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Multilateral COIL Implementation

*Environmental Literacy and collective action in Europe:
an international collaborative online learning experience*

RESPONSIBLE PARTNER

Complutense University of Madrid
(Spain)

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Acknowledgment

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Report – WP4.4 –

Multilateral COIL Implementation

Project Name:	ELCRA. Environmental Literacy in Higher Education Context for Preventing Radicalization in Climate Activism
WP 4:	Development of a community of practice on environmental literacy and prevention of radicalized environmental activism
Activity 4.4:	Multilateral COIL Implementation « <i>Environmental literacy and collective action in Europe: an international collaborative online learning experience</i> »
Partner:	Complutense University of Madrid

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Multilateral COIL Implementation:

«Environmental literacy and collective action in Europe: an international collaborative online learning experience»

1. INTRODUCTION

The implementation of multilateral COIL with the partner universities that are part of the ELCRA project introduces a high level of organizational and pedagogical complexity, requiring specific mechanisms for coordination, standardization, and supervision. The experience included shared assessment, inter-institutional faculty coordination, accessibility criteria, and the use of technological tools such as Genially (Aili, 2024) and ethical measures to ensure equitable participation of students and teachers.

This COIL, entitled *«Environmental Literacy and Collective Action in Europe: A Collaborative Online International Learning Experience»* is framed within the development and implementation of WP4.4 of the ELCRA project. Its implementation therefore aligns with the project's objectives of internationalization, interdisciplinary collaboration, and pedagogical transfer (ELCRA Project, 2025). This report details the use of the COIL with the five partner universities of the ELCRA project, one of whose objectives is to identify key elements for optimizing this type of initiative. Table 1 below proposes a matrix for the implementation of the ELCRA COIL.

Table 1:

Matrix for the implementation of the ELCRA COIL

Subject	Description	
COIL Title	<i>Environmental Literacy, Sustainability and Collective Action in Europe: A Collaborative Online International Learning Experience</i>	
Participating Universities	Name	Module Title
	Complutense University of Madrid	Environmental Sustainability and Communication
	Jagiellonian University	Climate Change Emotions and Activism
	University of Coimbra	Legal Tools for Circular Economy
	Klaipeda University	Critical Thinking for Social Sustainability
	University of Siena	Prevention of Radicalization in Environmental Activism
Educational level	Bachelor's and Master's degrees	
Thematic area	Sustainability and environmental literacy, prevention of climate activism and social responsibility.	

Central challenge	Analysis and proposed solutions to climate change with actions on environmental literacy to avoid the radicalization of climate activism.
General objective	Develop literacy and environmental sustainability skills through online international collaboration.
Learning outcomes	Understanding complex environmental problems, working in international teams, proposing viable actions, and communicating results rigorously.
Key Competencies	Critical and systemic thinking, prevention, collaborative action, ethical responsibility, intercultural communication.
Competency framework	GreenComp and Learning Recommendation for the Ecological Transition
Methodology	Collaborative International Online Learning (COIL), with mixed teams and sequenced tasks in each module. Each university will deliver one module. In each module, there will be two students from each of the five ELCRA partner universities. That is, ten international students will participate in each module. This makes a total of 50 students involved in the ELCRA COIL program.
Duration	Three weeks per module. (See calendar and synchronous time)
Work structure	Phase 1: presentation and team creation; phase 2: research; phase 3: co-design; phase 4: presentation and reflection.
Type of activities	Debates, case analysis, teamwork, report production and final presentation.
Working language	English
Digital tools	Videoconferencing, use of Genially, co-editing of the tool, and asynchronous messaging.
Organization of work teams	Participation of mixed international groups: 2 students per university and module. Total: 10 students per module.
Teaching coordination	The UCM teaching team assumes the distributed responsibilities: design, technical support, monitoring and evaluation.
Role of the teaching staff	Each participating teacher in each module must facilitate, guide, supervise collaboration and mediate in possible incidents.
Role of the student body	Actively participate, research, debate, co-create and evaluate collective work.
Assessment	Shared rubrics, peer assessment, and final product assessment.
Learning evidence	Presentations will be made using the Genially tool, whose matrix is provided by the UCM.
Inclusion and accessibility	Adaptation of materials, digital accessibility, equitable participation and attention to time zone differences.

Ethics and data	Special attention to informed consent, data protection, responsible use of recordings and student products.
Follow-up	Coordination meetings promoted by the UCM. Personalized assistance with each partner, intermediate milestones, continuous feedback, and plan adjustments. Monthly ELCRA meetings.
Expected impact	Improvement of global skills by students, with emphasis on raising environmental awareness, sustainability, internationalization of the curriculum and interdisciplinary work.
Transfer	Possibility of replicating the model in other thematic areas, degrees or university networks on ecology and environment.

2. PARTICIPATING INSTITUTIONS

Each partner university in the ELCRA project contributes a group of 10–15 students and 1–2 co-facilitating faculty members. Each university is responsible for a field or area of knowledge corresponding to each module.

Table 2:

Participating institutions of COIL according to areas of knowledge

Country	University	Area/Discipline	Module
Spain	Complutense University of Madrid	Communication	Communication and Environmental Sustainability
Lithuania	Klaipėda University	Social Sciences and Humanities	Critical Thinking for Social Sustainability
Poland	Jagiellonian University of Krakow	Psychology	Emotions and activism in the face of climate change
Portugal	University of Coimbra	Right	Legal tools for the circular economy
Italy	University of Siena	Education	Preventing radicalization in environmental activism

3. CONTENT STRUCTURE AND PEDAGOGICAL IMPLEMENTATION

The content of each module was proposed and developed by each ELCRA partner institution. This content is closely related to the scientific expertise of each participating university and was already addressed in the development of the MOOC, coordinated by the University of Coimbra, Portugal, with the implementation of WP3 of the project. In this way, each group of students had prior information on the topic to be covered in each module, and which university was responsible for its pedagogical implementation (ELCRA Project, 2025).

In this sense, the COIL (Cooperative Learning Environment) adopted a free navigation approach, allowing students to explore the content at their own pace (asynchronously) and according to their interests (SUNY COIL Center, 2026). This type of (exploratory) navigation gives students control over the COIL, limited only by a synchronous session consisting of an hour and a half of explanation of the module topic. The rest of the time, students could work asynchronously with their peers, as much as they deemed necessary. This model offers pedagogical advantages such as autonomy and motivation, as it fosters active and self-regulated learning, allowing students to focus on their knowledge gaps or specific interests. It also offers adaptability of the environment, considering the constructivist methodology where students, forming working groups of ten participants, could construct their own knowledge through research and initiatives arising during the development of each COIL module (UN PRME, 2025).

4. DESCRIPTION OF MODULE CONTENTS

This section includes the titles of the modules and the university responsible for teaching each one, as well as a brief summary of the scientific content and the objectives pursued.

Week	University	Module	Synchronous date and time
1	Complutense University of Madrid (Spain)	Environmental sustainability and communication	March 23, 2026. 13.30 h.

This module builds upon the ELCRA MOOC “Environmental Literacy and Empowerment for Climate Justice,” conducted under the auspices of the University of Coimbra (Portugal), where students explored the core concepts of environmental sustainability and reflected on how scientific knowledge influences public understanding of environmental challenges. In this collaborative international environment, students will delve deeper into this foundation by examining the social, cultural, economic, and political dimensions of sustainability through real-world examples and case studies. The module encourages students, using Genially, to analyze how different actors, such as the media, institutions, brands, and citizens, contribute to the communication and practice of sustainability, as well as the tensions and responsibilities involved in promoting sustainable behavior (Flores-Vivar & Molina-Diez, 2026). The module will also introduce key principles of international environmental governance and law, linking them to current global debates and the Sustainable Development Goals (SDGs) (Campoy-Cubillo & Jiménez-Estrada, 2025). The aim is to help students recognize sustainability not as an abstract concept, but as a set of interconnected challenges that affect daily life and require informed decision-making. Working in intercultural teams, students will develop a final educational resource designed to help young people understand environmental sustainability and responsible consumption (Montaño-Sevillano et al., 2025). This work will require them to translate theoretical knowledge into clear and accessible communication, while developing critical thinking, teamwork skills, and an understanding of how communication practices can influence more sustainable decision-making (Genially, 2025c).

Week	University	Module	Date
2	Jagiellonian University (Poland)	Emotions and activism in the face of climate change	April 24, 2026 Time: 2:00 PM

The module “Emotions and Activism in the Face of Climate Change” explores the relationship between climate change, human emotions, theories of change, and activism. Participants will engage in experiential learning to understand how climate-related challenges evoke emotional responses such as anxiety, grief, and hope, and how these emotions can be channelled into meaningful action (Petrucchi, 2021). The course will introduce key theories of change and demonstrate how these frameworks can guide individual and collective strategies for climate action. Part of the course is dedicated to collaborative, hands-on work, where students design a peer-centered climate workshop under the guidance of instructors. Through group discussions, reflective exercises, and collaborative problem-solving activities, students will receive step-by-step guidance on how to design practical solutions that address real-world climate challenges. Students will work in international teams to develop practical content for the workshop that transforms concern and knowledge into concrete solutions (Stoeber & Gaebel, 2025). At the end of the course, students will not only have a conceptual understanding, but also a fully designed workshop ready to be delivered to their peers, fostering intercultural collaboration, solution-building skills, and practical skills to transform climate concern into purposeful action.

Week	University	Module	Date
3	University of Coimbra (Portugal)	Legal tools for the circular economy	April 23, 2026 Time: 13:30

The module on legal tools for the circular economy builds on Module 4, “Circular Economy: Systemic Change for the Climate, for People, for the Planet,” of ELCRA’s Massive Open Online Course (MOOC) “Environmental Literacy and Empowerment for Climate Justice.” In the MOOC, participants explored the relationship between consumption patterns and climate change, becoming aware of the hidden carbon footprint and the broader ecological impacts of products and services. Within the COIL framework, students will design learning strategies and gamified educational materials to explain the role of law in supporting waste reduction and promoting climate-friendly consumption practices capable of driving behavioral a change among individuals and communities. The module will present, in a structured and progressive manner, a series of legal instruments that support the circular economy, enabling participants to identify the applicable tool in each scenario and explain the underlying legal logic and equity criteria of the respective regulatory regimes. The module will address, at a minimum, the following categories of legal tools: informational instruments that contribute to commutative justice; tax incentives that contribute to distributive justice; certification systems that contribute to procedural justice; criminal and administrative sanctions that contribute to retributive justice; and infrastructure requirements that contribute to preventive justice. Competitions, awards, and formal recognition of civil society initiatives—such as digital platforms for sharing content, applications, and behavioral persuasion strategies—constitute alternative strategies for promoting and accelerating the transition to a circular economy.

