

PLANTING MORE TREES IN YOUR CITY



**Environmental education raises our awareness and connects us with the world
around us.**

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1.- TOPIC

The project will focus on improving the Greenway in the municipality of Linares, known as the Camino de Úbeda. Greenways are the term given to paths for pedestrians, cyclists, and other uses in the natural environment, resulting from the renovation of disused infrastructure, primarily old railways.

Students will study its characteristics in depth, analyzing the flora, fauna, rocks, mining, landscape, and more. Subsequently, they will explore the various possibilities for improving this Greenway and propose, among other actions, the following: using panels to highlight the region's flora and fauna, reforesting with plants from our nursery, installing new signage with physical activities at each kilometer point, creating a panoramic view of the Guadalimar River valley with toponyms, detailing the geology, and so on.



Fig.1 Panoramic viewpoint

2.- INTRODUCTION

The Camino de Úbeda Greenway is integrated into the urban center of Linares and is a popular walkway for many pedestrians. Some improvements have been made to this Greenway since its creation several decades ago, but over the last few years, it has deteriorated for various reasons and needs a series of actions to renew, enrich, and beautify it. It is a beloved part of our city, serving as the old connection route to the Linares-Baeza Station, with a length of 6 km.



Fig.2 Camino de Úbeda Green Path

Students will organize ideas and knowledge for multiple purposes. Specifically, organizing opinions, designating groups, prioritizing ideas, adapting study or review to prioritize less-well-understood knowledge, etc. The goal is for students to work in a more dynamic and organized manner, both in groups and individually. This Greenway is steeped in recent history and offers many possibilities.

This trail follows the old railway line that connected the town of Linares with the Linares-Baeza Station. It connected the aforementioned Linares-Baeza Station with the so-called Almería Station, and in addition to serving as a passenger transport, it was one of the outlets for Linares' mineral wealth to the port of Almería (hence its name). Linares had five stations during the 20th century.



Fig.3 Reforestation activity

3.- JUSTIFICATION



Fig.4 Planting in the area

The tasks planned in the project consist of a series of actions aimed at promoting the more effective integration of this route and its surroundings into the city. The goal is to bring the area's appeal to the population, integrating it into a healthy lifestyle, all under conditions of sustainability and respect for the environment.

A series of actions will be designed to make optimal use of the landscape, following simple criteria based on the use of our surroundings, with minimal impact on the environment, ease of access, social interest, and scenic and cultural appeal. These actions, designed by the students, aim to establish continuity from the city through the Úbeda Way as an integrating axis, so that for aesthetic and landscape purposes they all form a unified unit. To enable this route as a backbone, the necessary improvements will be carried out with the support of the Linares City Council.

Students will organize ideas and knowledge for multiple purposes: organizing opinions, assigning groups, prioritizing thoughts, adapting study or review to prioritize the most difficult knowledge, and so on. The goal is for students to work in a more dynamic and organized way, both in groups and individually.

We will encounter a Greenway with a wealth of recent history and many possibilities. This trail runs along the old railway line that connected Linares with the Linares-Baeza Station. This train arrived at one of the municipality's five stations. A series of reforestation projects have been carried out here, requiring maintenance and expansion. To this end, students will study the municipality's flora and fauna. They will study the most appropriate species for reforestation and analyze existing ones to determine their success.

It will be necessary to study the geology of the area to identify the most suitable terrain for reforestation and areas prone to landslides. This information will be sent to the Linares City Council so they can carry out interventions based on our studies. In addition, a competition will be held to select the best infographics, which can then be installed on the Greenway.

4.- GENERAL OBJECTIVES

Project Objectives

Restore the Camino de Úbeda Greenway as an integrating environmental element of the municipality of Linares.

Conduct service-learning activities with students.

Move classrooms outdoors.

Integrate all elements aesthetically and landscape-wise to improve this Greenway.

Revitalize recreational spaces, currently in a state of semi-abandonment.

Generate new recreational areas where local residents can find a peaceful, natural space suitable for social and family life and recreation for children, as well as healthy activities.

Improve the environmental quality of the area by conducting forestry studies consisting of planting appropriate tree and shrub species and maintaining them, thereby creating natural areas that integrate with the surrounding landscape with positive ecological impacts.

