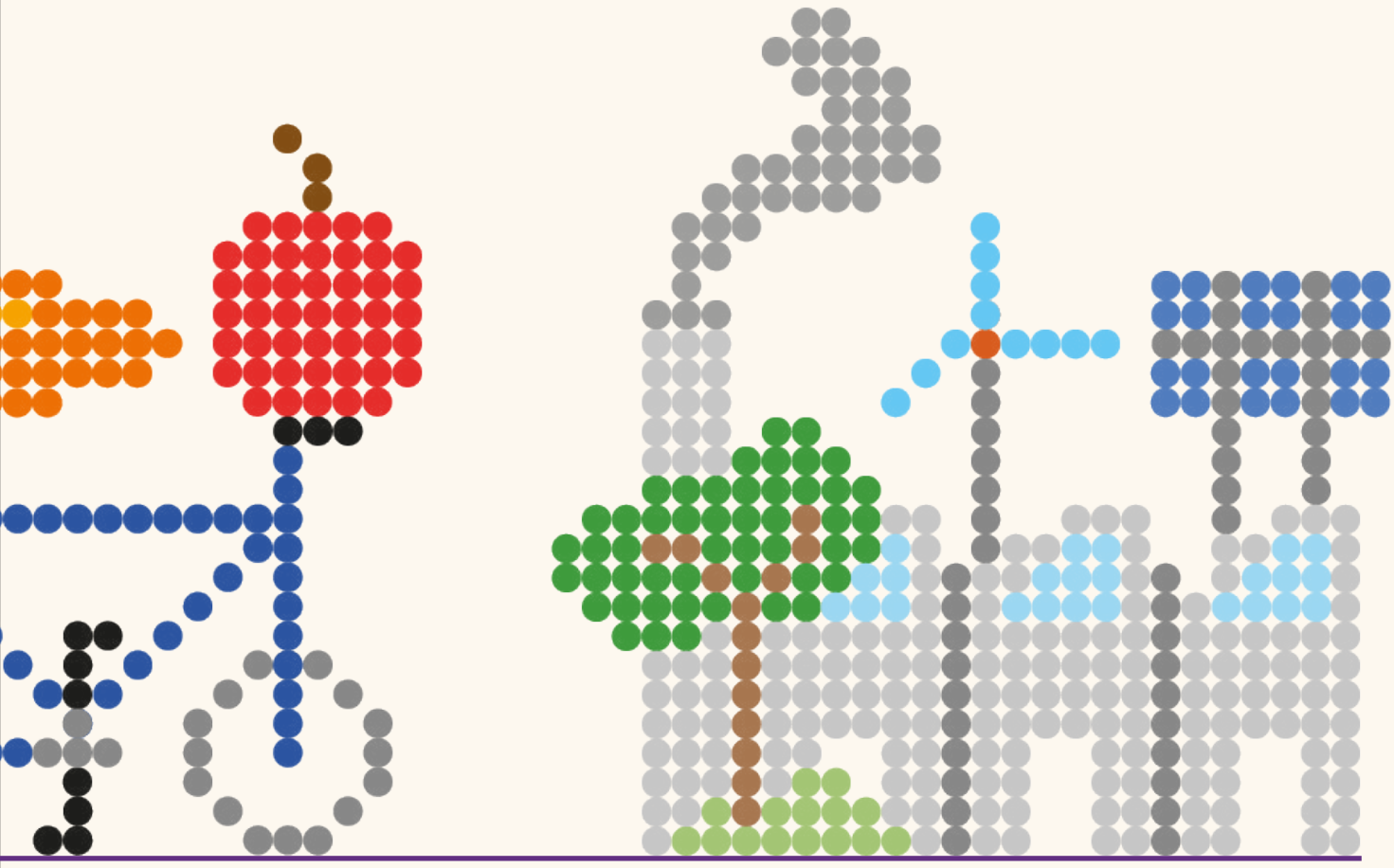
Educational toolkit

Games and Teaching Methods for Climate Education



OIKOS

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Enriching lives, opening minds.

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Project implemented in collaboration with:

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Introduction

The GAME ON project

Climate change is the reality we all face today. Addressing this reality requires awareness, responsibility, and the ability to imagine new solutions. In this scenario, schools can become living laboratories, where students can experiment, envision possible futures, and put concrete actions into practice.

GAME ON focuses on high school students from Italy, Bulgaria, Spain, and Slovenia to develop concrete and effective forms of climate action. We do this by acting on four levels:

In classrooms we use **innovative and participatory teaching methodologies**, including Game-Based Learning. With CLIMATIC, students take part in a role-playing game that allows them to explore global climate policies.

