



CONFERENCE EZA-UNAIE ON SUSTAINABILITY 4-6 NOVEMBER 2022

Jose Alberto Villaescusa Garcia- IES “Mare Nostrum” Alicante-Spain



Professional Development Workshop for Ambassadors

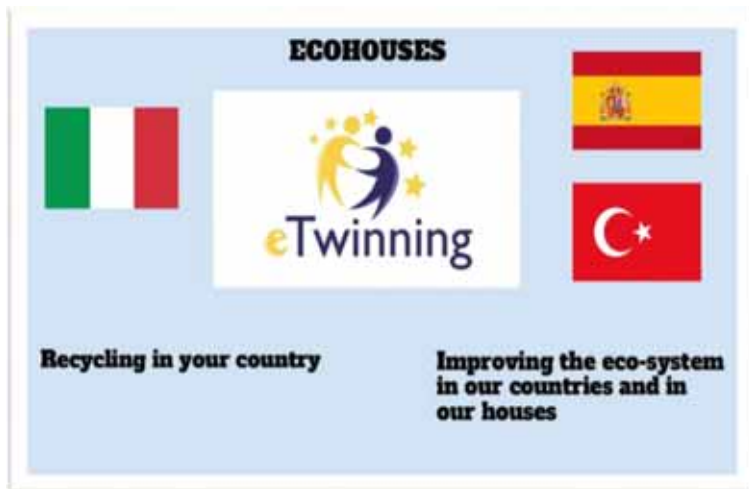


ETWINNING



- Community for schools in Europe
- Working with classes in over 40 countries
- Free and secure online network for teachers
- Online projects and expand knowledge of other countries and cultures
- Etwinning is co-funded by Erasmus + programme of the European Union

OUR PROJECT: DESIGNING ECO-HOUSES



RECOGNITION

At etwinning the work done by teachers is recognized in different ways:

National Quality Label

European Quality Label



PRE- PLANING THE PROJECT

ERASMUS PROJECT
DESIGNING ECO-HOUSES

AGE: 14-18 years old
 Subjects: Technology, Maths, English, Designing, Biology...
 Language: English
 Countries: minimum of 3

SHORT DESCRIPTION
 Designing 3d houses with several computer programs and analyse the different ways of recycling in each country finding new ideas.

AIMS

- Improve verbal skills and the level of speaking.
- Improve fluently with computer programs.
- Analyse the different systems of recycling.
- Study the level of recycling.
- Increase the communication in English by presenting their systems of presentation.

WORK PROCESS
 Analyse needs, use software, search and use web resources for learning in the initial and final of the project.

EXPECTED RESULTS

- Design houses and understand house plans.
- Be able to use the programs.
- Present ideas in videos using English language.
- To have respect for environment and find ideas to improve recycling.

OTHER INFORMATION
 Through the project we will be doing a online magazine / online blog...

APPS Or WEBS

- Roomle
- Floorplanner
- Canva/Genially
- Flipgrid
- Google forms

- Specifications
- Short description
- Aims
- Work process
- Expected results
- Other information
- Apps/tools or web

PLANING THE PROJECT

PART 1: INTRODUCTIONS
AND LOGO OF THE PROJECT
(15TH OCT. - 10TH NOV.)



PART 3: MAKE ONE
HOUSE FOR EACH
COUNTRY MORE
SUSTAINABLE (15TH FEB.-
15TH APR.)


PART 2: DESIGNING THE
HOUSES

- | | |
|---|---|
| A. Designing the houses in a sketch (10th Nov.- 10th Dec.) | B. Designing the houses using the app roomle (15th Jan.-15th Feb.) |
|---|---|

PART 4: WORK IN
INTERNATIONALLY GROUPS
TO MAKE POSTERS: (10th
Mar.- 1st May)

- | | |
|---|---|
| A. Recycling in your country and new ideas | B. Materials for eco-houses and to improve our environment |
|---|---|

PART 1: INTRODUCTIONS AND LOGO OF THE PROJECT

 **DESIGNING ECOHOUSES**
SPANISH TEAM


TELMA - IAEL (4°)
SOFIA - DIANA (4°)
SERGIO - IVÁN B. (4°)


IRENE - CLAUDIA (4°)
DANIEL - ANGEL (4°)
GABRIEL - JULIA (3°)


