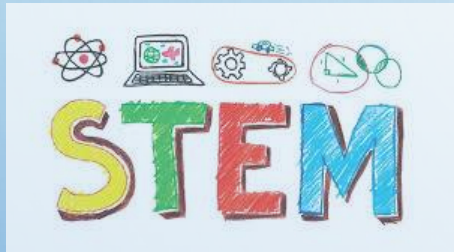


Project objectives



SeA project is not only a STEM project but also an opportunity for our students to act and express their selves on topics about climate change. The project objectives are to:

- Record views and attitudes on climate change
- Motivate students to schedule climate change actions
- Design and construct of a submarine using 3D modeling and 3D printing
- Collaborate using e-Twinning platform
- Take digital measurements of water characteristics (temperature, pressure, clarity, etc.) with an Arduino circuit attached to the submarine
- Record data in different aquatic environments at Greece and Belgium and apply statistical process
- Draw conclusions and create climate change discussions



Initial Actions

- Two surveys has been proposed to the students and their parents:
 1. In Greece, [the survey results](#) are going to be the base of a school plan of actions about Energy saving, Recycling, Climate Change.
 2. In Belgium to make an [initial assessment](#): what do they know about what has already been done, what should we do next?
- Twelve (12) [Newsletters](#) have been published
- A [website](#) was published
- School's ecological footprint was held in Greece
- Students recorded their family ecological footprint



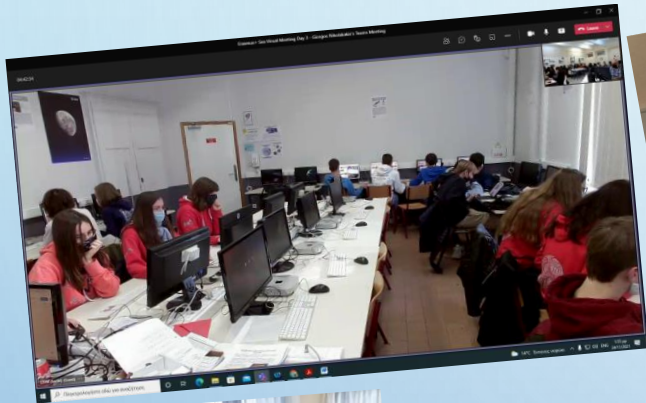
C1 LLT meeting in Namur – Jan 2020

- 17 students and 3 accompanying teachers of Second Lyceum of Kalamaria visited Institute Providence Champion in the city of Namur, from 19/1/2020 to 25/1/2020. The results of the online survey were presented and discussed. Background theory, introductory workshops, 3D modeling design and 3D printing were included into the schedule.
- Students had the chance to learn how to design and print an underwater vehicle that will be used to measure data under sea.
- Finally, both schools agreed to prepare and run common action plans about climate change.
- Students made a [short video](#) to disseminate the project meeting



C2 Virtual meeting- Nov 2021

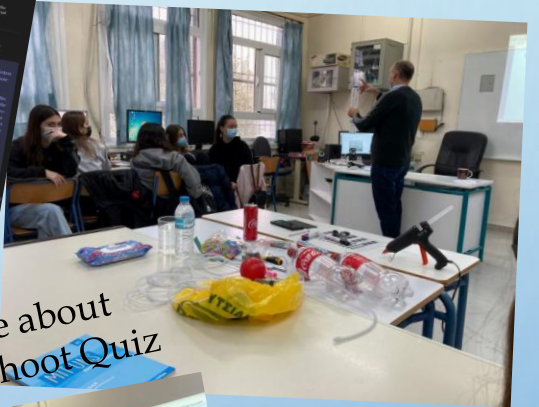
Group mixing - Awareness-raising newsletter