We propose **a training pathway for teachers** designed to innovate environmental education and bring more experiential and participatory approaches to classrooms.

We stimulate **collaboration between students and teachers** to implement concrete sustainability actions: initiatives that improve spaces, change behaviours, and strengthen the role of the school community.

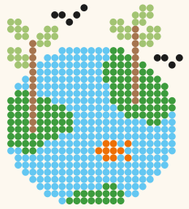
We involve students and teachers in **international exchanges**: a precious opportunity to create alliances, share experiences, and strengthen collective action.

Purpose and structure of the toolkit

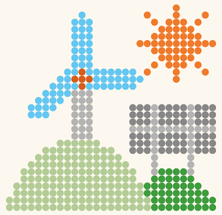
This toolkit is designed to **support teachers in using games as an educational tool**, with a particular focus on sustainability education and tackling the climate crisis. It brings together principles, methodologies, practical tools, and examples adaptable to different subjects and school contexts.

The toolkit is organized into three parts:

1
The importance of play
introduces the main pedagogical foundations of play, presents the key characteristics of **Gamification and Game-Based Learning**, and offers tools for designing and implementing gamified educational activities.



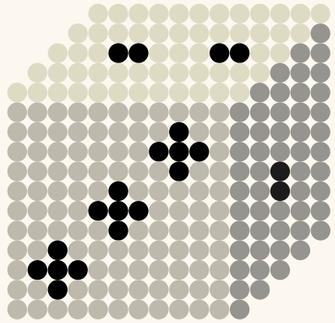
2
Climate crisis and environmental education
focuses on the relationship between education and climate change, providing ready-to-use resources for the classroom.



3
CLIMATIC
provides an overview of the game's educational objectives, examples of interdisciplinary pathways, and a practical guide to debriefing.

In addition to the three main sections, you will find two theoretical appendices that explore the references provided within the toolkit in depth.

1
The importance of play



Pedagogical foundations

Play accompanies human beings from childhood to adulthood and provides a way for children and young people to explore the world, interact with others, and test their skills.
Today, thanks to numerous *game studies*, it is also widely recognized as an effective tool for supporting learning and the development of cognitive, emotional, and social skills.

In educational contexts, the gaming experience can help the student to:

- strengthen their **communication skills**;
- increase their motivation;
- reduce the fear of making mistakes;
- develop cognitive flexibility, resilience, and adaptability;
- become aware of rules, learn how to use them and understand their purpose;
- develop the ability to **manage and control their emotions**;
- learn to plan and create projects;
- learn to **relate to others** and establish active, constructive, and meaningful relationships;
- **develop** their **creativity**.

According to the *Theory of Gamified Learning developed* by Richard N. Landers (2014), playful elements can influence learning in two ways:

1 **Through a moderating mechanism.**
Game elements stimulate a behaviour or attitude (e.g., motivation or engagement) that strengthens the relationship between the quality of instruction and the final outcome. For example, adding narrative elements to a lesson can make it more engaging and allow the student to better internalize the contents.

2 **Through a mediating mechanism.**
The teacher, by using playful elements, encourages a behaviour or attitude (e.g., the time dedicated to a task), which in turn directly causes an improvement in learning. For example, the use of badges can motivate students to complete more practice tests; it is the completion of the tests (behaviour), not the badge itself, that generates learning.

At the core of both processes, however, is quality education.
Gamification does not replace teaching; if the original educational material is ineffective, adding game elements will not produce learning.

Gamification and GBL: differences, key elements, potential, and limits

Gamification and Game-Based Learning (GBL) are approaches capable of transforming learning from a passive process into an immersive experience, stimulating the acquisition of knowledge and the development of transversal skills (*soft skills*) such as: critical thinking, systemic *problem-solving*, negotiation, and collaboration.

How do they differ?
The table below summarizes the **main characteristics of the two approaches** and the aspects to consider before using them in teaching practice.