Week	University	Module	Date
4	Klaipėda University (Lithuania)	Critical thinking for social sustainability: Towards a Holistic Approach	April 15, 2026 Time: 2:30 PM

Critical Thinking in Environmental Sustainability: Towards a Holistic Approach. This module aims to develop an understanding of critical thinking in environmental sustainability and its role in social development towards a more sustainable future. Critical thinking in environmental sustainability

involves carefully analysing information, questioning assumptions, and considering the long-term impact of actions. It means not only choosing among various options but also understanding the complexities and interdependencies that define the human relationship with the environment. Critical thinking is the process of actively analysing, synthesizing, and evaluating information to arrive at an informed conclusion. This emphasizes the normative and axiological background of critical approaches to sustainable development (Rahdar et al., 2023). The module will help students recognize the influence of norms and values on critical thinking; develop skills to carefully examine and analyze information; develop the ability to question and analyze assumptions; and foster reflection and evaluation. Within the module, online teaching and learning combine synchronous and asynchronous activities to encourage participation using the Genially platform (2025e). Key approaches include inquiry-based learning, questioning techniques (such as Socrates, Creative, etc.), gamification, and discussion forums to promote student participation and interaction.

Week	University	Module	Date
5	University of Siena (Italy)	Preventing radicalization in activism	April 17, 2026 Time: 13:30

The interactive COIL (Collaborative International Online Learning) session, lasting a total of 6 hours, is designed as a structured and participatory learning experience with the objectives of: (a) understanding the processes of violent radicalization that can arise within groups involved in environmental activism; and (b) exploring educational strategies aimed at preventing violent radicalization (Macaluso, 2016). Through a critical and reflective approach, the session seeks to provide students with tools and methodologies to recognize the dynamics that shape forms of climate engagement, offering an interpretive framework for understanding the conditions that can fuel processes of polarization and violent radicalized trajectories (Pérez-García et al., 2025). Furthermore, the learning activity promotes the development of pedagogical and design competencies that support inclusive, dialogical, and responsible forms of environmental participation within a collaborative and international learning context (Martín, 2023a). The session introduces theoretical frameworks for analysing the mechanisms of radicalization and prevention strategies, with particular attention to the role of education, dialogue, and critical thinking as key tools for fostering conscious and nonviolent forms of activism (Koehler, 2021). Part of the activity is dedicated to collaborative work: students, organized in international groups, will design a simulation of an educational intervention or a micro-workshop aimed at promoting nonviolent and sustainable environmental activism practices (Genially, 2025b). By the end of the session, students will have developed not only a solid understanding of the factors that can contribute to radicalization processes within environmental activism, but also practical skills for designing educational interventions capable of channelling climate commitment toward constructive, dialogical, and socially transformative actions, while simultaneously strengthening intercultural collaboration (Martín, 2023b).

Key points:

- Critical analysis of the dynamics of radicalization and prevention strategies
- Introduction to the theoretical frameworks and educational approaches aimed at preventing violent radicalization
- Case study analysis

- Practical and collaborative activities focused on the design of primary prevention educational interventions.

5. IMPLEMENTING THE GAMIFICATION STRATEGY WITH GENIALLY

The implementation phase of this COIL (WP4.4) within the ELCRA project consists of launching Collaborative International Online Learning (COIL) and producing interactive educational materials using Genially. The purpose of this phase is to raise awareness among university students about environmental literacy and sustainability, climate change, the circular economy, the prevention of violent radicalization, and the development of critical thinking. To ensure effective knowledge transfer and maximize engagement with the proposal, technological development was carried out using the Genially web platform (Moreau, 2025). This development environment was chosen for its ability to integrate complex information architectures within an interactive, engaging, and user-centered design approach, facilitating the didactic transposition of content related to sustainability, climate activism prevention, and the promotion of critical thinking.

The technical implementation was structured around a linear navigation logic for Genially, its uses as a gamification tool, and its didactic approach that prioritizes student autonomy and active, independent exploration. The scientific content on environmental awareness topics was developed by each of the partner universities in the ELCRA project. Previously, the team from the Complutense University of Madrid, responsible for coordinating this WP4.4, provided technical support for questions about Genially that arose as the COIL project progressed. Accordingly, a Genially user guide was created and made available to all partners involved in the development of each module. The Genially matrix (template) (Figure 1) was distributed, which, according to the Guide, could be layered using dynamic information layers, pop-ups, and embedded multimedia resources—such as climate data charts, impact maps, and audiovisual pieces from validated institutional sources. This visual arrangement of Genially avoids cognitive overload for the user, allowing students from participating universities to explore the various thematic modules in a voluntary and critical manner.

As the central element of the pedagogical approach, the implementation of a gamification strategy was suggested, using a multiple-choice quiz integrated into Genially. Far from being a mere entertainment element, this gamified component acts as a formative assessment tool, designed to encourage self-evaluation, provide immediate feedback on errors, and reinforce key concepts related to environmental sustainability, climate change, the circular economy, critical thinking, and climate activism.

Figure 1:
Genially template adapted to the development of the ELCRA COIL



6. USE OF GENIALLY AS A MULTIMEDIA, DIDACTIC AND COLLABORATIVE TOOL ADAPTED TO COIL

Using Genially requires combining clear design guidelines with simple analytical rubrics shared with students. Below is a proposed Genially guide with a structure adaptable to COIL (Community-Based Learning) focused on sustainability, climate, and environmental activism.

6.1 Genially Principles:

- Create interactive resources (presentations, maps, infographics, escape rooms) that integrate short text, images, video, and external links.
- Prioritize pre-made educational templates (presentation, timeline, infographic, game, rubric) and customize them according to the task.
- Incorporate meaningful interactivity: buttons, layers, pop-up windows, and questions that encourage exploration and decision-making.
- Leverage gamification (points, challenges, progress) to increase engagement, while maintaining a focus on learning objectives.

6.2 Task design with Genially

- Possible tasks:
 - Interactive infographic about a socio-ecological conflict.
 - Timeline of an environmental activism case.
 - Story map or guided presentation about a complex system (actors, loops, scenarios).
 - Escape room or interactive quiz about radicalization prevention and critical thinking.
- Minimum requirements for each task:
 - Use of a template appropriate to the objective (infographic, timeline, game, rubric, etc.).
 - At least 3–4 interactive elements (buttons, hotspots, layers) that expand on information or pose questions.

Inclusion of sources and links to quality resources (scientific bodies, European institutions, ELCRA Project, NGOs).

7. CONSIDERATIONS FOR IMPLEMENTING THE COIL WITH GENIALLY

Table 3:

Factors to consider for the implementation of COIL

Factors	Definition/characteristics
1. Diversity in academic approaches	The participation of multiple institutions promotes conceptual richness, although it introduces variability in depth, focus and content development, which makes a clearly defined common framework necessary.
2. Differences in work rhythms	Different academic structures can generate rhythms that are not completely synchronized, making rigorous and coordinated planning essential.
3. Use of common tools	The shared template facilitates project cohesion, although it will be necessary to ensure its correct implementation through monitoring and intermediate validations.
4. Collaborative work dynamics	The international environment implies differences in participation, work styles and coordination in intercultural groups, which requires a pedagogical design that fosters effective collaboration.
5. Student Integration	Given the limited duration of the modules, student integration becomes critical. Specific strategies must be designed to foster group cohesion and enable genuine collaborative work from the very first sessions.
6. Deadline Management	Firmness in meeting deadlines will be a determining factor for the success of the project, since any delay can affect the entire process, especially in interdependent environments.
7. Leadership by module	It is crucial to have leadership figures in each module, made up of people involved both in the development of the project and in achieving the final objective, thus ensuring coherence and progress in the work.
8. Student Activation	Activation during the sessions should be a priority, through participatory dynamics that avoid passivity and encourage continuous student involvement.

8. EVALUATION OF THE INTEGRATION PHASE

The final integration phase will transform the product into a resource transferable to different international training contexts and will be key to:

- consolidate the narrative coherence of the final product,
- standardize visual criteria,
- to strengthen the overall quality of the content,
- orient the result towards its pedagogical reuse.

9. RESULTS OF THE IMPLEMENTATION OF COIL IN EACH UNIVERSITY

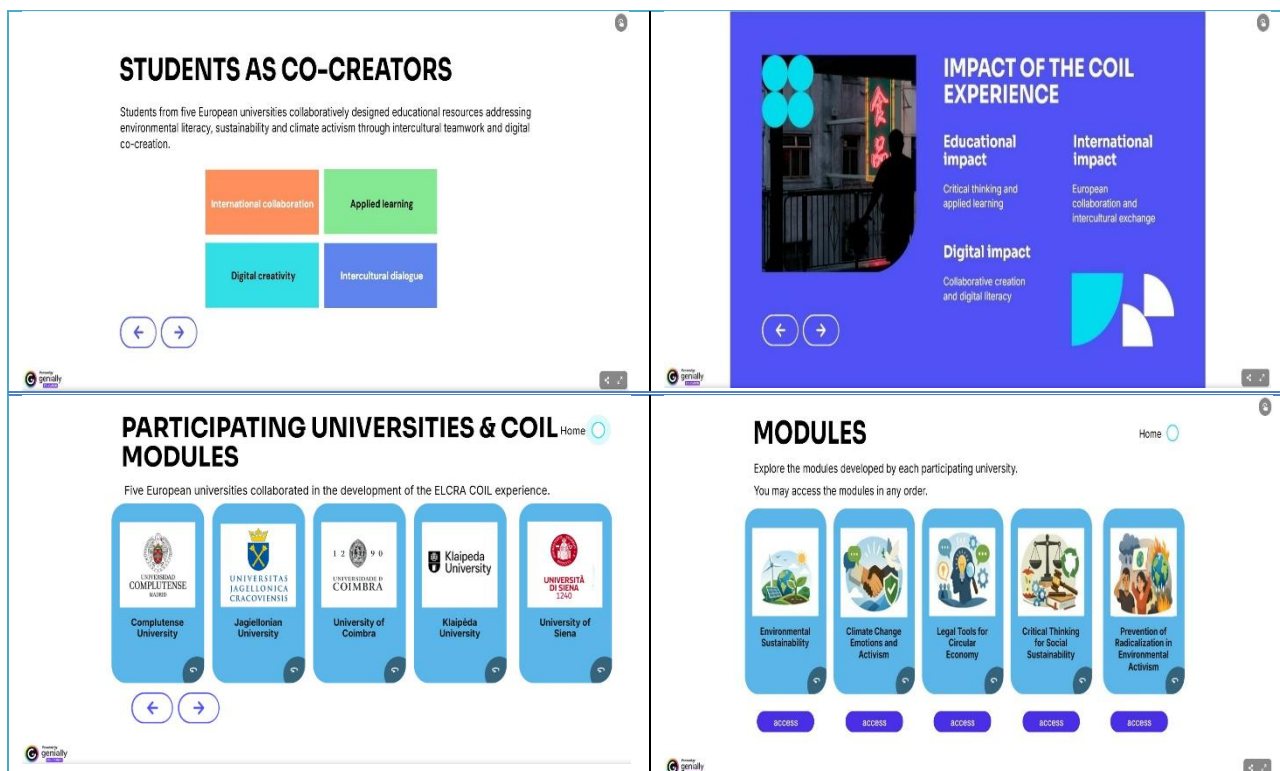
9.1 Work carried out by student groups in each module

The following is the COIL matrix in Genially, a common header for all modules, starting by defining and contextualizing the ELCRA project and the COIL experience, and then beginning to include within this same Genially matrix the work developed by each group of students participating in each module of each university.

