



## Change gear use your head

Activity to promote sustainable mobility

Type of pedagogical	
project, activity,	Project on mobility, Interactive classroom laboratory
action, accompanying	
Key words of relevant	- Know the complex world of transports, how they can influence Climate
disciplines/	Change: the cause-effect relationship between phenomena (science)
Pedagogical content	- Learn about the production of CO2 from fossil fuel (sciences)
	<ul> <li>Understand the exponential effect in the use of polluting transports (mathematics)</li> </ul>
	- Understand the physical and chemical phenomena related to the increase of CO2 in the atmosphere (science and chemistry)
	- Understand why we underestimate the environmental aspect in the choice of transports (social sciences)
	- Find out where the CO2 masses in the atmosphere end up (geography)
Problematic	Mobility is one of the indirect causes of climate change, this workshop
	develops the theme of the different types of "Green" mobility that students
	can use to move
Thematic	- Understand that transport can influence Climate Change
	- The different elements that make up the pollution (atmospheric and the one
	related to the usage of the soils)
	- Why do we use transports without evaluating their environmental impacts?
	- What are sustainable transports?
Disciplines (sciences,	- Sciences
geography)	- Social sciences
	- Geography
	- History
	- Maths
Pedagogical	The students will be able to:
Objectives/New	- Define responsible attitudes for the environment
targeted skills	- Understand the ecological footprint that everyone produces every day
-	- Respect and love the environment in which we live
	- Respect the life of living beings threatened by pollution and the Climate























Public target(s) (age, requested skills)	Change - Develop good practices for adequate mobility  11-15 years old Prerequisite: Recommended to have analysed the evolution of the transports
	used for mobility, in order to understand the historical and pivotal moment in which we are living and the correlated problems
Description (step by step)	During the two planned class seminars, the theme of mobility will be analysed at a global level, analysing both sustainable mobility and traditional mobility by comparing them: the various available means of transportation will be treated, highlighting the limits and potentially associated with respect, the environment and the health of the person. The educational seminar also consists in establishing interdisciplinary links with the various subjects present in the school curricula:  - Links with historical elements will be established by developing the concept of human mobility through time.  - The geographical elements will be mainly related to the right and duty to act on a global and local scale.  - We will also analyse scientific elements, in particular inked to our atmosphere, climate changes and the impact of mobility on the environment and on the ecosystem.  Students will understand better the appropriate use of bicycles and the application of traffic laws. During the activities of the seminar, in addition to learning about the concepts and developing their skills, they will have to communicate some of the elements received to their schoolmates from other classes not directly involved in the project and communicate about good practices and skills.  Examples of proposed activities:  ACTIVITIES "HOW DO WE KNOW IT?" (2h) On a board, students have to register all means of transportation, characterizing them from the point of view of the fuel and technology used, exploiting the aspect of sustainability related to the environment and health.  ACTIVITIES "TRAVEL MY WAY" (1h) The class, divided into groups, must carry out missions. Each group has a different destination to reach. The group must plan the trip, list the transports and the logic used.























ACTIVITY "DIVIDELLO INQUINATUM" (2h) Students discover that traditional mobility is not sustainable. The class is divided into two teams, each student of each team, using the relay mode, must manage a basket containing phrases, potentially real, about the environmental impacts due to traditional mobility. The sentences suggested indicate, for example: "the red family car issued 12 kg of CO2 on the way to school", "the green family's car has bumped into the yellow family's, causing serious back pain to all members of the "cockpit", "to avoid a car stopped in front of the school 15 cars have repeatedly sounded their horn" etc.

The student must identify if the sentence falls within the category of one of the clothes hanging at the other end of the class:

- AIR POLLUTION
- NOISE AND LIGHT POLLUTION
- THERMAL POLLUTION
- INCIDENTALITY AND PSYCHOPHYSICAL STRESS
- CONSUMPTION AND DEGRADATION OF URBAN AREAS

And paste the sentence on the corresponding sign board.

When all sentences are attached to the respective message boards, the environmental and psychophysical impacts of reduced mobility is returned to the students.

ACTIVITIES "HOW DO WE KNOW ABOUT SUSTAINABLE MOBILITY?" (2h) Students know and explain the different ways of characterizing sustainable mobility. The class is divided into 3 teams, while 4 selected students compose a jury. The educator asks each team to represent a category of sustainable means of transportation, announced from time to time aloud (with an explanation when the term is not clear, such as carsharing).

The categories will be:

- Go on foot!
- Use the bicycle!
- Use COMMON TRANSPORT! (buses, trams, trains)
- Optimize the use of PRIVATE CAR! (car sharing, carpooling, electric cars, parking outside the city centre and use of other transports).

At the end of each brief presentation, the jury will vote in the ballot box. Each group has the opportunity to repeat themselves in 2 or more performances.























	ACTIVITIES "WHAT DID WE LEARN?" (1h)
	, <i>,</i>
	In groups of 4, try to summarize the concepts that emerged in the laboratory,
	use of a video of redefining the concepts.
n. / .:	
Place (meeting room,	Classroom
outside space,)	
Individual and / or	
collective actions	Group activity
Material needed	PC and projector, pens, poster paper, internet
	, , , , , , , , , , , , , , , , , , ,
Duration of	12 hours
pedagogical project or	
activity	
Evaluation of the new	Ask students for a self-assessment of the activities performed, restoring the
acquired skills	feelings and emotions experienced during the various activities
Eco-citizen adaptation,	Link to:
knowledge	Organise the links in the different language in this setting
enhancement and	Croatian:
links to other topics	• { HYPERLINK xxxxxxxxx} For the links, when you past them must appear
	{ HYPERLINK xxxxxxxxx} That shows that the link is working, even when
	it past in PDF or on internet.
	Greek:
	Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
	Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
	Italian:
	Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
	Xxxxxxxxxxxxx
	French:
	Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
	Xxxxxxxxxxxxx























## **Observations**

Example of methodology, ideas

- -Some examples of pedagogical methods used in the activities:
- learning from experience (W. Bion): participating in an emotional experience that leads to a change in the structure of the personality;
- working together (G. P. Quaglino): the group work functions as a place where knowledge is constructed as a gradual, conflictual, open, negotiable and confrontational process;
- work together as a research community (Peirce): start a journey of knowledge that moves from doubt to reach belief; the group as a self-corrective community;
- thinking through relationships (E. Morin): educating complex thinking as a difficult and refined way to be acquired during the training course;
- measures to promote behavioural self-transformation (G. Bateson): activation of a process through which the "assumptions" of ideas and knowledge are identified.

## **Pictures**