	Gamification	Game-Based Learning (GBL)
Definition	It consists of introducing typical game elements (*points, badges, levels, missions*, etc.) into non-gaming contexts, such as school lessons.	It is a learning strategy that involves the use of complete and structured games (digital or analogue, defined as *serious games*) specifically designed to achieve educational goals.
Type of learning	**Indirect:** game mechanics influence learner behaviours or attitudes (e.g., motivation, time-on-task), which subsequently enhance learning outcomes.	**Direct**: the player learns through experience, interaction, and experimentation. The educational objectives are intrinsic to the game mechanics.
When can you use it?	• To foster **short-term engagement.** It can stimulate students to quickly complete a task, meet deadlines, or participate actively in lessons. • When the initial teaching materials are already valid and structured, but **students struggle to maintain concentration** or perceive them as boring. • To support lessons focused on repetition, **memorization**, or execution speed. Instant feedback and extrinsic rewards stimulate the student's consistency in performing the exercise.	• **To facilitate the understanding of complex concepts and systems.** When educational goals require studying systems characterized by non-linear interconnections and cause-effect relationships, the game allows simulating realistic scenarios, translating complex data into a visual and tangible experience. • **To drive intrinsic motivation and foster deep, sustained engagement.** The pleasure of discovery and decision-making autonomy generate authentic and lasting participation. • **To reduce anxiety and encourage learning from mistakes.** Immersion in the game removes external pressure and encourages the exploration of alternative solutions.
What you need to know before starting	You must have a clear overview of the **available *game design* elements** (points, badges, leaderboards, missions, levels, etc.) and how they influence learning.	To use or design an educational game, you need to know the **most common game mechanics relevant to your learning objectives** (Appendix A).
What should you pay attention to?	• **Superficial design.** It is not enough to add game elements to content perceived as boring. The activity must be structured by integrating game dynamics with educational objectives. • **Access to technology.** Students from disadvantaged socio-economic backgrounds may not have access to the necessary devices.	• Developing or acquiring valid *serious games* can require significant investments in terms of **budget, infrastructure, and time.** • Logistical barriers. The integration of GBL into standard teaching is often hindered by **rigid curricula and school schedules not well-suited** to prolonged gaming sessions. • **Need for facilitation and a debriefing phase.** Without them, the experience risks becoming just an entertainment moment.

Play at school: when to use it and how to integrate it into teaching

More and more educators and teachers are using Gamification and GBL as part of their teaching strategy. To achieve concrete results, however, it is necessary to start with **effective planning**.

Based on the models proposed by Silvia Fioretti in "*Il Valore Educativo del Gioco*", and by Huang and Soman (2013) in "*A Practitioner's Guide To Gamification Of Education*" – both explored in depth in Appendix A – we have prepared a **sheet that will support you specifically during the planning phase**.

For each of the 5 steps into which the sheet is divided, you will find guiding questions and checklists that will help you build a pathway tailored to your students' needs.

CLICK HERE TO DOWNLOAD THE COMPLETE PLANNING SHEET

STEP 1
Target group and context analysis

It will help you focus on the characteristics of the class and identify possible logistical limits of the activity. Through the analysis of the target and context, critical points may emerge that you may need to address along the way.

STEP 2
Define learning objectives

Defining clear goals will help you structure a pedagogically sound activity, and at the end of the pathway, you will be able to verify the effectiveness of the tools and approach used.

STEP 3
Structure the experience

Structuring the experience into phases will allow you to identify specific goals and understand what motivates students to stay engaged throughout the activity.

STEP 4
Choose the tools and apply them!

Depending on the effect you want to have on students' motivation and/or participation, this section will help you find the most appropriate game element.

STEP 5
Define an evaluation system

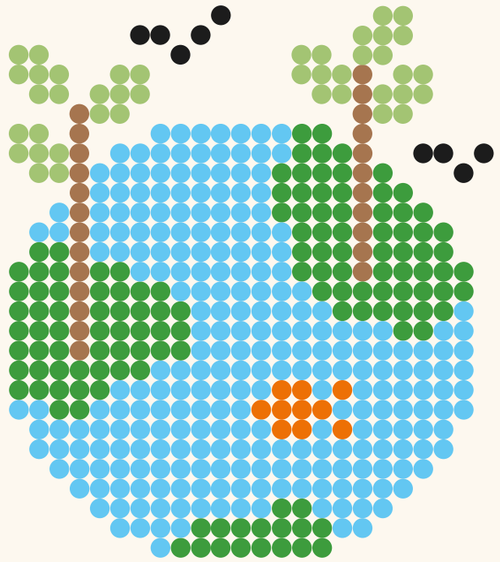
It will allow you to understand if the activity was successful, if students had a positive experience, and what aspects you could improve in the future.