Figure 2:

Genially matrix for the development of COIL modules for the ELCRA project



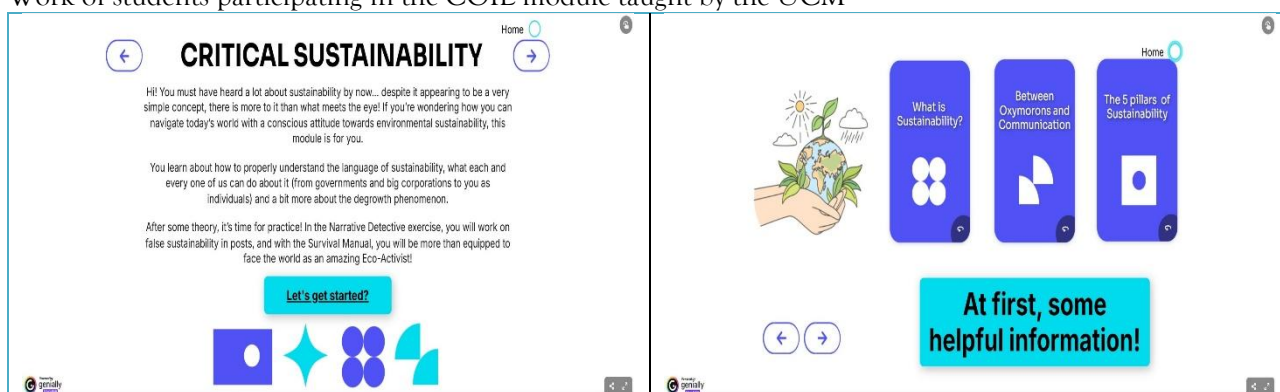


9.1.1. Complutense University of Madrid (Spain)

Through the module "Environmental Sustainability and Communication" the UCM explores the social, political, and environmental dimensions of sustainability and responsible consumption through intercultural collaboration. Students respond by completing the project "Critical Sustainability," with a clear focus on communication processes.

Figure 3:

Work of students participating in the COIL module taught by the UCM



In a broad sense, sustainability is to "meet the needs of present generations without compromising the ability of future generations to meet their own needs", as defined by the Brundtland Report.

If development needs to meet economic growth, and sustainability is associated with preservation of resources, then 'sustainable development' might be an oxymoron. However, today we know that these are both ideas that need to be communicated directly and positively, so we do this in the next page!

Home

SOCIETY
ECONOMY
CULTURE
GOVERNMENT
ENVIRONMENT

At first, some helpful information!

SUSTAINABLE DEVELOPMENT GOALS
Which ones should guide our environmental action?

7 AFFORDABLE AND CLEAN ENERGY	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND

01

COMMUNICATING SUSTAINABILITY

02

SUSTAINABLE LAWS AND GLOBAL POLICIES

03

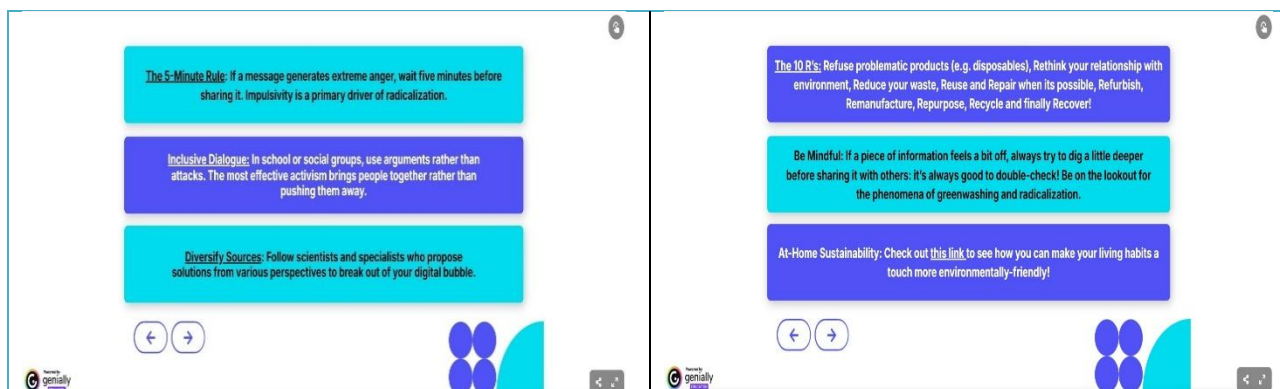
DEGROWTH
beyond the Myth of Green Growth

"Routabing with first" "here machines for the production of surplus-value"

From Normalization to Flourishing

ACTIVITY:
THE NARRATIVE DETECTIVE

REAL-LIFE APPLICATION:
DIGITAL SURVIVAL MANUAL FOR THE ECO-ACTIVIST

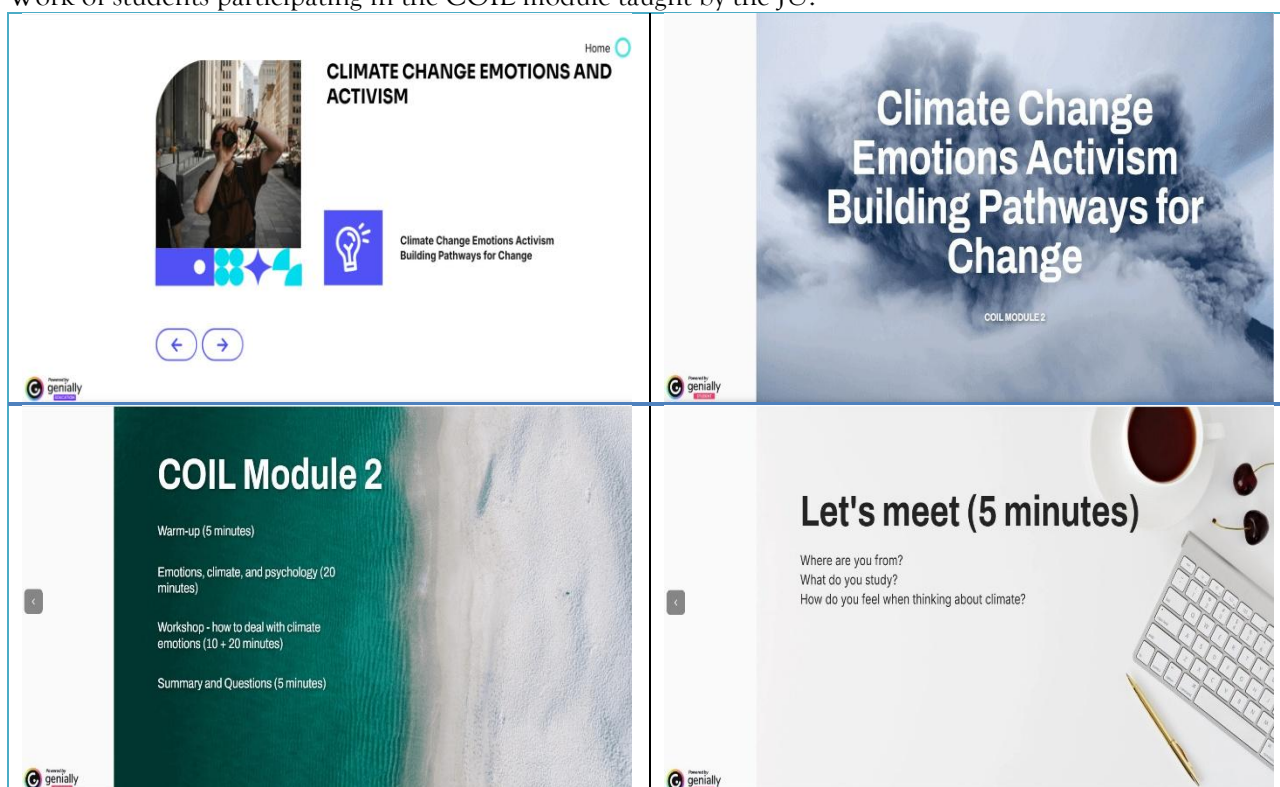


9.1.2. Jagiellonian University (Poland)

The module, “Emotions and activism in the face of climate change”, proposed by Jagiellonian University (Poland), examines how climate-related emotions can be transformed into meaningful collective actions and climate activism.

Figure 4:

Work of students participating in the COIL module taught by the JU.



Climate change and emotions

Global research across multiple countries confirms that climate change directly impacts human emotions.



A meta-analysis of 94 studies across 27 countries found that "climate change anxiety is experienced globally," with higher levels among younger individuals and women (Lange, 2025).

A 32-country study of 12,246 participants confirmed that "climate anxiety is negatively related to mental wellbeing in 31 out of 32 countries" while being "positively related to pro-environmental behavior in 24 countries" (Ogunbode et al., 2022).

Research across 30 countries found that "people in developing countries experience climate emotions more intensely than those in advanced economies" (Baum et al., 2025).

A systematic review concluded that "climate change and its specific hazards impact human well-being and mental health" with outcomes that "are complex, extremely individual, and can be long lasting" (Rückle et al., 2025).



Emotions and activism

Negative emotions, including **guilt** and **anger**, may encourage pro-environmental behaviour but can also produce emotional paralysis and helplessness.

At the same time, positive emotions such as **hope**, **pride**, and **collective efficacy** may foster climate engagement, social participation, and collective action (Schneider et al., 2020).

Current literature suggests that climate emotions are not only psychological responses to ecological crisis, but also **potential drivers of social mobilization and collective transformation**.



Negation and news avoidance

Emotional distress related to climate information can lead to **selective avoidance**. People who experience **ecoanxiety** may avoid news, reduce exposure to environmental content, or disengage from social media discussions as a way to reduce psychological discomfort.

Some individuals develop an **emotional negation** or psychological distancing. This does not necessarily mean denying climate change, but rather emotionally "switching off" to protect oneself from distress. It can result in withdrawal from collective or political action.

It might be a normal response to overload and you can deal with it by recognizing and understanding emotions.



Please use the Climate Mental Health Network "Wheel of Emotions" to identify which emotion you relate to the most. It will help you with our next activity.



Activity 1



What am I feeling?

Try to notice and name your emotions. If you find it helpful, you can use some kind of chart or list of emotions.

Where do I feel it?

Notice how this feeling shows up physically. You might notice tension in muscles, shallow breath, warmth. Try to just observe what you notice, without trying to change it.

Why do I feel it?

We experience our emotions for a reason, they have a purpose and a message. Reflect on your reason - why do you feel the way you feel? Try to find meaning and importance of this experience.

What can I do?

On a short term: Reappraisal is one of the strategies for managing emotions. It is changing how one thinks about a situation to change one's feelings (Ortner et al., 2025).

On a long term: engage in meaningful action with others.