Online collaboration



Submarine construction using plain materials



Test your knowledge about climate change - Kahoot Quiz



Climate change Activity - Mentimeter

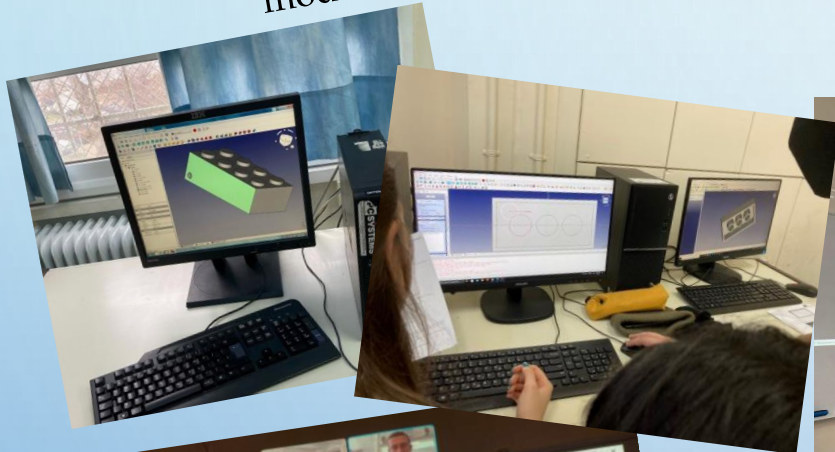


Arduino Intro & workshops

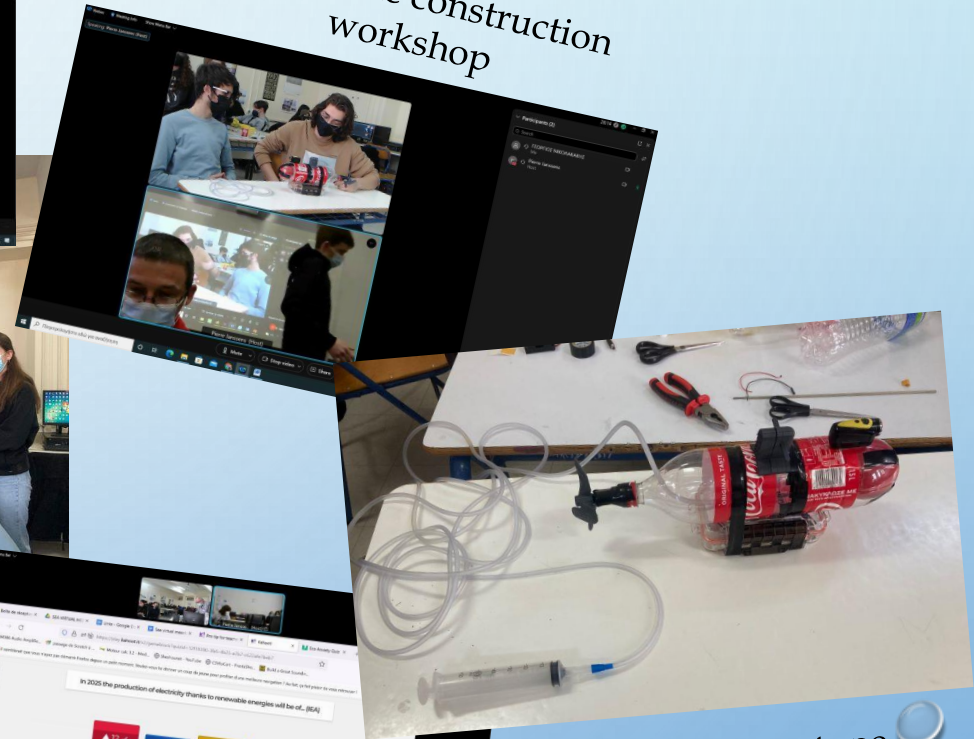


C3 virtual meeting- Feb 2022

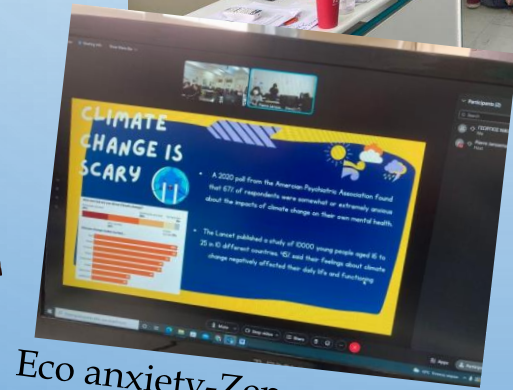
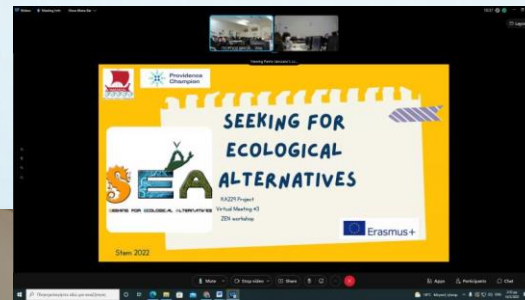
3D workshops
modelling & design