Gamification and GBL at school: digital platforms

To easily integrate game mechanics into standard teaching, you can use platforms and tools available online for free:

Platforms	What it does	When to use it	Preparation time
ClassCraft	Transforms the class into an adventure: each student creates a character and plays as part of a team, earning experience points based on their behavior and academic performance.	To motivate the class over a long journey (weeks/ months), not on a single lesson.	Medium-high (to be set up at the beginning of the path)
Socrative	Quizzes, polls, and instant feedback to test students' knowledge.	To engage the class, verify knowledge and/or understanding of concepts.	Medium-low
Genially	Flipcards, timed challenges, memory, interactive presentations, quizzes, and digital escape games; it also includes a short course on gamification and GBL.	To stimulate participation and test knowledge (quizzes, flipcards). To develop collaboration, problem-solving, and critical thinking (escape games).	Medium-high
Canva	Interactive presentations and quizzes to test students' knowledge in class.	To assess prior knowledge, get immediate feedback, reinforce key concepts, and stimulate participation.	Medium
Kahoot	Quizzes can be created from scratch or adapted from ready-made templates and resources in the "Learn" section.	In teams, to stimulate cohesion and collaboration among students.	Medium-low
Blooket	Quizzes integrated into game modes (Gold Quest, Tower Defense, Racing, Café).	To engage the class, verify knowledge and/or understanding of concepts.	Medium-low
Educaplay	Various mini-games: crosswords, puzzles, quizzes, find the pair, memory.	To test knowledge and, depending on the minigame, to enhance visual memory, processing speed, and problem-solving skills.	Medium-low

2
Climate crisis and environmental education



Environmental education in European curricula

The climate crisis certainly concerns the ongoing ecological crisis, but it profoundly affects the way we live, produce and consume, use resources and build the future of our communities. Its effects impact ecosystems and biodiversity, but also health, safety, the economy, and the quality of life. Educating about the climate crisis therefore means going beyond the simple transmission of scientific knowledge: it means providing students with the tools to understand the relationships between environment and society, critically interpret data and information, recognize causes and consequences, and, above all, imagine possible solutions.

It is from this perspective that environmental education meets **Education for Sustainable Development** and **Global Citizenship Education**. The goal is not just to train "informed" students, but citizens capable of navigating complexity and making informed and responsible decisions. The fundamental shift is therefore moving from acquiring knowledge to developing deep understanding, and ultimately fostering **action competence**.

An internationally recognized commitment

The role of education in the transition towards more sustainable societies is now recognized by major international agreements. The **2030 Agenda** explicitly recalls it in Goal 4[1] dedicated to education, and **UNESCO** follows the same line, proposing in its 2024 ***Greening Curriculum Guidance: Teaching and Learning for Climate Action*** to integrate climate change into educational pathways at all levels, from early childhood to lifelong learning.

According to UNESCO, an effective educational pathway should work simultaneously on four dimensions:

- **Knowledge and critical thinking**, to understand how the climate system works, what causes the crisis, and what consequences it produces;
- **Socio-emotional skills**, to confront different points of view, collaborate, and manage emotions such as fear, anger, or a sense of helplessness;
- **Ability to imagine the future**, building and comparing different scenarios and understanding that the future is not already written;
- **Student agency and action**, to transform what is learned into participation and concrete individual and collective initiatives.

1. In particular, Target 4.7 highlights the need to provide everyone with the knowledge and skills needed to promote sustainable development, responsible lifestyles, human rights, and global citizenship. Target 13.3, which focuses on climate action, also assigns a central role to education and awareness-raising in strengthening capacities for climate change mitigation, adaptation, and response to climate impacts.

These skills must naturally be developed in a progressive and age-appropriate manner. Climate, biodiversity, water, energy, consumption, climate justice, and community resilience thus become topics to explore not within a single discipline, but through **connections between science, geography, mathematics, technology, economics, history, languages, and civic education**, as well as through concrete activation actions by the school itself.

To translate these principles into concrete skills, the European Commission developed **GreenComp, the European sustainability competence framework**: a useful compass for teachers and educational designers to build pathways capable of integrating knowledge, skills, values, and attitudes.

To delve deeper into the European perspective on environmental and climate education, read **Appendix B** of the Toolkit.

Why play is an effective tool to talk about the climate crisis

Students must learn to **recognize their own possibilities for action without losing sight of the collective and systemic dimension of change.** Environmental challenges do not have a single solution: they involve different interests, limited resources, long-term consequences, and choices that must be negotiated.
This is where "play" can become a particularly effective educational tool: it allows transforming complex problems into concrete situations, experiencing different points of view, making decisions, and observing their consequences. In this way, students can move from understanding a problem to directly confronting the choices it entails.

This perspective is consistent with the ***Bicycle Model*** by Cantell et al. (2019), which describes climate education as a system of **interdependent dimensions.** Like a bicycle, knowledge and thinking skills must be accompanied by values, emotions, motivation, participation, future orientation, and the possibility to act.