How emotions can paralyze us

Climate change is a huge challenge. Sometimes we can have a feeling of not being capable to deal with climate change. We can overcome it in couple ways.

- Focus on things you can change and do
- Focus on people, who act with you
- Find people you like and care about
- Take care of yourself
- Connect with nature
- Talk to your professional health care provider



GROUP ACTIVITY 2

Form smaller groups, 3-4 people.

Discuss your **memory**, the most meaningful or joyful memory of you and nature.

- Do you have one? Why/why not? Why this one is meaningful?

Now focus on your own experience with climate activism - what are the obstacles that are stopping you and your friends from getting involved?

- What emotions are stopping you?

Do you have any ideas of how you can overcome these issues?

- Did you try any of them? What were the results of that?

Each smaller group will share one obstacle and solutions to it with the whole group.



Greta Thunberg

She started her activity in 2018. She was 15 years old, when she decided to start skipping school to hold a one-person "Skolstrejk för klimatet". She was angry that her government isn't doing enough to prevent climate change and to honor their promises to reduce climate harm. Ever since, she has been involved in activism and she has become a known character, because of media coverage of her activity. She was a speaker during many important gatherings, for example at UN Climate Summit in New York, USA. She has even refused to accept prizes for her activism saying that she doesn't need them and people should focus more on climate change than rewarding specific activists. She is a great example of how people can overcome their helplessness in the face of a big issue, because she started to act alone and created a movement of many around her.

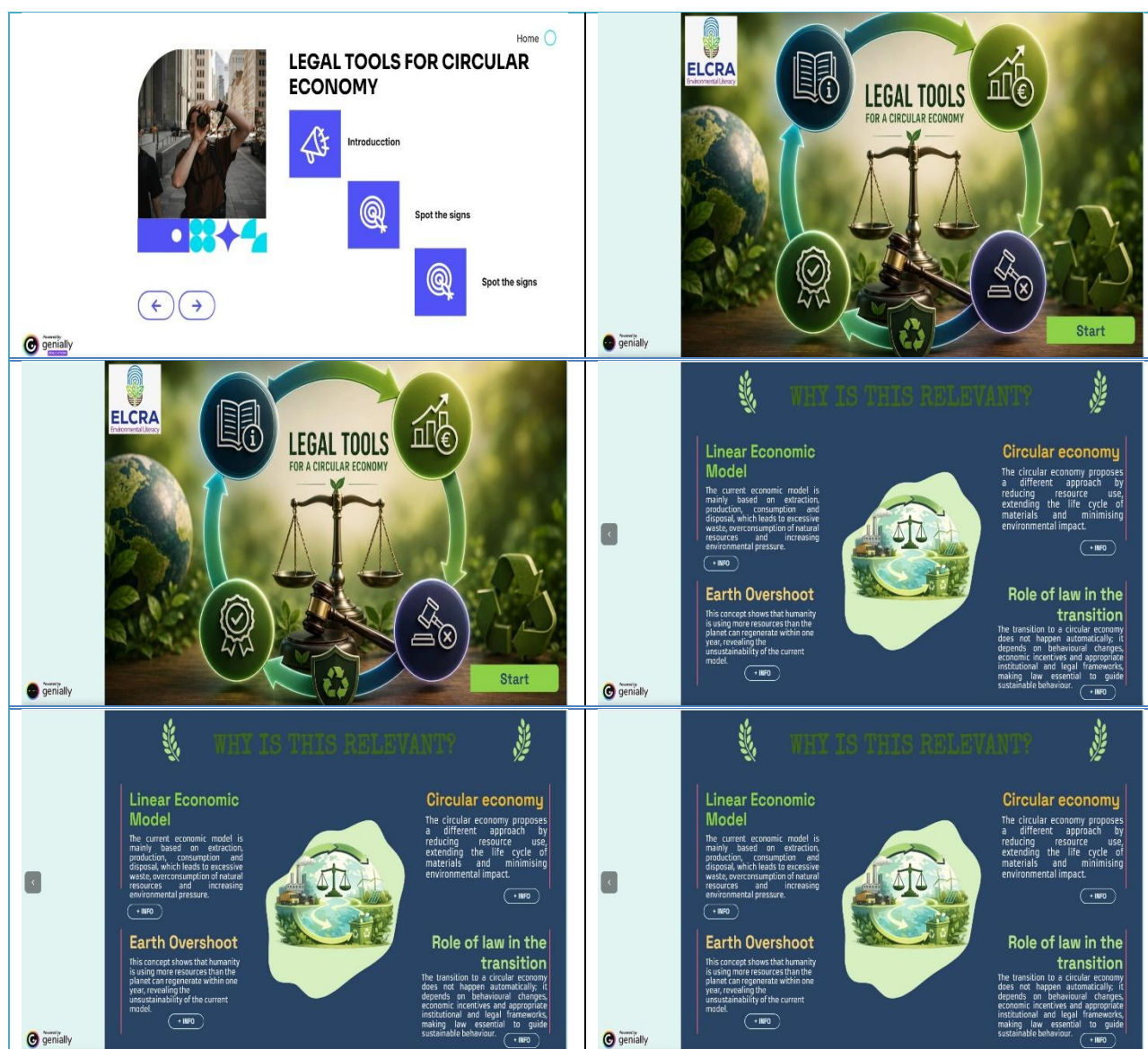


9.1.3. University of Coimbra (Portugal)

The module, “Legal instruments for the circular economy”, proposed by the University of Coimbra, presents legal instruments that support circular economy practices and promote a change in sustainable behavior.

Figure 5:

Work of students participating in the COIL module taught by the UC.



LET'S CHECK WHAT YOU HAVE LEARNED

Which action belongs to a circular economy?

- Produce more and consume faster
- Buy, use and throw away
- Repair, reuse and recycle

Enviar

ROLE OF LAW IN WASTE REDUCTION

WASTE AND RECYCLING

Directive 2008/98/EC

- Establishes a waste hierarchy
- introduces recycling and recovery targets to be achieved by 2020 for household waste (50 %) and construction and demolition waste (70 %).
- introduces the concept of extended producer responsibility (EPR)
- confirms the polluter-pays principle, whereby the original waste producer must pay for the costs of waste management
- makes a distinction between waste and by-products

Vehicles and Used Motor Oil in Circular Economy

EU legal systems supporting sustainable vehicle design and oil circularity

Created by
Aistė Liaučytė
First-year Biology and marine biotechnology student
Klaipėda University

Vehicles and Used Motor Oil

Understanding the problem, its importance and the solution.

PROBLEM

Vehicles use large amounts of raw materials and produce hazardous waste.

IMPORTANCE

Vehicles and used oil have a major environmental impact across Europe.

SOLUTION

EU laws support recycling, reuse, and sustainable vehicle design.

Used Motor Oil

Used motor oil is hazardous if disposed incorrectly

ILLEGAL DISPOSAL

Harms the environment

River pollution
Harms aquatic life

Soil contamination
Damages ecosystems

CIRCULAR OIL SYSTEM

Protects resources and creates value

- COLLECTION**
Used oil is collected separately and safely
- REGENERATION**
Oil is cleaned and regenerated to high standards
- REUSE**
Regenerated oil is turned into new lubricants

How Can You Support Circular Mobility?

Small actions today lead to a more sustainable tomorrow.

