

URBAN TRANSPORT AND SUSTAINABLE MOBILITY PROGRAMME

**WORKSHOP:
“LIFE+RESPIRA: Air
Quality in the Region”**

**4º de ESO, FP Grado Medio
y Bachillerato**

Description of the Activity



CLASSROOM TALK

“LIFE+RESPIRA: Air Quality in the Region”

TARGET STUDENTS:	4th Year ESO (Secondary education, first stage), FP Grado Medio (Vocational Training, First Stage) and Bacallaureate Students
DURATION:	50 Minutes
REQUIREMENTS:	<ul style="list-style-type: none"> • One group/class per talk. • Up to 3 consecutive talks. • One teacher per group/class. • Preparatory classroom work recommended.

CURRICULUM APPROACH

Objectives	<ul style="list-style-type: none"> ▪ Arouse interest in scientific research and technological and social innovation. ▪ Raise awareness about the importance of air quality and active mobility for our health. ▪ Promote sustainable, non-polluting mobility habits. ▪ Highlight the valuable contribution of volunteer cyclists and motivate students to play an active role in the improvement of the urban environment. 							
	<table border="1"> <tr> <td rowspan="3">Contents</td> <td>CONCEPTS</td> <td> <ul style="list-style-type: none"> ▪ Transport and air quality in urban areas. ▪ Healthy and sustainable mobility. ▪ Scientific methods. ▪ Technological innovation. ▪ Volunteer work and social action. ▪ Health protection. </td> </tr> <tr> <td>PROCEDURES</td> <td> <ul style="list-style-type: none"> ▪ Understanding and interpreting the current research results through a PowerPoint presentation and ICT tools. ▪ Interacting with students, encouraging them to suggest intuitive solutions to certain obstacles. </td> </tr> <tr> <td>ATTITUDES AND VALUES</td> <td> <ul style="list-style-type: none"> ▪ Open attitude, willing to listen and actively participate in the talk, taking on the role of researcher. ▪ Committed attitude in order to understand the nature of environmental issues and participate in solving them. </td> </tr> </table>	Contents	CONCEPTS	<ul style="list-style-type: none"> ▪ Transport and air quality in urban areas. ▪ Healthy and sustainable mobility. ▪ Scientific methods. ▪ Technological innovation. ▪ Volunteer work and social action. ▪ Health protection. 	PROCEDURES	<ul style="list-style-type: none"> ▪ Understanding and interpreting the current research results through a PowerPoint presentation and ICT tools. ▪ Interacting with students, encouraging them to suggest intuitive solutions to certain obstacles. 	ATTITUDES AND VALUES	<ul style="list-style-type: none"> ▪ Open attitude, willing to listen and actively participate in the talk, taking on the role of researcher. ▪ Committed attitude in order to understand the nature of environmental issues and participate in solving them.
	Contents		CONCEPTS	<ul style="list-style-type: none"> ▪ Transport and air quality in urban areas. ▪ Healthy and sustainable mobility. ▪ Scientific methods. ▪ Technological innovation. ▪ Volunteer work and social action. ▪ Health protection. 				
			PROCEDURES	<ul style="list-style-type: none"> ▪ Understanding and interpreting the current research results through a PowerPoint presentation and ICT tools. ▪ Interacting with students, encouraging them to suggest intuitive solutions to certain obstacles. 				
ATTITUDES AND VALUES		<ul style="list-style-type: none"> ▪ Open attitude, willing to listen and actively participate in the talk, taking on the role of researcher. ▪ Committed attitude in order to understand the nature of environmental issues and participate in solving them. 						

RESOURCES:

- Interactive presentation using PowerPoint or PD.
- Mobile air pollution analyser.
- Project management ICT tools (itineraries, graphs, dynamic maps, statistics, healthy route planner)

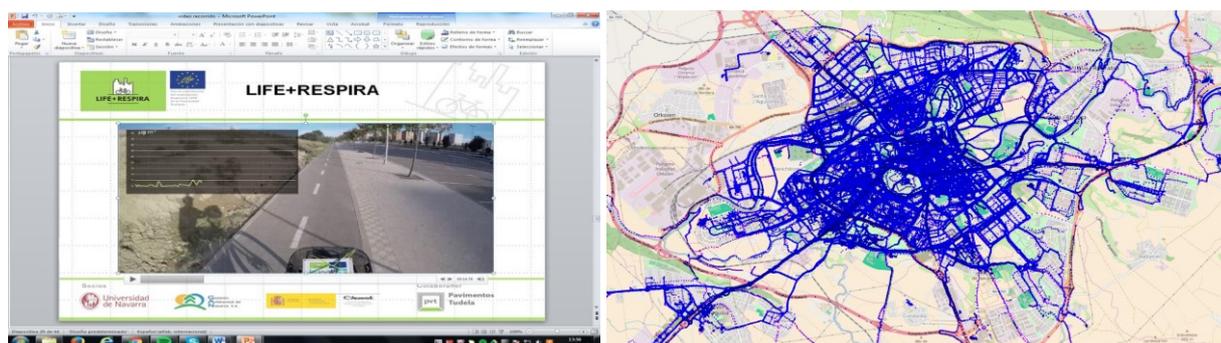
COMMENTS:

It is important that the students should receive the researcher with a positive attitude and remain attentive during the talk. The presentation is graphical and highly dynamic, including video footage of routes travelled by volunteer cyclists with sports cameras fitted on their helmets, dynamic graphs and thematic maps.

The speaker will describe the various difficulties encountered and encourage the students to suggest intuitive solutions before explaining how the difficulties were actually overcome.

ACTIVITIES	DURATION
Introduction of the researcher visiting the school and the equipment he/she carries on his/her bicycle	10'
Demonstrative talk including an interactive presentation and the use of ICT project management tools	45'

DESCRIPTION OF THE ACTIVITY



The availability of members of the LIFE+RESPIRA project research team (who are also part of the group of volunteer urban cyclists), together with access to ICT tools for the management of the project, make it possible to deliver a demonstrative and dynamic talk in which the students take on the role of researchers and become aware of the importance of urban air quality and the need to acquire sustainable and healthy mobility habits.

A member of the research team travels to the school on his/her bicycle, carrying one of the mobile air pollution analysers.

The talk describes, in a demonstrative manner, the performance and partial results of the LIFE+RESPIRA research project, aimed at reducing the exposure of pedestrians and cyclists to urban atmospheric pollutants caused by traffic.

The speaker explains how to measure pollution levels using the mobile analysers carried by volunteer urban cyclists and how pollutant distribution maps are generated from the data collected.

These graphs serve as the basis for a healthy urban route planner (app), thanks to which pedestrians and cyclists can protect their health and public managers can propose improvements based on scientific criteria.

The challenge is to prove that it is possible to reduce atmospheric pollution through the implementation of new technologies and urban management, design and planning measures.