



IPSIA CATTANEO

Comenius Project

- Title: Sustainable solutions
- Code: 2010-1-GB1-COM06-05656-6
- Year 2010-2011

The project and the school curriculum

- As all the Comenius projects of the past Sussol was integrated in the curriculum of the classes involved which means:
- Use of lesson time to work on the project
- Materials produced will be evaluated
- Materials produced will be used by the students of the last year for their final examinations

What we have already done-1

- Presentation of the project to the teacher council
- Short summary of the project on the school website(www.ipsiacattaneo.it)
- Link to the official site (www.sussol.eu)
- First round of identification of classes involved in the project
- Presentation of the project to the classes

What we have already done-2

identification of classes /subjects

for the project

- 5th year (the last year before the second level examination-
Sites:CorsoVittorio/Lungotevere
Testaccio)
- 3rd year (the last year before the first level examination-Site: Città dei Ragazzi)
- Students : 90
- Subjects:Italian,English,History,Mechanics
,Thermotechnics,Electronics,

What we have already done-3

Sustainability ?(all classes)

- What?
- Why?
- Where?
- Who?

Actions:

- students surfed on Internet to find out the meaning and the origins of the word
- Identification of possible fields to study
- Reading articles
- Watching the film “ an inconvenient truth”
- Class discussion

What we have already done-4

Water sustainability(one group)

- Subjects involved: English, Hydraulics
- Reading of articles about the problem
- Analysis of water consumes at school and at home
- Virtuous consumes and water waste
- Production of materials (diagrams, technical reports)
- Planning of possible solutions

Plans for future activities:

group works

- Students will work in groups (class groups and subject groups)
- They will produce materials during the school year
- Students of the last years will use all the materials produced at the examinations

Group Work 1

- **Energy sustainability-** a practical study:
- subjects involved: English, Thermohydraulics, Electronics
- Focus on the heating system of the school building in Corso Vittorio 217 (analysis of the building, energy waste and loss of heat, possible optimization of solutions, use of renewable sources)
- Comparing energy consumes (electricity, gas, water) with and without electronic control devices
- Photovoltaic panels

Group work 2

- **sustainability and globalization**
- Subjects Involved: Italian (L1) and English (L2)
- Actions: Students will read articles and produce short essays in L1/L2 about:
- Globalization and use /waste of resources

Groupwork 3

- **Virtuous uses and wastes** :Analysing and comparing in a multicultural class virtuous uses and wastes of water at home (in Italy and in your native country)
- Subjects involved : L1(Italian)/L2(English)
- Production of questionnaires delivered to people

Groupwork 4

- **Planning the heating system of a house** using conventional and renewable energy sources

Group 5: Public transports and private motorbikes and cars

- A Practical study: Students will monitor the levels of Carbon Dioxide emissions of the main means of transports used in a big city.
- The study aims at
 - 1-increasing the awareness of students of the importance of an atmosphere –friendly city transport
 - 2- increasing the awareness of students about the emissions

Activities

- Students will compare the polluting emissions of public transports (coaches and buses)and private means (cars and motorbikes)
- Students will compare the powers of the engines of the different means of transports and the numbers of their passengers (coaches and buses -more powerful engines up to ten times more than a car but more than 100 times the number of passengers) and private motorbikes (1/2 passengers but less powerful engines up to ten times less than a car) and cars (from euro"0"to euro "5" max 1or 2 passengers (the average in a city, more powerful engines compared to motorbikes' but less powerful compared to coaches and buses)).
- Subjects involved : Lab of Mechanics