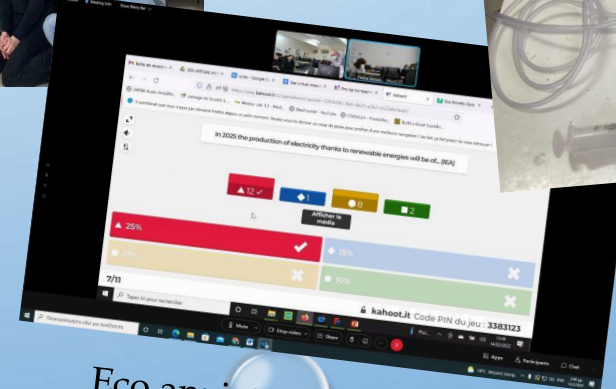
Submarine construction
workshop



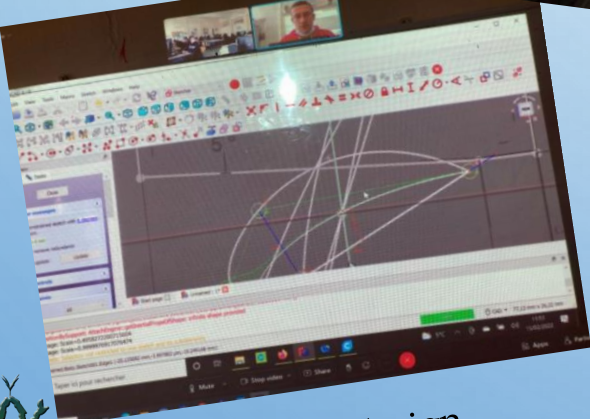
Submarine prototype



Eco anxiety-Zen workshop



Eco anxiety-Kahoot game



3D propeller design

Waste collection activity

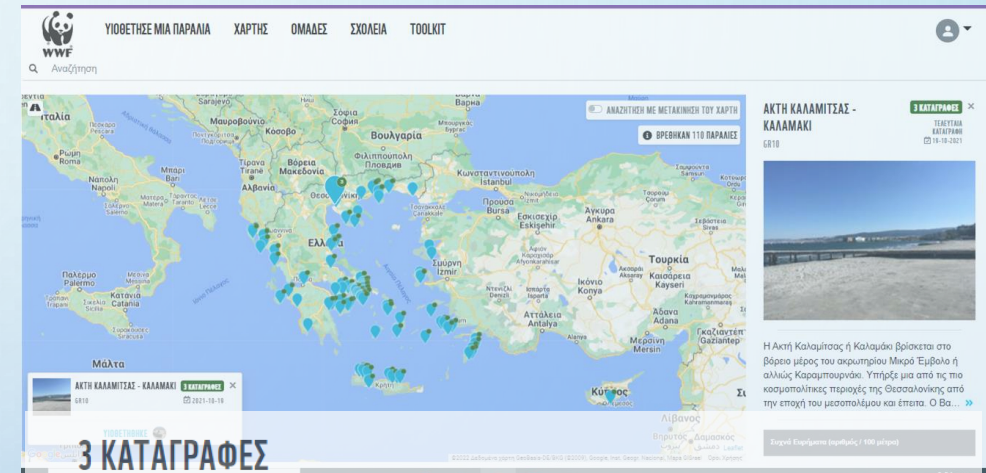
- “Adopt a beach” WWF program in Greece



April 2021

June 2021

Oct 2021



3733 ΕΥΡΗΜΑΤΑ

89% ΤΕΧΝΗΤΑ ΠΟΛΥΜΕΡΗ ΥΛΙΚΑ

3% ΧΑΡΤΙ/ΧΑΡΤΟΝΙ

3% ΜΕΤΑΛΛΟ

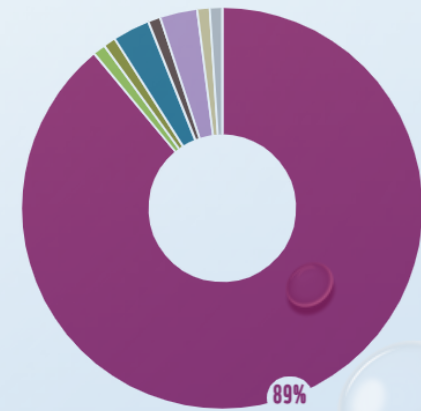
1% ΚΑΟΥΤΣΟΥΚ/ΕΛΑΣΤΙΚΑ

1% ΥΦΑΣΜΑ/ΔΕΡΜΑ

1% ΕΠΕΞΕΡΓΑΣΜΕΝΟ ΞΥΛΟ

1% ΓΥΑΛΙΑ/ΚΕΡΑΜΙΚΑ

1% ΑΛΛΟ

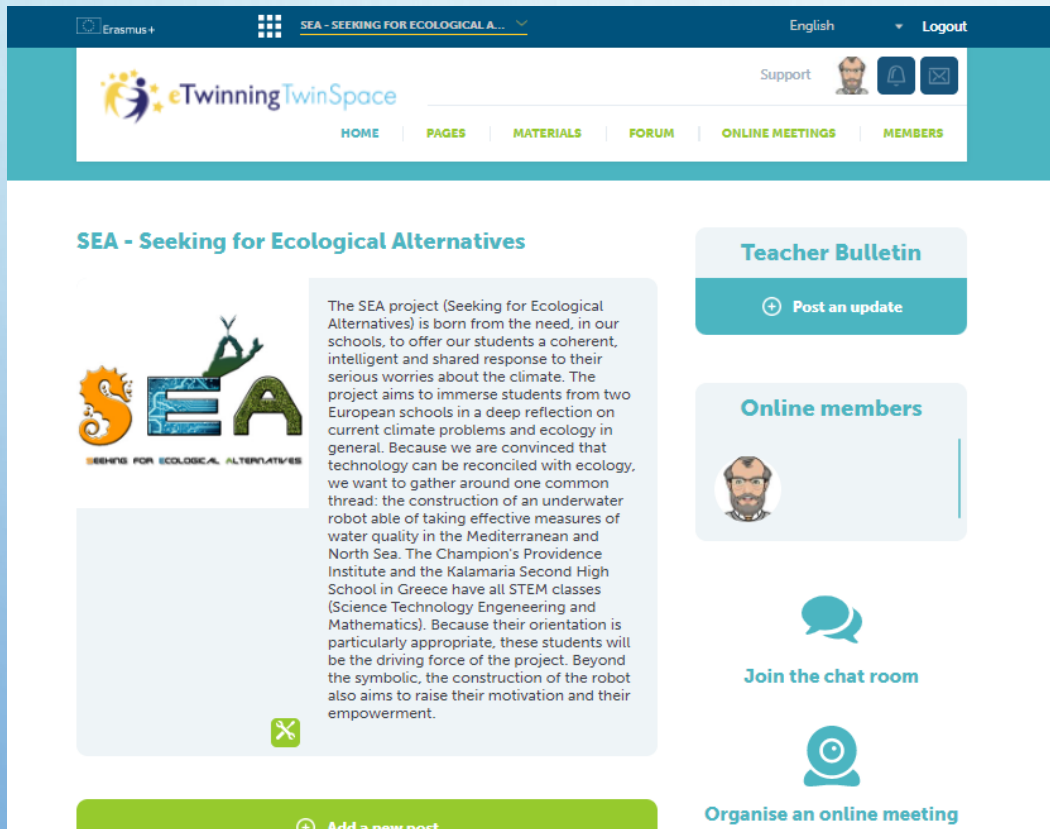


Ecological week & Waste collection activity

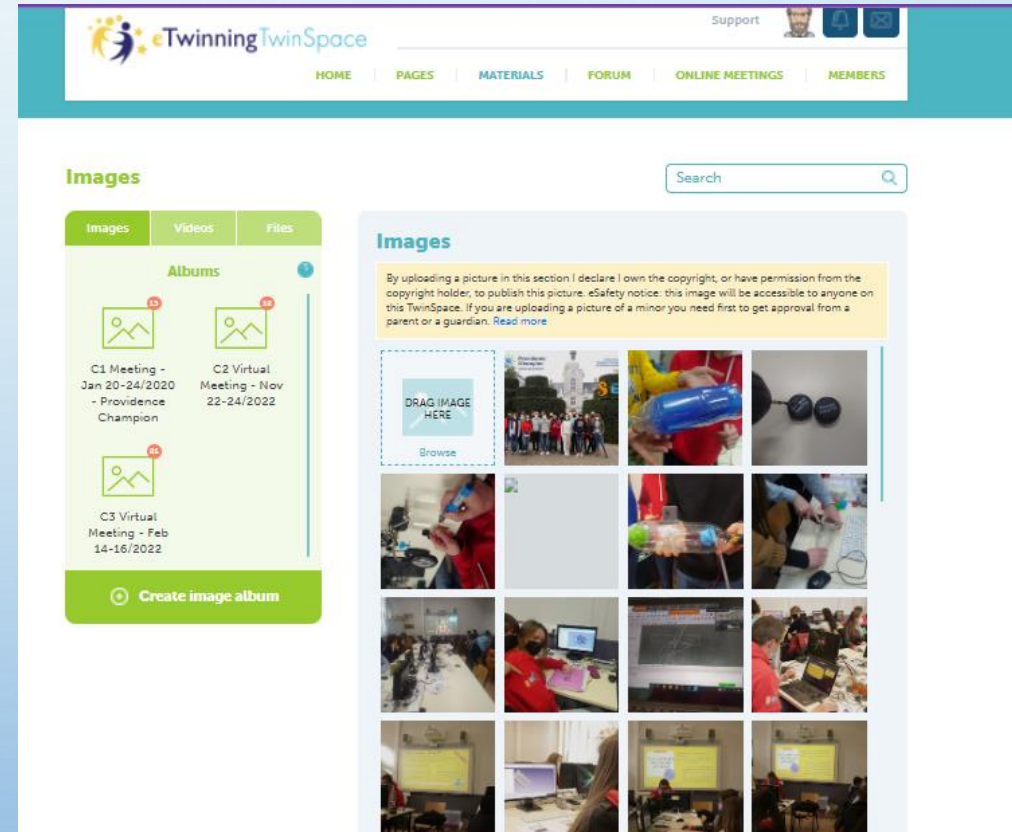
- “Ecol’ogic” week in Belgium



e-Twinning platform Collaboration



