

ECF4CLIM - A EUROPEAN COMPETENCE FRAMEWORK FOR A LOW CARBON ECONOMY AND SUSTAINABILITY THROUGH EDUCATION

PT-DS02-IN03

REACTIVATE THE SCHOOL'S BIOLOGICAL GARDEN

Secondary school

Reactivate the school's biological garden (known as "Quinta do Charco") by involving students, teachers, families and external actors in a participatory process. Activities included space diagnosis, collaborative sessions with architects from IST, group reflections on sustainability, and co-design of a multifunctional garden. The aim is to transform the space into a sustainable and educational green area integrated into school life and the community.









Relevant difficulties

 Lack of material and human resources for the construction and maintenance of the garden.

 Dependency on external partners (e.g., municipality, architecture teams).

- Risk of discontinuity due to high teacher turnover and variable commitment.
- Difficulty integrating the space into the school curriculum and routines.
- Unclear governance: Who will maintain and manage the space long-term?

Resources

Human	***
Time	000
Costs	€€€

Individual Competences	Collective Competences	Technical-material Competences
✓ Environmental awareness and responsibility.	✓ Co-creation and collaborative decision-making.	✓ Spatial planning and participatory design skills.
✓ Sense of ownership and pride in shaping school space.	 Negotiation and dialogue among diverse school actors. 	✓ Understanding of ecological gardening and land use.
 Motivation to contribute to sustainability and health. 	✓ Shared responsibility for the long- term future of the garden.	 Awareness of technical needs (e.g., irrigation, accessibility).
✓ Reflection on the role of nature in well-being and education.	✓ Strengthening of trust and school- community bonds.	✓ Ability to communicate ideas visually (models, drawings).





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Sustainability competences in place in the intervention



Engagement

The reactivation of the garden generated strong emotional engagement among students, especially those from classes with direct participation in the design sessions. Many students expressed a desire to use the space regularly. Engagement from teachers was mixed — some were deeply involved, while others were hesitant due to workload. There was growing engagement from the school board and community actors, especially the parents' association and parish council. One of the main challenges is expanding engagement to the entire school community and maintaining continuity.



Connections

The intervention was clearly linked to citizenship and science curricula and also created links with architecture and design (via collaboration with IST). It promoted interdisciplinary connections and potential community use of the garden. The activity was positioned within broader school projects on sustainability and health, but still needs stronger integration into the school's operational routine and pedagogical plans.



Change

The intervention triggered changes in students' perspectives on sustainability, nature, and school spaces. Students became more aware of the value of green areas and expressed a desire to participate in their care. The process also changed some teachers' views on co-creation. While physical transformation of the space has not yet been implemented, behavioural and attitudinal changes were observed in terms of ownership and long-term vision.



Action

Activities included student-led diagnosis of the garden space, participatory design sessions with architects, group discussions on sustainability, and development of conceptual models for the future garden. Although the physical transformation is still pending, the planning and design phases were completed, and collective visions for the garden were co-created.