Gamification and Game-Based Learning (GBL) can help activate many of these dimensions, but their effectiveness depends on the quality of instructional design. It is therefore important to accompany the experience with moments of preparation and debriefing, which allow connecting what was experienced during the game to scientific concepts, real problems, and possibilities for individual and collective action. Placed in a structured educational pathway, the game thus becomes **more than a strategy to increase engagement**: it can integrate knowledge, critical thinking, emotions, motivation, and participation, helping to train students capable of understanding the challenges of the ecological transition and actively participating in their transformation.

To learn more about the Bicycle Model, CLICK ON THE IMAGE and access the interactive resource.



Games and climate: available educational resources

Developing serious games from scratch can be costly and complex. To facilitate the use of GBL in the classroom, in the following table we have collected some free games on climate change that you can include within structured educational pathways.

Game	Language	Suitable for	Brief description of the game
Climate Clicker	English	Primary school	To save the planet you have to click as fast as possible. Thanks to the clicks you will earn money that will allow you to buy new technologies, which will enable you to reduce emissions and collect more money.
Climate Adaptation Game	English, Swedish	Middle and high schools	You play the role of a climate adaptation coordinator. The climate crisis pushes the city council to implement adaptation strategies. Based on the available resources, you will have to choose which solutions to adopt.
Climate Action Simulation Game	35 languages available	High schools	Players are divided into teams representing 6-8 key stakeholder groups (governments, lawyers, industry leaders, etc.). The goal is to develop a strategy to limit global warming using the En-Roads simulator.
European Climate Pact Games	English	All school levels	Collection of free games. For each resource, you will find: a brief description of the activity, the materials needed to carry it out, information on group size, participants' age, activity duration, and the most suitable location (indoor/outdoor).
EUcraft	Available in all European languages	High schools	Become a minister of an EU country and discover how the decision-making process works by participating in negotiations on a topic that interests you. Reaching an agreement on a universal charger for all devices, banning single-use plastics, or supporting the transition to electric cars and greener buildings: it's all in your hands.
2050 - It's up to you	Available in all European languages	Middle and high schools	Will you have a healthy future? To find out, choose your avatar and start the journey through a typical day. Choose what to eat for breakfast, how to get to work, how to spend your free time, and where to shop. Many factors will shape our lifestyle in 2050. The choices you make today could shape the world of tomorrow in ways that might surprise you!
ClimarisQ	Italian, English, Spanish, French	Secondary schools	The goal of the game is to explore the effects of mitigation and adaptation choices on extreme weather events at local, regional, and global levels. You will make decisions that will impact the economy, politics, and the environment. You will face unexpected situations due to the occurrence of extreme events generated by a real climate model, and you will have to try to balance, with your choices, the indicators of "popularity", "ecology", and "finance" for as long as possible to stay in the game.
Our Climate Story	Italian, English, Catalan, Dutch, French, Arabic	Middle and high schools	The main objective of the game is to design together a strategy to reduce temperatures and effectively decrease vulnerability to extreme weather events. During the game, players can pool their resources to fund adaptation measures shared by all.
Clima sin Filtro	Spanish	Secondary schools	A gamified methodological pathway combining environmental education, media literacy, critical thinking, civic engagement, and evidence-based learning.

Examples of teaching methodologies to address CC in the classroom

GBL and gamification are not the only forms of **playful learning** suitable for addressing the topic of sustainability and climate change in the classroom. Among the most effective participatory playful methodologies in putting students in a position to observe, discuss, choose, and experiment, there is certainly **role-play**.

Role-play: entering complexity through different points of view

In **role-play**, students take on the role of people, groups, or institutions involved in a concrete situation. In climate education, this methodology makes it possible to highlight a fundamental element: faced with the same problem, there can be **very different interests, priorities, responsibilities, and possibilities for action**.

For example, you can simulate a city council called to decide how to adapt the city to heatwaves, an international climate conference, a consultation on the construction of an energy plant, or water management during a drought.

Students can represent public administrations, citizens, local communities, researchers, businesses, or associations. Each role has different information, objectives, resources, and constraints. The task is not simply to "be right," but to **build a decision in a situation where not all needs can be met simultaneously**.

This methodology is particularly useful for working on **systems thinking, negotiation skills, listening, communication, conflict understanding, and active citizenship**. It also allows experiencing an aspect that is often difficult to convey through explanation alone: climate decisions rarely depend on a single entity and almost always require some form of cooperation.

To simplify the use of role-play in the classroom, we have prepared a table summarizing the **6 useful steps** to build and carry out an activity of this type, each accompanied by an example.