a Dispose used oil safely

More information

b Recycle batteries correctly

More information

c Repair instead of replacing

More information

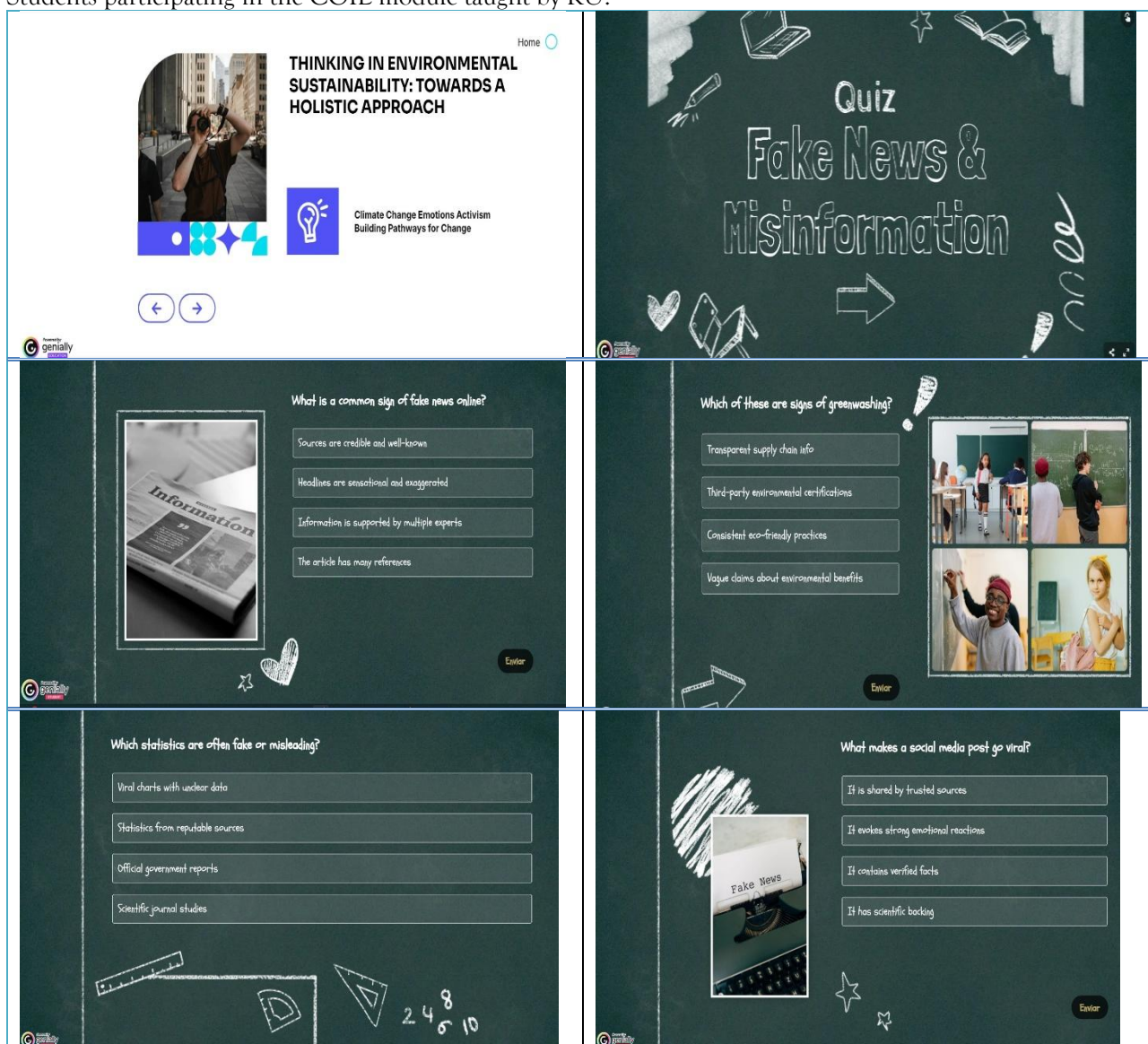
d Support circular products

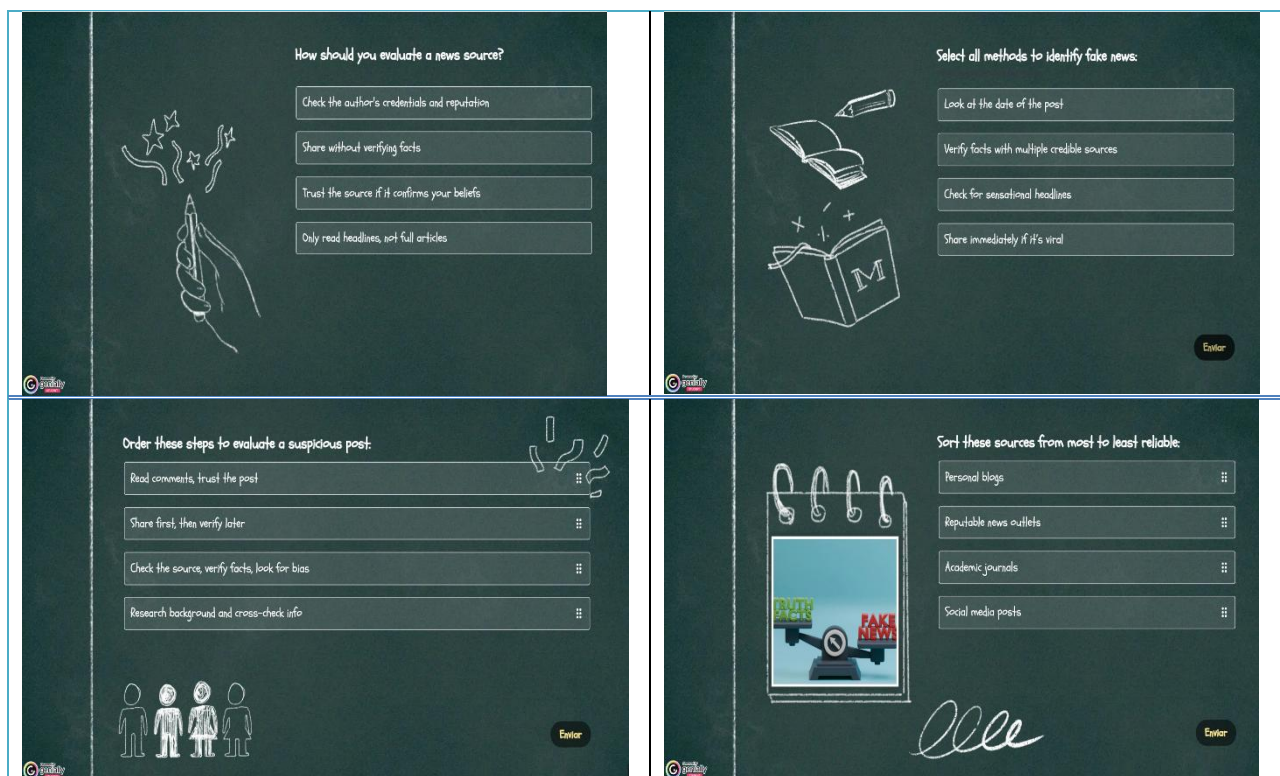
More information

9.1.4. Klaipeda University (Lithuania)

The COIL teaching materials (available on the Genially platform) were created in collaboration with students from the universities participating in the ELCRA project, focusing on critical thinking and the principles of social sustainability (module, “Critical Thinking for Environmental Sustainability”). The topic “Fake News and Disinformation” was chosen by majority consensus.

Figure 6:
Students participating in the COIL module taught by KU.





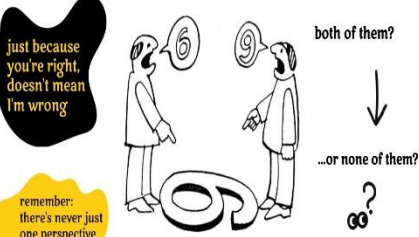
9.1.5. University of Siena (Italy)

With the development of the module, "Prevention of radicalization in environmental activism", the University of Siena investigates the processes of radicalization in environmental activism and explores educational strategies for prevention and inclusive participation.

Figure 7:

Work of students participating in the COIL module taught by UNISI.



The target • children of age 9-12 • primary school/middle school • preteens • prone to graphical messages • "sponge" target • still attracted by strong visual, friendly images (ie comic books, animals, funny phrases) • approachable distribution amongst schools and neighbourhood clubs	Rules of respectful discussion 1- Listen carefully (and without interrupting) 2-Speak with respect 3-Keep an open mind 4-Seek common ground 5-You always do it 
Not everything is black or white When we talk about problems, people sometimes think there are only two sides: right or wrong. Could be gray But many situations are more complex. There can be different opinions, feelings, and solutions! Respect is the key! Listening to different perspectives helps us understand better. 	WHO IS RIGHT?! just because you're right, doesn't mean I'm wrong both of them? ...or none of them? remember: there's never just one perspective WHAT DO YOU THINK? 
TRUTH IS LIKE A ZEBRA ?! YES buddy, you've heard right! there's always a little bit of white..... and a little bit of black 	play FAIR. think for YOURSELF. build a TEAM. the team is only strong TOGETHER no hate. no violence. choose RESPECT you're only as strong as your TEAM 
Feel free to ask any questions! Thank you very much! Domenica Guglietti Antonio Spada Gonzalez Weronika Kucharska 	SPOT THE SIGNS Preventing Radicalization in Environmental Activism Hello, I'm David! Join me on this journey to learn how to recognize manipulation, think critically, and turn anger into peaceful action. Are you ready? An interactive learning journey on critical thinking, non-violent activism, and democratic action. START 

LET'S PLAY!

To succeed, you'll need to master these four areas

- What is Radicalisation?
- Critical thinking
- Understanding/learning non-violent activism
- Turning Anger into democratic action

Roll the dice to go forward on the board. You must reach the final tile to go to the next level!

LEVEL 1
What is radicalization?

Let's start with the basics. Level 1 will show you the basic concepts of radicalization and its prevention. I'm sure you will do great!

Level 1: What is radicalization?

I had no doubt you would pass the first level! Let's see how you do with the next one! Let's practice critical thinking together!

Let's go!

Level 2

Level 2: Critical Thinking

WELL DONE!

Great job! You made it to the end!

CONGRATULATIONS!

You completed all the levels! You used critical thinking, learned about non-violent activism, and turned anger into democratic action.

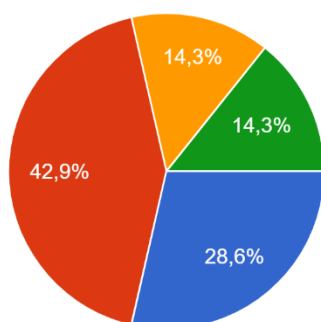
Keep thinking critically and using your voice in a positive way!

9.2 Teachers' perception of the COIL developed

Next, the participation of the teaching staff in the development of COIL is addressed.

COIL Module:

7 respuestas

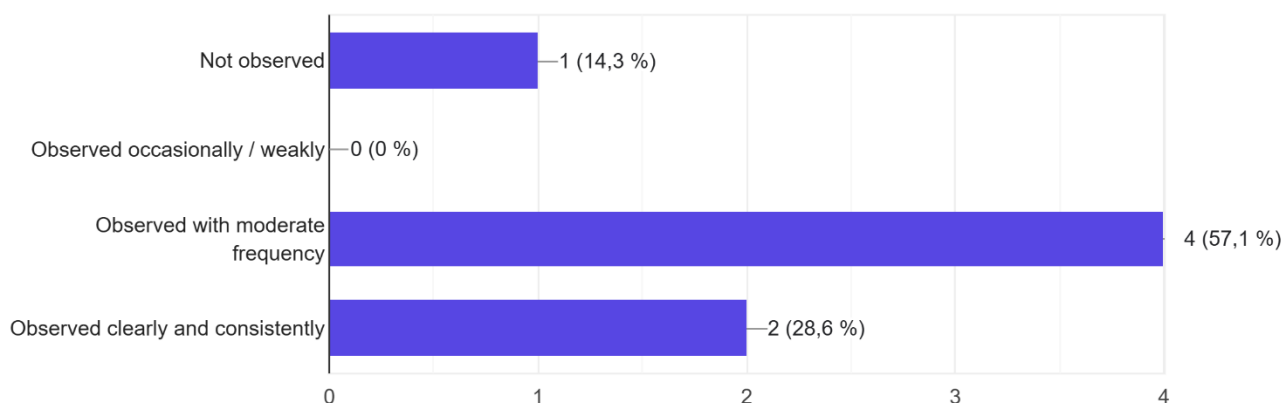


- Environmental Sustainability (Complutense University of Madrid)
- Climate Change Emotions and Activism (Jagiellonian University)
- Legal Tools for Circular Economy (University of Coimbra)
- Critical Thinking for Social Sustainability (Klaipėda University)
- Prevention of Radicalization in Environmental Activism (University of...)

Block A. Working with environmental literacy content

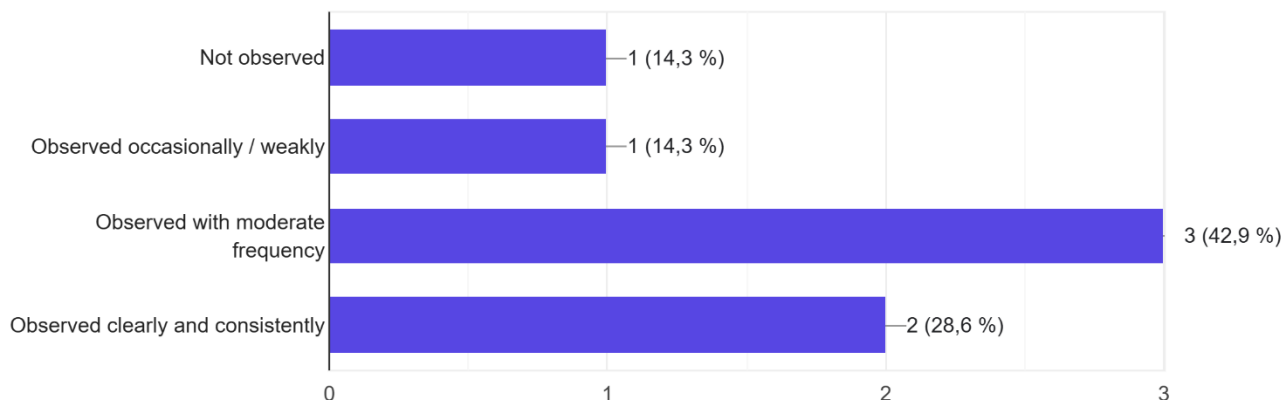
1- Students correctly use basic sustainability concepts (e.g., ecological footprint, sustainable development, biodiversity, SDGs).