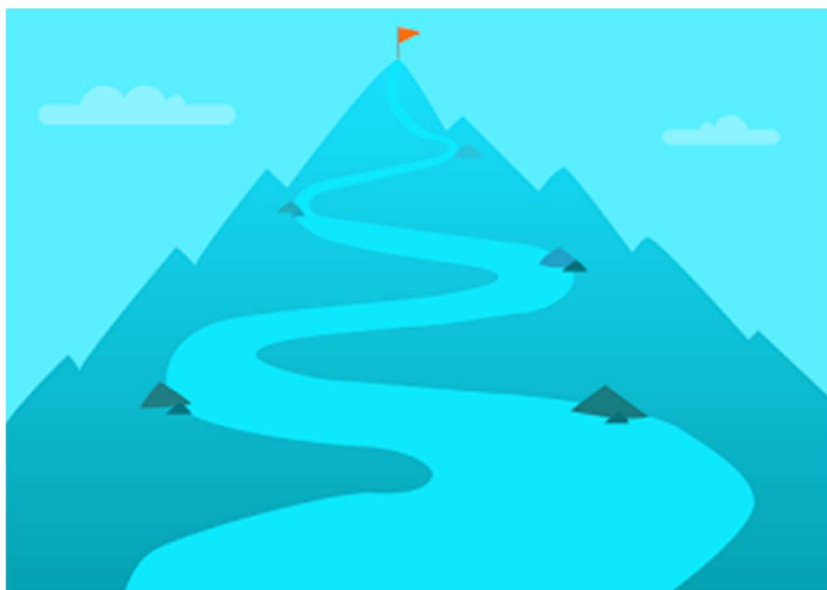


Fig.5 General objectives

5.- OBJECTIVES OF THE EDUCATIONAL STAGE

Regarding the project objectives related to secondary education, the most representative ones are listed:



Fig.6 Stage objectives

1. Appropriately use scientific vocabulary in a context appropriate to their level.
2. Search, select, and interpret scientific information and use this information to form their own opinions, express themselves appropriately, and argue about problems related to the natural environment and health.
3. Conduct experimental work with the help of a laboratory or field practice guide, describing its execution and interpreting its results, using basic laboratory materials and instruments correctly, respecting laboratory safety regulations.
4. Plan, apply, and integrate the skills and abilities inherent to scientific work.
5. Develop hypotheses and test them through experimentation or observation and argumentation.
6. Use a variety of sources of information, discriminate, and decide on them and the methods used to obtain them.
7. Participate in, value, and respect individual and team work.
8. Present and defend the research project in public.
9. Identify healthy habits as a method of disease prevention.
10. Identify some of the causes that make relief differ from one place to another.
11. Analyze and predict the action of surface waters and identify the most characteristic forms of erosion and deposits.

12. Investigate the various factors that influence the shaping of the landscape in the students' surrounding areas.
13. Recognize the geological activity of living beings and assess the importance of the human species as an external geological agent.
14. Recognize the properties and characteristics of minerals and rocks, distinguishing their most common uses and highlighting their economic importance and sustainable management.
15. Recognize the main morphological characteristics of the different taxonomic groups.
16. Incorporate the SDGs in a practical way into the teaching-learning process.

6.- SUSTAINABLE DEVELOPMENT GOALS

With regard to the SDGs, this project would cover the following:



Fig.7 Sustainable goals

SDG 3: Ensure healthy lives and promote well-being for all at all ages.

SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

SDG 5: Achieve gender equality and empower all women and girls.

SDG 10: Reduce inequality within and among countries.

SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

SDG 13: Take urgent action to combat climate change and its impacts.

SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

SDG 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

7.- METHODOLOGY



Fig.8 Maintenance activity

The project currently underway aims to improve the Camino de Úbeda Greenway near our secondary school. To this end, three infographics will be displayed along the route, depicting its fauna, flora, and landscape (a panoramic view to be installed at the trail's viewing point).

Similarly, we will collaborate with the municipal council and other educational centers to promote the protection of this trail and improve it together. It is proposed to carry out two reforestation projects, collaborating with as many students as possible from all the local schools.

To carry out the proposed projects, students will conduct in-depth research on each of the topics in each infographic. They will be grouped according to my criteria so that each one is compatible and essential. Each task is flexible and motivating and can be completed with different resources and tools, adapted to the diversity of each student.

Regarding the UDL principles:

1.- Why do we learn?