Step	What to do	Example
1 Scenario and roles	Choose a real, well-defined, and understandable decision-making problem, possibly linked to the local context. Define roles with different interests, information, and constraints.	A Municipality with limited resources must decide how to reduce flood risk. Possible roles: municipal administration, citizens in the at-risk area, environmental association, local business, hydraulic engineer, regional representative.
2 Options on the table	Prepare a sheet for each role (structured role-play) and list concrete options to negotiate among, each with different costs/benefits and based on real scientific data. Each student will try to get into character (*warm-up*) by adding details to their role sheet.	The Municipality evaluates different strategies: strengthening levees, restoring wetlands and natural river expansion zones, warning systems, and relocation interventions for the most exposed structures. Each option has different costs, timelines, and impacts.
3 Rules and time	Establish how much time groups have to prepare and how much time they have for the actual role-play.	For example, 20 min of group preparation, 30 min of simulated city council, 5 min for the final resolution.
4 Briefing	Explain the dynamics of the representation, provide guidelines on playing the role and scene development.	The teacher presents the scenario and assigns roles. Each group reads their sheet and identifies priorities, interests, possible allies, and room for negotiation. Before starting, everyone clarifies any doubts about the scenario or rules.
5 Role-play	Observe, support participation, help clarify any doubts, and ensure that everyone has an opportunity to participate. Whenever possible, favor cooperative dynamics: the climate crisis is not a race where there must be a single winner.	In the city council, each group presents its priorities. Participants discuss the different strategies, highlight costs and benefits, seek alliances, and can modify their proposals. Halfway through the simulation, the teacher can introduce a new piece of data, for example, a forecast of increased extreme precipitation events, asking the groups to re-evaluate their positions.
6 De-roling and debriefing	Ask participants to evaluate themselves and share any difficulties encountered during the activity. Then prepare questions to guide the debriefing. Try to bring out the obstacles, strengths, emotions, and areas for improvement of the activity.	• What happened? What decisions did we make and what consequences did they produce? • Why did it happen? What interests, constraints, and relationships influenced our choices? • What does it tell us about reality? Which aspects of the game reflect real-world problems? What has been simplified? What could we do in our own context?

Other methodologies to integrate into the pathway

Role-play is naturally not the only useful and available participatory methodology to address the issue of the climate crisis in the classroom.
The choice of the most suitable methodology **depends on the students' age, objectives, time, and available resources**. What matters is to create experiences in which students are not just recipients of information, but can question a problem, discuss with others, make decisions, and understand the consequences of their decisions

For their detailed design, please refer to the Guide to Participatory Teaching Methodologies.

Inquiry-based learning, for example, can start from a question close to the students' reality: *Which areas of our neighborhood are most exposed to heatwaves?* The class collects data, formulates hypotheses, and tries to interpret them.

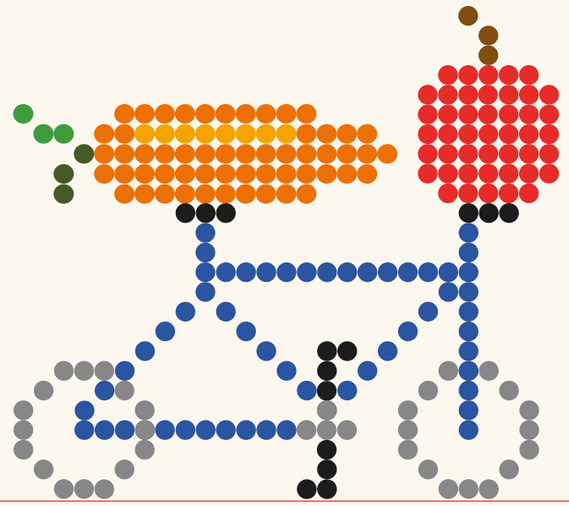
Project-based learning, on the other hand, allows transforming a problem into a concrete project: reducing the school's energy consumption, improving water management, increasing green spaces, or developing proposals for more sustainable mobility.

Through **case studies and problem-based learning**, students can analyse real events – a drought, a flood, a fire – identifying causes, consequences, involved parties, and possible response strategies.

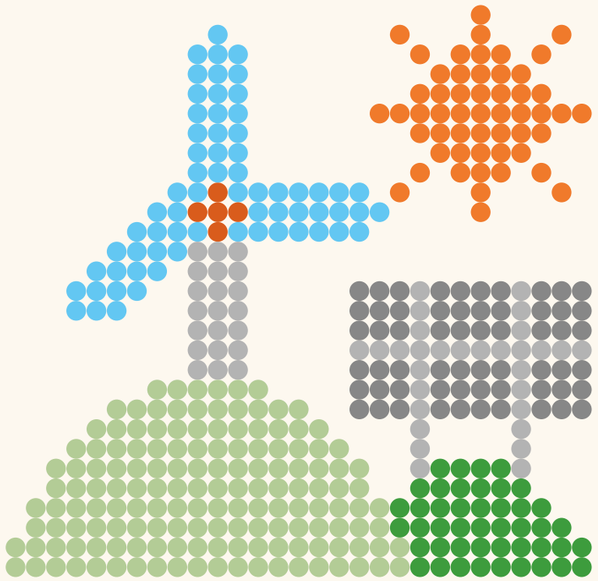
Debate allows working on controversies and the conscious use of sources, while **cooperative learning** focuses on the construction of shared solutions.