7 respuestas



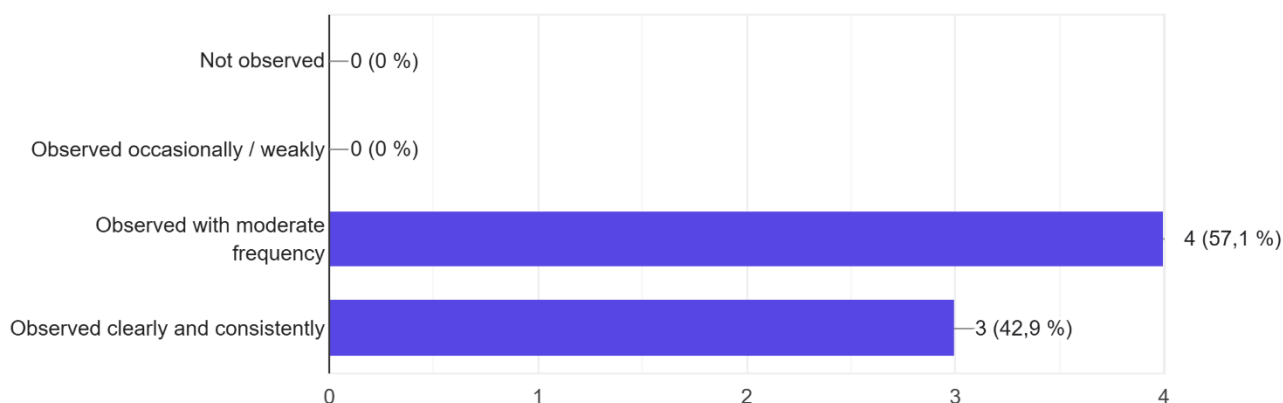
2 - Students ask questions or make comments that show interest in clarifying environmental concepts.

7 respuestas



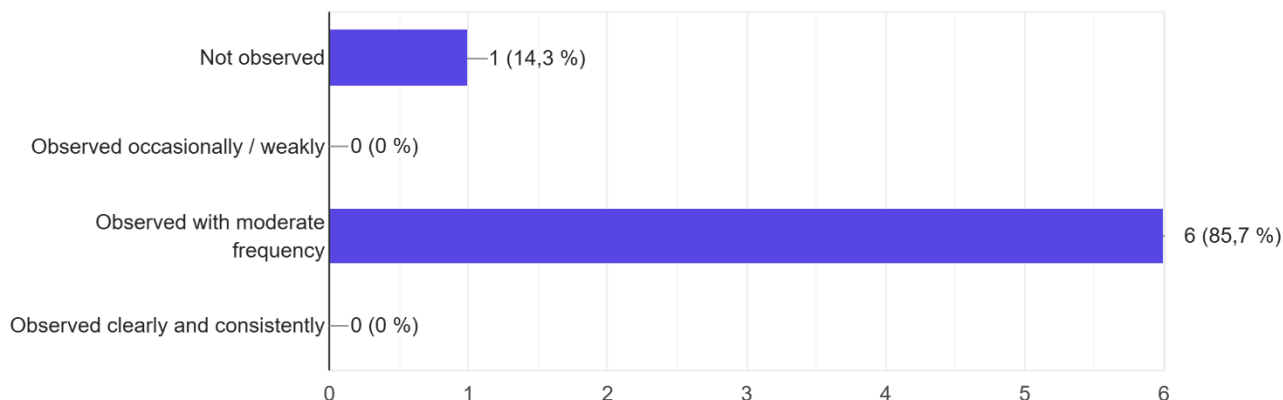
3 - Students connect everyday examples with environmental concepts covered in the course.

7 respuestas



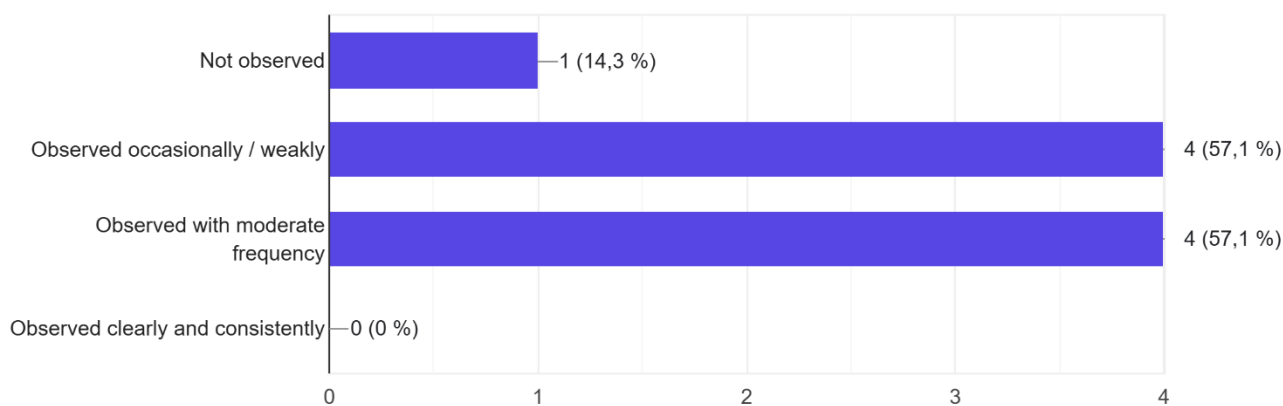
4 - Environmental problems are linked to social and economic dimensions (employment, inequality, health, etc.).

7 respuestas



5 - There are explicit references to environmental justice or to the unequal distribution of environmental impacts.

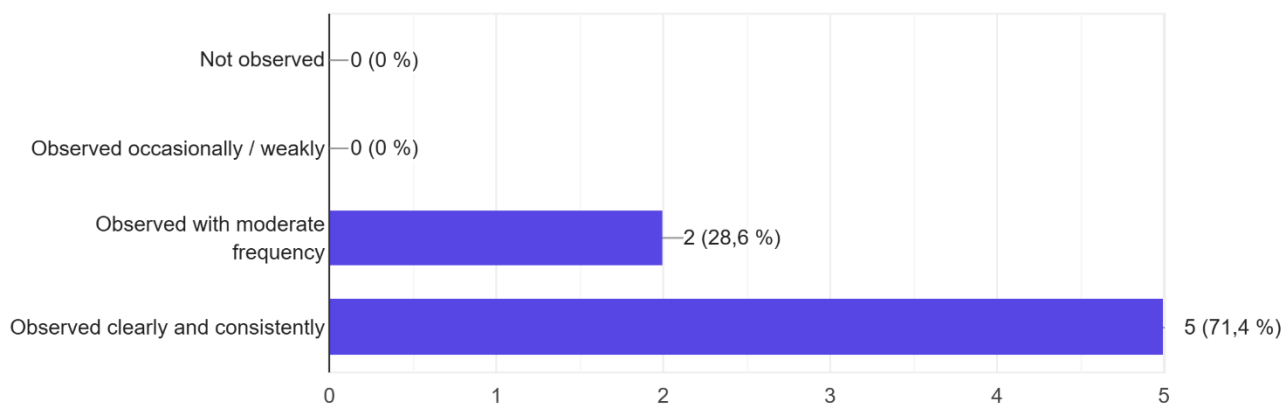
7 respuestas



Block B. Attitudes and values / environmental citizenship

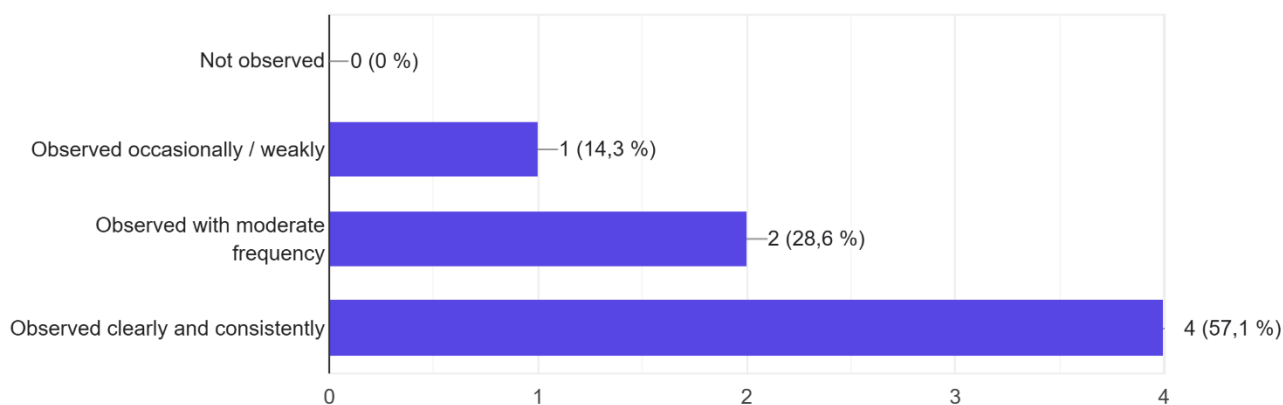
6 - Students show concern about socio-environmental problems (comments, tone, reactions).

7 respuestas



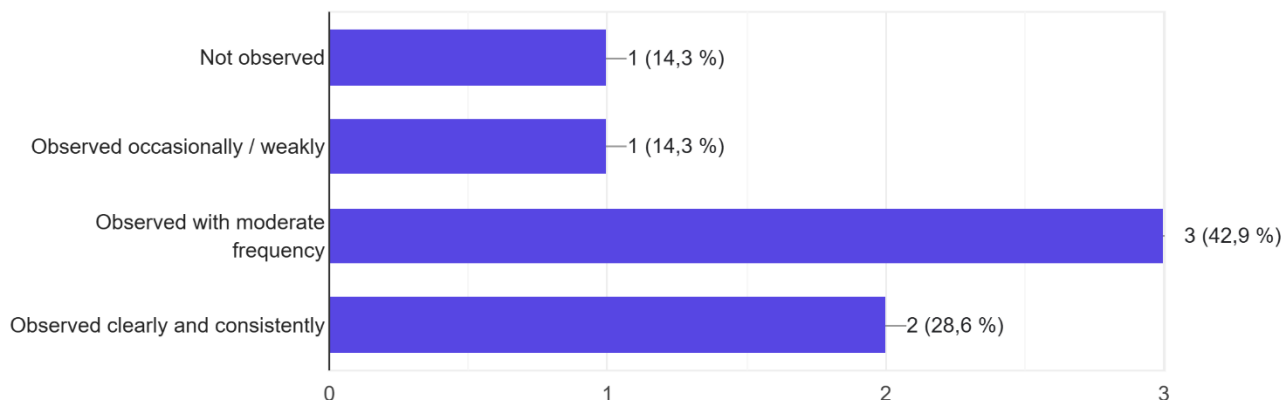
7 - Concrete actions for changing habits or policies are proposed (not just problem diagnosis).