IVÁN P. - DANTE (3°)
SARA - PAULA (3°)
CARLA - SARA M. (3°)
CLAUDIA T. - DAVID (3°)





LOGO DESIGNING ECO HOUSES 

1 


2 


3 


4 


5 


6 

7 


8 


9 

10 

11 





GABRIEL H

PRESENTATION SPANISH STUDENTS

PART 1: INTRODUCTIONS

ACTIVITY

THIS IS MY CITY /THIS IS MY SCHOOL



[MY SCHOOL](#)

Bitmoji

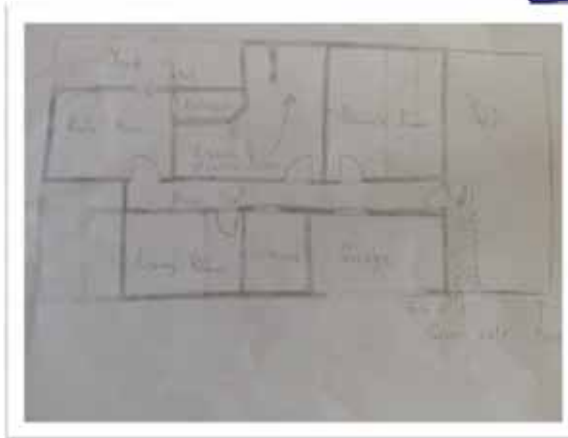


PART 2: DESIGNING THE HOUSES

DESIGNING ECO HOUSES

YOUR HOUSE MUST

- 1 GARAGE TO HAVE:
- 1 GARDEN
- AT LEAST 2 BEDROOMS AND MAXIMUM 4
- KITCHEN
- LIVING ROOM
- 1 OR 2 BATHROOMS
- ONLY ONE FLOOR
- NO STAIRS
- MAXIMUM 200 M2 (YOU WILL CHECK THIS IN ROOMLE)



roomle

PART 2: DESIGNING THE HOUSES

EXAMPLE OF HOUSES



3D

PART 3: MAKE ONE HOUSE FOR EACH COUNTRY MORE SUSTAINABLE

A HOUSE IN ITALY

Discussion on maintenance

After choosing the house for the project of maintenance to apply groups of students created the whole discussion to see which possibilities were the most convenient to choose among. This discussion for the Italian house was made by a group of 4 students from the ITIS "Sergio-Battiston" (Agrate, Bardesera, Region, Zampieri)

The photovoltaic system
you can see the Photovoltaic system description on the house above.
The final step of this study has been the table of energy production in favourable conditions.




A SPANISH HOUSE

A house in Barcelona

Dimensioning of domestic photovoltaic system for a house in Barcelona.

Discussion on the reasons why we
The reasons why we have chosen we chose this type of improvement for its eco-sustainability, photovoltaic systems and the solar energy produced by them don't release climate-altering substances into the atmosphere and reduce pollution, because every kWh produced corresponds to -0,531 kg of CO2 (the main cause of global warming) that is the byproduct of thermoelectric systems about 50% of energy produced

We imagined a pitched roof building in Barcelona, Spain. We searched for the best option of specialized websites and chose an inverter Viver 5hp 400V 170 and 0 games 1040rTE335 producing 300V (ought it's a non-binding choice). We followed CEI standards and European laws.





A HOUSE IN TURKEY

A House in ANKARA

Created by Italian students from the ITIS "Sergio-Battiston" (Agrate, Bardesera, Region, Zampieri)

Technical Assessment Generator: Prof. Damiano, Dr. vizzini, Tomella

Project data
This project aims to implement a photovoltaic system producing electricity for domestic use, we imagined to install our panels on a building in Ankara, Turkey, and chose to work on a design made by our friends Green partners. We chose this type of improvement for its eco-sustainability, photovoltaic systems and the solar energy produced by them don't release climate-altering substances into the atmosphere and




PART 4: WORK IN INTERNATIONALLY GROUPS TO MAKE POSTERS:



5 TEAMS MIXING THE STUDENTS FROM THE 3 COUNTRIES

ANALYSING:

- HOW THEY RECYCLE IN THEIR COUNTRY
- NEW IDEAS TO IMPROVE RECYCLING



MAGAZINE



MAGAZINE



Thanks for your attention

Molte grazie!

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QUESTIONS?