With **outdoor education and citizen science**, finally, the territory can become a real laboratory: monitoring temperatures, biodiversity, water, or landscape transformations allows connecting major climate processes to the local dimension.

Storytelling and the construction of future scenarios can also be very effective. Imagining what one's territory might look like in 2050, depending on the decisions made today, helps students understand that different futures exist and that present choices help determine them.



3
CLIMATIC



The game and its educational objectives

Role-play is a methodology that can find particular expression in serious games. **CLIMATIC** is an example: it is a data-driven, role-playing serious game that engages students in a participatory simulation of global climate negotiations. During **three rounds** of play, set in the short (from today to 2035), medium (from 2035 to 2060), and long term (from 2060 to 2100), participants take on the role of citizens from different countries and are called upon to make decisions, negotiate with other players, and face the consequences of their choices. Each citizen has their own personal goals and different possibilities for action depending on their socio-economic circumstances.
Thanks to a **calculator based on models developed by the IPCC**, the choices made by each nation are processed in real time, resulting in changes in GDP, national emissions, and global temperature.

The goal of CLIMATIC is to offer students an experience that allows them to understand the complexity of the climate crisis, experience realistic decision-making processes, and reflect on the dynamics that characterize global climate governance.

Click on the logo to access CLIMATIC

Climatic

What educational objectives does CLIMATIC develop?

CLIMATIC allows working simultaneously on knowledge, skills, and attitudes, in line with the main European frameworks for sustainability education.

Specifically, CLIMATIC helps students to:

Understand the climate crisis

- understand the causes and consequences of climate change;
- explore the functioning of the climate system and the relationships between environment, economy, and society;
- know the main mitigation and adaptation strategies;
- reflect on the principle of common but differentiated responsibilities among countries;
- evaluate the costs, benefits, and limits of different climate policies.

Develop systems thinking

- address complex problems;
- analyse cause-and-effect relationships;
- evaluate alternative scenarios;
- develop future-oriented thinking

Educate for global citizenship	• international cooperation; • negotiation; • conflicts of interest; • inequalities between countries; • meaning of shared responsibility.
Strengthen transversal skills	• effective communication; • active listening; • negotiation; • problem solving; • teamwork; • conflict management.
Promote empowerment and participation	• counter the sense of helplessness; • stimulate active involvement.

How to use the game: the Game Master Guide

CLIMATIC is a completely free game available online in 5 languages: Bulgarian, Italian, English, Slovenian, and Spanish. To gain access to the web app, it is necessary to fill out a request via an online form. Once accepted, you will receive login credentials for the game master (who will moderate the game) and for the players.

Before the game session we recommend:

Reading the *Game Master Guide*:
The guide explains the game rules and provides the basic knowledge needed by those who are less familiar with climate change issues. It also explains the purpose of the different stages of the game and offers practical tips for facilitating sessions, engaging participants, and making the experience more dynamic and engaging.

Downloading and printing the necessary material
CLIMATIC is a *phygital game*, combining a digital interface with physical cards and game boards .

Starting a trial session at home
This way you can get an overview of the slides that will be projected in class and familiarize yourself with the game's structure.

Integrating CLIMATIC into teaching: practical examples of interdisciplinary pathways

CLIMATIC can become a tool to accompany students in understanding the climate crisis through an active, collaborative experience aimed at finding solutions. However, for its educational potential to fully emerge, it is important that it is not proposed as an isolated playful activity as an end in itself, but that it becomes the heart of a **structured educational pathway**.

There is no single way to use CLIMATIC. Depending on the educational objectives you wish to achieve, you can choose to insert it at different moments of the pathway (Figure 1).

Which are your primary objectives?

- Surface prior knowledge and initial ideas
- Spark student curiosity
- Introduce the topic

You can integrate CLIMATIC at the beginning of the learning pathway.

During the simulation:
follow the game's introduction, enhancing it with extra context if needed. Act as a facilitator: encourage students to fully embody their roles, and observe them as they play.