7 respuestas



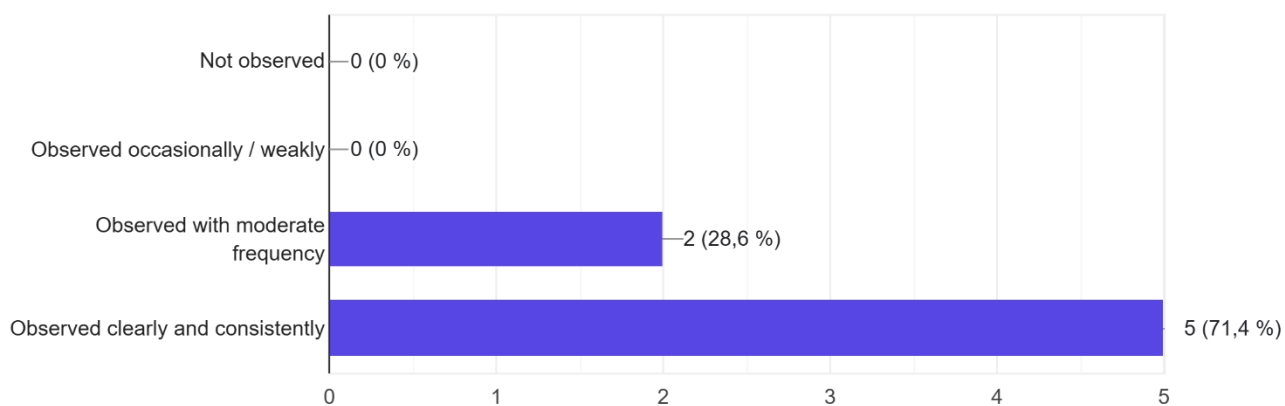
8 - Students acknowledge that environmental impacts affect different groups or territories in different ways.

7 respuestas



9 - Attitudes of openness are observed (curiosity, questions, acknowledgement of mistakes or lack of knowledge).

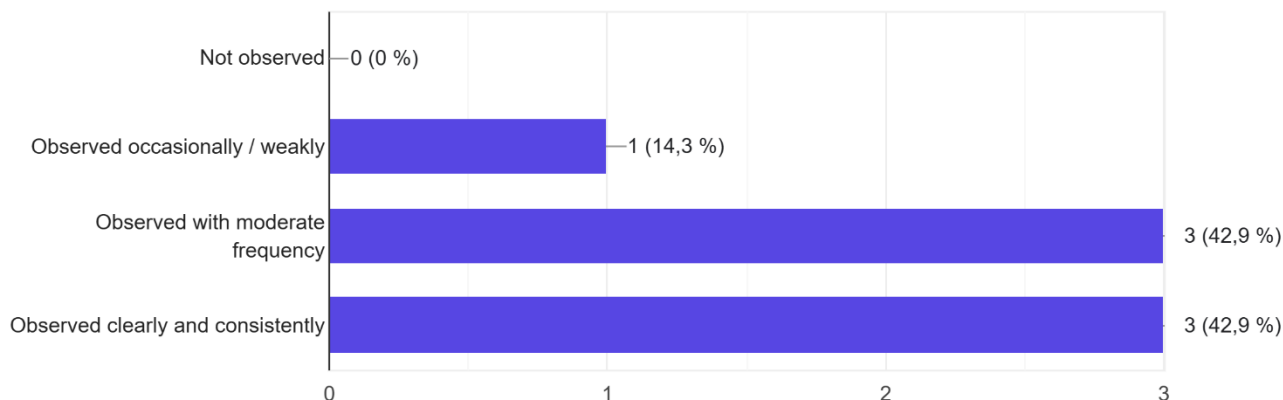
7 respuestas



Block C. Transversal skills (in the context of COIL)

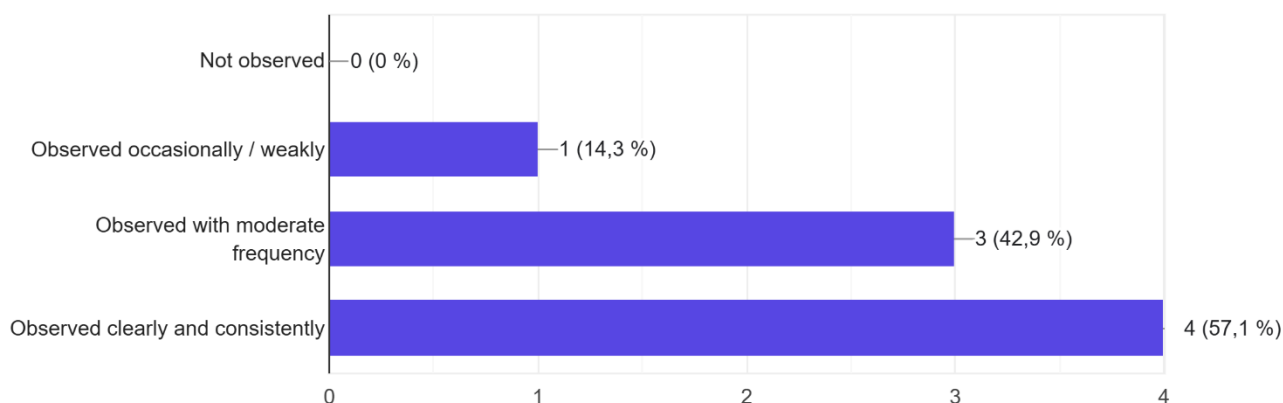
10 - Participation is relatively balanced between students from the different countries (no single national group monopolises discussion).

7 respuestas



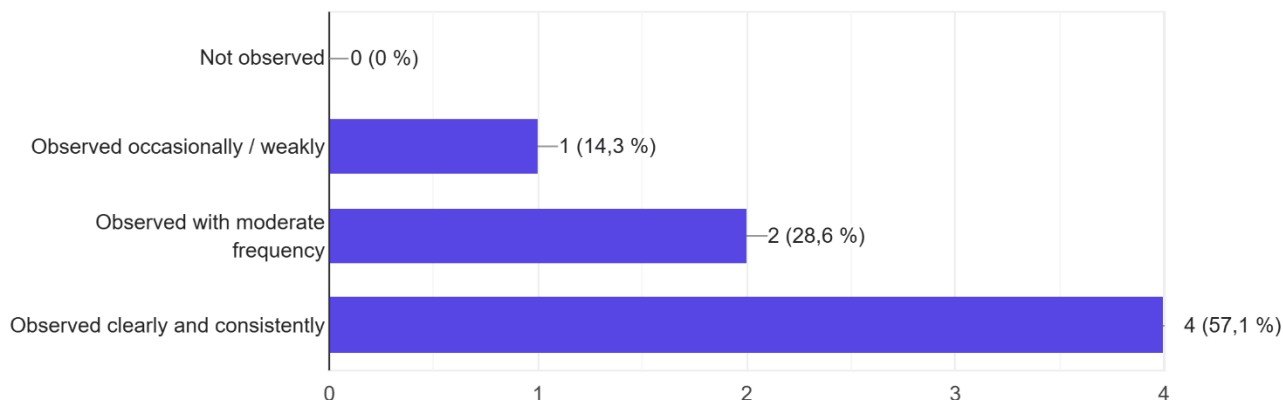
11 - The group structures the task (assigns roles, defines steps, timing, responsibilities).

7 respuestas



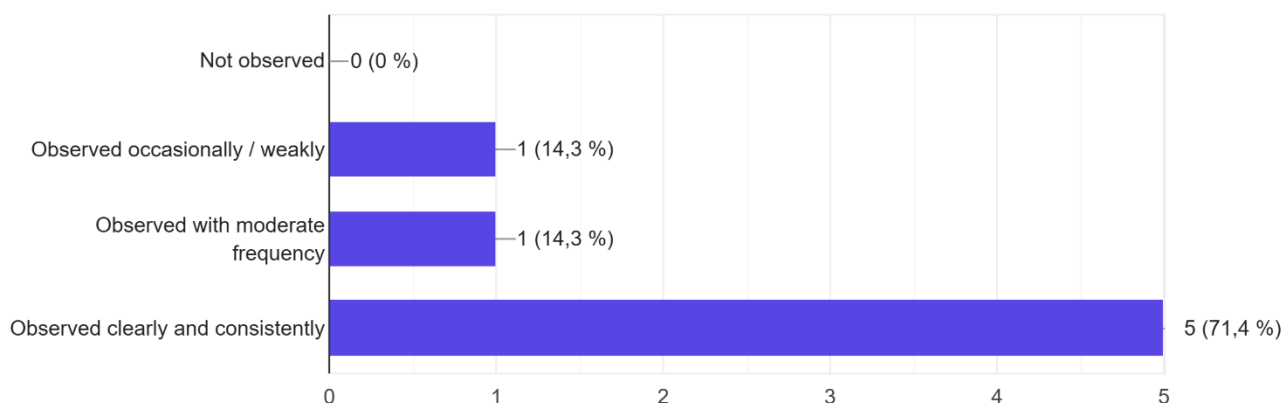
12 - Peer support behaviours are observed (explaining concepts, helping with technology, translating or rephrasing when needed).

7 respuestas



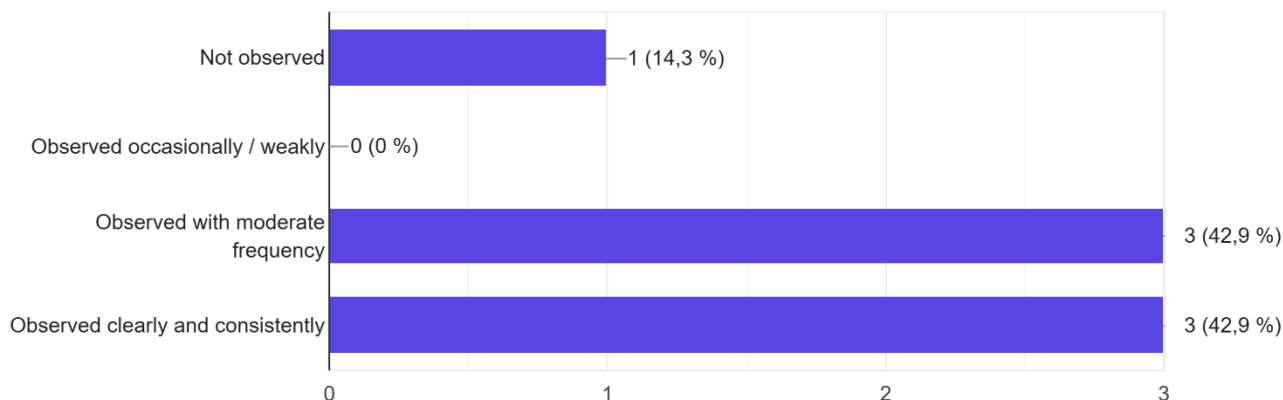
13 - Students address their peers respectfully and clearly.