Curiosity about what surrounds us, starting with what's closest to us, motivates students to learn.

2. What is learned?

Students will learn ways to obtain accurate information and the different tools to create products.

3. How is learning done?

By cooperating and encouraging the creation of high-quality products in graphic and written expression, and finally, in oral expression.

In relation to the principles, and considering that the students are the protagonists, it will be encouraged that the students themselves empower the strategies, activities, adaptations, presentations, etc.

1. Provide multiple forms of representation:

Use all types of texts: written, audiovisual, etc.

Provide examples such as graphic organizers, diagrams, font sizes, shapes, etc.

Arrange content appropriately for relevance.

Provide keys, subtitles, translations, etc.

2. Provide multiple means of action and expression:

Use different programs, with varying degrees of complexity, to represent content, graphics, images, etc.

Provide computers if necessary and create products with all types of devices: mobile phones, tablets, computers, etc.

Use adapted concept maps, social networks, web pages, dictionaries, guides, correctors, image modifiers, processing of different formats, creation of texts by voice, etc.

3. Provide multiple forms of Involvement:

Provide activities appropriate to the students' stage, providing cooperative and individual learning environments. Tasks must be relevant and adapted to each situation, with varying degrees of achievement, thus adapting them to each level.

Students must set their own goals and dates for completion and execution. They must design their work, enjoying their choices and changing them if necessary. In other words, they must control the execution process and be supported at each stage by their peers and the teacher.

Finally, students must analyze and evaluate their work and the progress of each stage. They must be provided with alternatives if necessary and if they cannot adequately resolve the problems that arise. Student autonomy is crucial. Perseverance is crucial, avoiding mediocrity, and ensuring that each student gives their best.

Therefore, the use of tools such as Google Calendar, Google Sites, and in general all Google applications, easily accessible to all students, facilitates individualized and tailored attention, engagement, and learning.

Regarding the SDGs, this project would cover the following:

SDG 3: Ensure healthy lives and promote well-being for all at all ages.

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SDG 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

8.- PRODUCTS



Fig.9 Infographic from the viewpoint



Fig.10 Fauna Infographic



Fig.11 Information panel

The project's results include the following:

Including environmental education in our daily lives.

Creating a group of several schools, the City Council, associations, individuals, etc., working together since October 2020 with the hope of improving this area of Linares.

Planting 200 shrubs and trees during the 2022/23 school year, which is the most productive period. We have planted more than 400 trees over the past few years and have also preserved what we have done.

Creating infographics to be installed on panels along the 6 km stretch. Conducting surveys among students to select the best infographics.

Creating two panoramic images, one with the toponymy and the other with the geology of the areas covered. Due to its difficulty, this project was carried out by a few students with the collaboration of the Biology and Geology teachers.

Designing the short- and long-term projects. Involving the City Council in the installation of a second fountain and all the new signage.

In addition, we have been participating in an environmental education program on provincial radio for two years.

9.- PLANNING-PROJECT TIMELINE

YEARS	2020				2021				2022				2023				2024				2025				2026			
TERMS	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4
Data collection				■	■			■	■			■	■			■	■			■	■			■	■			■
Proposals				■				■				■				■				■				■				■
Seedbeds																												
Meetings				■				■				■				■				■				■				■
Reforestations				■				■	■			■	■			■	■			■	■			■	■			■
Maintenance							■				■	■			■	■			■	■			■	■			■	
Radio programs																■	■	■		■	■	■			■	■	■	
Environmental education																■	■	■		■	■	■			■	■	■	

Fig.12 Planning

The project timeline includes all the actions that have been carried out for several years. During these years, many setbacks have arisen, but these haven't prevented its development. The most significant setbacks have undoubtedly been the drought and COVID-19. However, we have learned from our mistakes and are gradually achieving our goals by improving our environment and promoting environmental education.

10.- ASSESSMENT

Project-Based Learning has been shown to expand students' knowledge and develop their skills, making them more competent individuals and empowering students to be the protagonists of their learning.



Fig.13 Different assessment tools

Important changes are taking place in all areas of society, and education cannot ignore these changes. These projects value the ability to solve problems, be creative, innovate, make decisions, work in teams, and a long list of other things that have little to do with knowing facts, dates, and other meaningless content for students.

What do we want to teach?

As teachers, we must carefully select content when designing a generative project or topic. It must be motivating, comprehensive, and connect with previous learning experiences, and, above all, be related to situations in students' everyday lives—something relatable.