After the simulation:
facilitate a debriefing session. In subsequent lessons, use participatory teaching strategies to gauge student understanding and pinpoint any concepts that need further clarification or deeper exploration.

- Consolidate learning
- Assess the ability to apply theoretical concepts
- Foster active engagement and student advocacy

You can integrate CLIMATIC during the core phases of the learning pathway.

Before the simulation:
Cover the core themes of the game in class.

During the simulation:
Observe without intervening or judging. Assess whether students have understood the concepts and can successfully apply them within the game.

After the simulation:
Center your attention on the students. Use a series of guiding questions to lead the debriefing. This phase is critical to consolidate learning and prevent students from feeling overwhelmed, frustrated, or helpless.

Figure 1: Possible structures of educational pathways in which to insert CLIMATIC

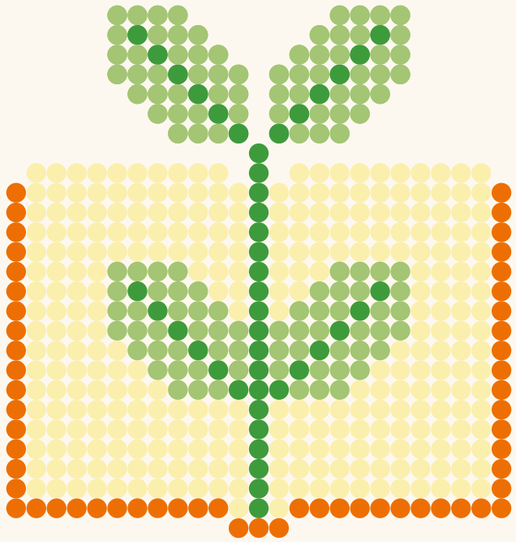
To facilitate the integration of CLIMATIC into standard teaching, we offer **3 examples of short, ready-to-use interdisciplinary pathways** in which to insert the game simulation:

DISCOVER THEM BY CLICKING HERE

How to guide the debriefing phase: consolidating learning and managing eco-anxiety

The gaming experience alone does not necessarily lead to learning. Without an adequate reflection, students may have an enjoyable experience without necessarily developing the intended skills. Debriefing is fundamental precisely because it allows students to reflect on and discuss what happened and make connections to real-world contexts.

In this section, we want to provide you with **an operational protocol** that integrates cognitive, emotional, and practical dimensions. For each dimension, you will find guiding example questions and practical tools to help you effectively conduct the debriefing phase.



Dimension	Guiding Questions	Tools
Cognitive	• What knowledge was most useful to you during the game? Did you learn new concepts? • What happened in the round? What specific decisions led to the final result? • How did your individual or group choices affect the well-being of others? • Which parts of the game reflect the real difficulties encountered when trying to solve a global problem?	To avoid a "shifting of responsibility" during the discussion (e.g. *"it's only the responsibility of politicians"* / *"it's the responsibility of big companies"*), you can create a stakeholder map. Use this schema as a starting point, and enrich it with your class, tracing the connections between roles and between countries.
Emotional	• How did you feel during the different phases of the game? Why? What does this tell us about reality? What can we do? • How did it make you feel to see one of the countries flooded? • How did you handle the conflict between your personal interest and that of the country?	Use the emotion wheel to help your students identify what they felt during the game. Have them reflect on what triggered that emotion and what it might tell us about real-life situations, and what can be actually done.
Practical	• How can we, as individuals and as a school community, have a positive impact? • Are there concrete actions we could implement at school to respond to the climate crisis? • Are there tools/ways through which young people can make their ideas heard? Do you know them?	Use a feasibility matrix to evaluate the impact and ease of implementation of the proposed actions. Use Padlet to create, in collaboration with the class, a bulletin board of activism and participation opportunities dedicated to young people.

Who we are

Istituto Oikos is a non-profit organisation working in Italy and around the world to protect biodiversity and promote more sustainable lifestyles.

For over thirty years, we have supported the most vulnerable communities in protecting soil, water, forests and wildlife, while working to promote well-being and inclusion. We are actively committed to informing and engaging the public through initiatives that highlight the importance of collective action, with the aim of building a fairer and more sustainable society together.

In pursuing this mission, schools play a crucial role. That is why we work every day in Italian classrooms and alongside teachers, offering educational workshops, hands-on training and multidisciplinary learning programmes. We do this to foster a culture of environmental sustainability and share the tools needed to become agents of change.
Our goal: changing the future, one classroom at a time.

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All of Oikos' initiatives for schools are free of charge.
To continue this work and provide educational programmes for students and training for teachers, we need your support too.
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Together, we can achieve even more, and do even better!

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References and Contacts

CLIMATIC

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