7 respuestas



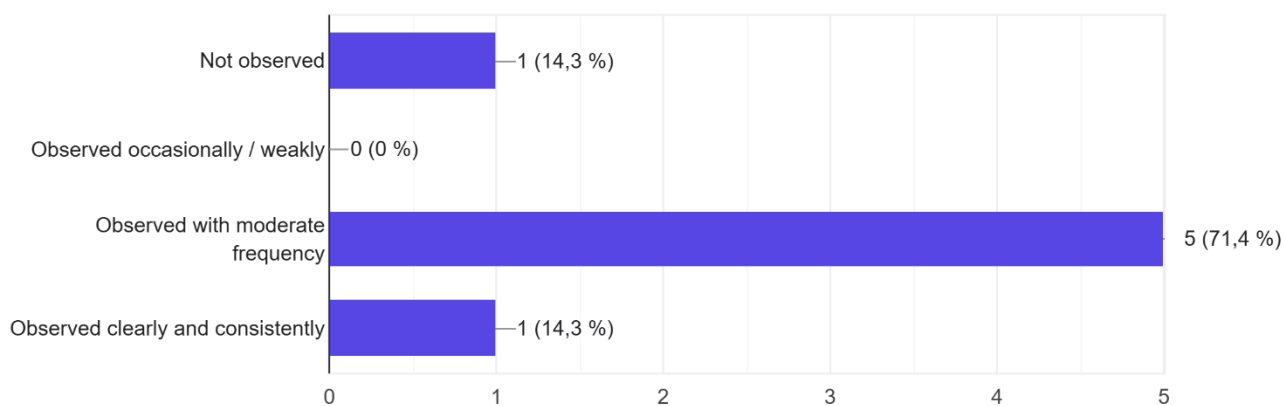
14 - When linguistic or cultural misunderstandings occur, students try to clarify them calmly or with humour rather than ignoring them.

7 respuestas



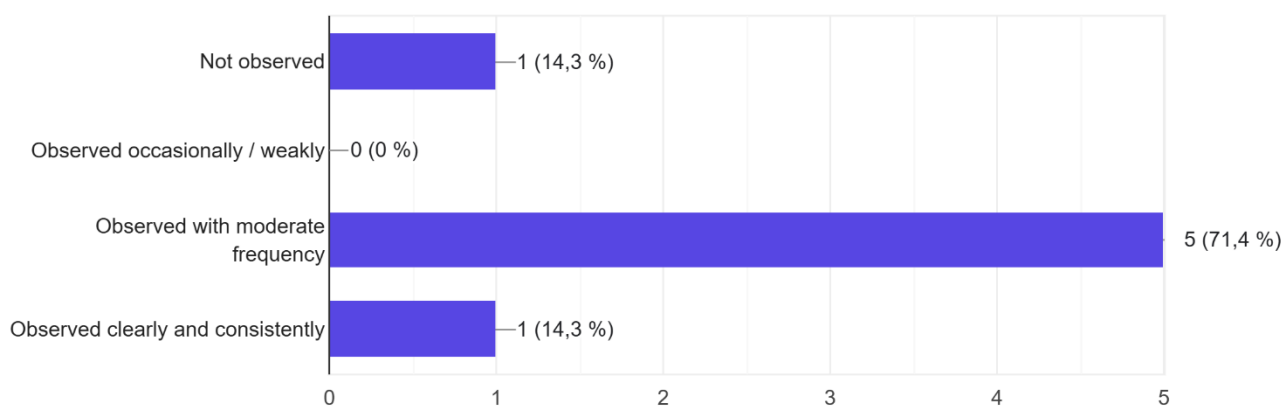
15 - Creative or novel ideas are proposed to tackle environmental problems (not only “recycle more”).

7 respuestas



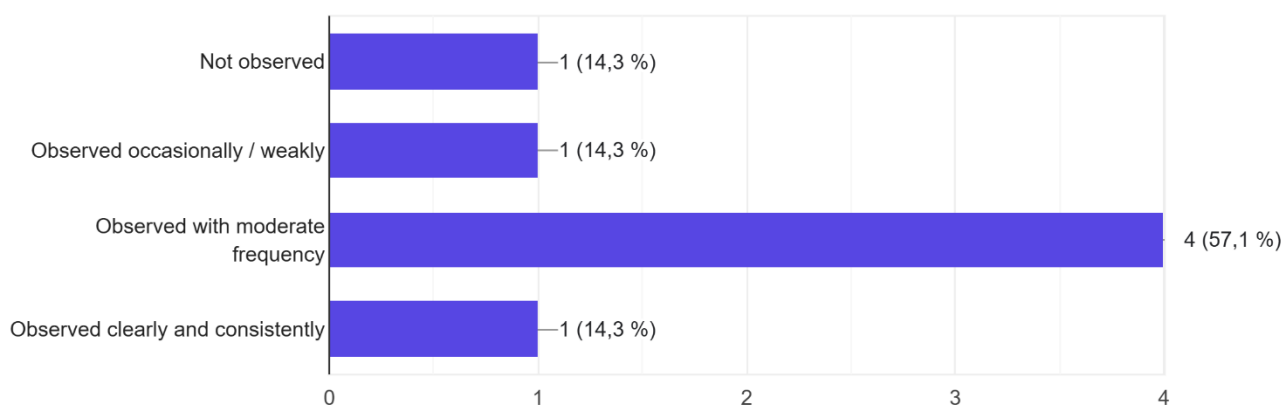
16 - Different possible solutions are compared, weighing up advantages and disadvantages.

7 respuestas



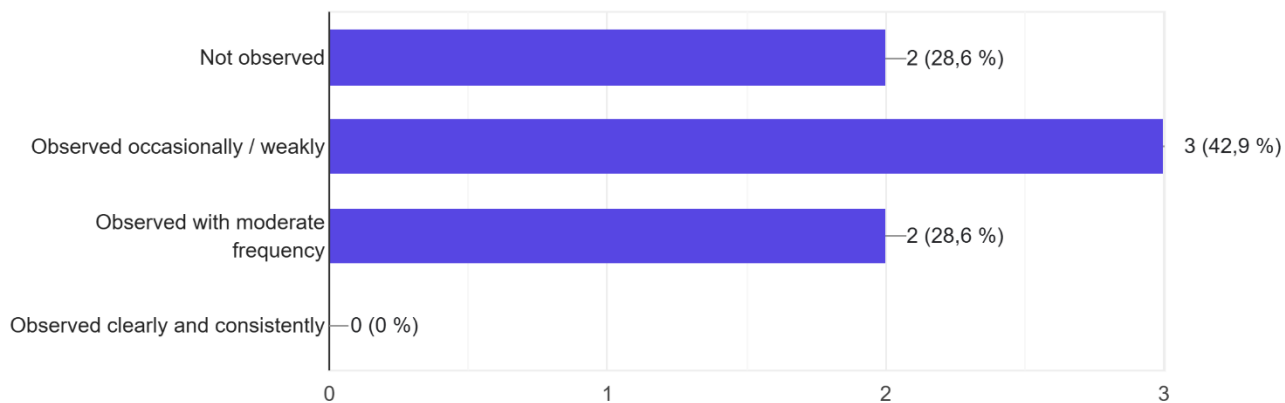
17 - The group shows genuine interest in understanding the reality of the partner country (questions, comments, careful comparisons).

7 respuestas



18 - If a cultural or values-based misunderstanding arises, the group tries to address it (explanation, negotiation, search for common ground).

7 respuestas



10. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The experience carried out with the COIL *"Environmental literacy and collective action in Europe: an international collaborative online learning experience"*, under the coordination of the Complutense University of Madrid and with the participation of the partner universities of the ELCRA project, coordinated by the University of Siena, allows to consolidate a replicable model based on strategic standardization, progressive supervision and orientation to international pedagogical transfer, especially in contexts integrated in international projects, where the collaborative and transferable dimension acquires a strategic role.

The main conclusion regarding the implementation of the COIL within the ELCRA project highlights the need to deepen and promote environmental sustainability through actions that are increasingly demanded globally. Therefore, the implementation of this multilateral COIL demonstrates its potential for developing international and collaborative skills in higher education. Furthermore, the structured planning, continuous coordination mechanisms, and integrated design of the final product using Genially are noteworthy.

The implementation of the COIL project *"Environmental Literacy and Collective Action in Europe: A Collaborative International Online Learning Experience,"* delivered through modules, addressed diverse topics related to environmental sustainability, legal instruments, and prevention, demonstrating that international education in these fields is vital for developing agents of change. This educational model, which fosters deep reflection on the climate crisis, utilized interactive methodologies developed on technological platforms such as Genially, a gamified tool increasingly used in innovative educational contexts.

The conclusions of the collaborative program discussed and agreed upon in the various modules on which this COIL of the ELCRA project is based are:

First. - Communication and Environmental Sustainability: Strategic communication is essential to mobilize society and avoid falling prey to misinformation. An informed, educated, and environmentally literate society will have a positive impact on daily environmental stewardship. The use of infographics and interactive resources from Genially, as a training and communication strategy, becomes a valuable educational tool that helps to debunk myths and develop accurate information, contributing to the analytical thinking of society.

Second. - Preventing the Radicalization of Climate Activism: Climate activism must be channelled through education and dialogue. International collaborative debate allows students to understand systemic change, preventing the climate emergency from leading to extreme or violent actions. The arguments and approach of the prevention module have highlighted the need to continue promoting climate literacy as a strategic formula for future generations of environmental activists.

Third. - Legal Instruments and the Circular Economy: There is a consensus on the need to transition from a linear economy (use and discard) to a circular economy, prioritizing recycling, ecodesign, and compliance with current legal regulations. Promoting this model requires companies and institutions to adopt and develop strategies that make them increasingly sustainable and environmentally responsible.

Fourth. - Managing Emotions Regarding Climate Change: Climate change is a reality and threatens the future of the Earth. Therefore, heightened concern about the climate emergency we are experiencing can lead to psychological disorders such as "eco-anxiety," or emotions that can be transformed into meaningful collective action and climate activism. Thus, addressing "eco-anxiety" through group dynamics transforms anguish and frustration into positive, collaborative, and constructive activism.

Fifth. - Critical Thinking and Environmental Sustainability: Critical thinking is fundamental to environmental sustainability as it allows us to analyze environmental challenges and support and promote sustainable social development. It also enables us to evaluate the real impact of everyday actions, expose greenwashing, and make informed decisions about consumption and environmental policies in accordance with global strategies such as the European Sustainability Competence Framework (Green Comp).

RECOMMENDATIONS FOR FUTURE IMPLEMENTATIONS

- Define a common framework beforehand with minimum objectives and content.
- Standardize the design and use of templates.
- Introduce intermediate validations during development.
- Define a global product architecture from the beginning.
- Aligning the workload between institutions.
- Establish clear project governance.
- Consolidate the integration phase as a structural part.
- Design the final product for its pedagogical reuse.
- Strengthen the intercultural interaction of students.
- Align the evaluation criteria.
- Guarantee mechanisms for the early integration of students.
- Establish strict control of deadlines and continuous monitoring.
- Define clear leadership roles in each module.
- Incorporate activation and participation strategies during the sessions.

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Multilateral COIL Implementation: *“Environmental Literacy and Collective Action in Europe: A Collaborative Online International Learning Experience”*

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FOR PREVENTING RADICALIZATION IN
CLIMATE ACTIVISM

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