The screenshot shows the eTwinning TwinSpace interface for the project "SEA - Seeking for Ecological Alternatives". The header includes the Erasmus+ logo, the project name, language (English), and a Logout button. Below the header, there are navigation tabs: HOME, PAGES, MATERIALS, FORUM, ONLINE MEETINGS, and MEMBERS. The main content area features a large heading "SEA - Seeking for Ecological Alternatives" with a logo and a detailed text block. The text describes the project's goal to immerse students in climate issues and ecology through a robot-building project. On the right side, there are three interactive buttons: "Teacher Bulletin" with a "Post an update" option, "Online members" with a profile picture, and "Organise an online meeting". At the bottom, there is a "Join the chat room" button and an "Add a new post" button.



The screenshot displays the "Images" section of the eTwinning TwinSpace. The header includes the eTwinning TwinSpace logo, a search bar, and navigation tabs: HOME, PAGES, MATERIALS, FORUM, ONLINE MEETINGS, and MEMBERS. The main content area is titled "Images" and features a search bar. Below the title, there are tabs for "Images", "Videos", and "Files". The "Images" tab is active, showing a list of "Albums" with three entries: "C1 Meeting - Jan 20-24/2020 - Providence Champion", "C2 Virtual Meeting - Nov 22-24/2022", and "C3 Virtual Meeting - Feb 14-16/2022". A "Create image album" button is located at the bottom of the album list. To the right, there is a "DRAG IMAGE HERE" box with a "Browse" button and a grid of image thumbnails showing various activities related to the project.

[Visit our Project's TwinSpace](#)

C4 - until June 2022

- Final test of the submarine into the water
- Data underwater measurements
- Data comparison
- Statistical analysis
- Conclusions



Thank you for your attention