Clearly, carefully selecting the content to work on is key, but it wouldn't make much sense to work on the content if we don't know what we really want students to develop, what competencies (learning to learn, initiative, communication in different languages, math and science, cultural expression, etc.), or what thinking skills we want them to acquire through that content.

How do we want to teach it?

The "how" is the part where students must put into practice everything we have previously designed. We moved from simple activities that only measured content to performances (activities that involve thinking). We were able to propose scenarios in which students were the ones who had to think and put their knowledge into practice in different contexts to advance in their learning process.

Project-Based Learning

When we talk about developing thinking skills, we may also be plagued by a question: How can I, as a teacher, know what my student is thinking and whether they are acquiring the thinking skills I have set out to develop? A culture of thinking is generated. This makes thinking visible, helping students become aware of it and, in turn, becoming a tool for teachers to assess their students' progress in the skills they develop.

To address diversity and taking into account multiple intelligences, this project ensures that the desired information reaches students through different channels, fostering their strongest intelligences and helping them develop their weakest ones.

Assessment consists of judging and grading something; assessment, on the other hand, evaluates something and offers feedback and suggestions for improvement, so that the student themselves can establish improvement plans and thus become aware of the areas in which they need to improve (they must be the protagonists of their own learning).

In this process, I propose various tools, including self-assessment rubrics, which are very useful, as they make it clear to students what goals and understandings they need to achieve and allow them to compare their achievements and establish improvement plans. Furthermore, the proposed teamwork is motivating and encourages creativity and reflection.

11.- FUTURE



Fig.14 Planting more trees in your city

New course, new challenges, building on what we've already learned to improve and beautify our environment. We work from modesty, we want to continue, little by little and consistently. We want more trees in our city, in your city, in our surroundings. Our actions can bring many benefits:

- Youth Engagement and Education
- Community Health and Wellness
- Urban Heat Mitigation
- Biodiversity
- Water Resource Protection
- Recreation
- Air Pollution Reduction

Nothing and no one is indispensable—not a person, a place, or a job, but we are all necessary. Paulo Coelho

12.- MILESTONES

The land of the former railway line between Linares and the Linares-Baeza Station forms the Camino de Úbeda Greenway. It presents a series of interesting natural, historical, and scenic features, which can be made known to the public by renovating this greenway with educational content and reforestation. The route has significant scenic potential and can also serve as a leisure and recreation area for the citizens of the Municipality of Linares and the surrounding region. The very nature of the route is ideal for the establishment of a greenway that acts as a link between a large number of routes, sites, and elements of interest that currently exist in the surrounding area and that would otherwise go unnoticed. These interactions can also continue with another greenway that begins at the end of this route: the Guadalimar Greenway.

The greenways have been established as recreational infrastructure and transformed into healthy trails, featuring elements aimed at environmental outreach, implemented in our project with students as part of Project-Based Learning (PBL) and Service Learning (SLL).

It is a somewhat neglected area, with erosion and landslides, road surface problems, and damage from vandalism over several years. In addition, intensive reforestation is necessary. Collaboration with other educational centers to carry this out has been a success, always supported by the City Council, which has also been heavily involved.



Fig.15 Beautifying our environment

This project has proposed measures aimed at disseminating the area's values, highlighting the creation of an itinerary with educational stops and interpretive panels, allowing the greenway to act not only as a route, but also as a space for environmental

education and knowledge of the environment, its unique features, and its history. Considering all of the above, this paper, after analyzing the current situation of the route, proposes measures to adapt its route and disseminate its main values.

Finally, integrating the SDGs of the 2030 Agenda is crucial in any type of project, and even more so in the one we are dealing with. Several of them have been integrated, and we would like to highlight number 11, which is bringing natural spaces closer to cities, and number 17, which is seeking alliances and collaborations to achieve our goals.

13.- LINKS

- **BLOG**
<https://plantmoretreesinyourcity.blogspot.com/2025/08/>
- **EVIDENCES**
<https://drive.google.com/drive/folders/1BSxPUOnh6tobq-QqRZKdR-u6VYIGJ3yN?usp=drive link>
- **PANORAMIC VIEW FROM THE VIEWPOINT**
<https://pano.fotoflier.es/050-NATURALEZA/Mirador de las Novias/>