



# YIELDS

Developing  
Sustainability Skills  
through Emotional  
Intelligence Practices

**Digital / Serious  
Game Manual**

**Project Number:  
2023-1-EL02-KA220-YOU-000160949**



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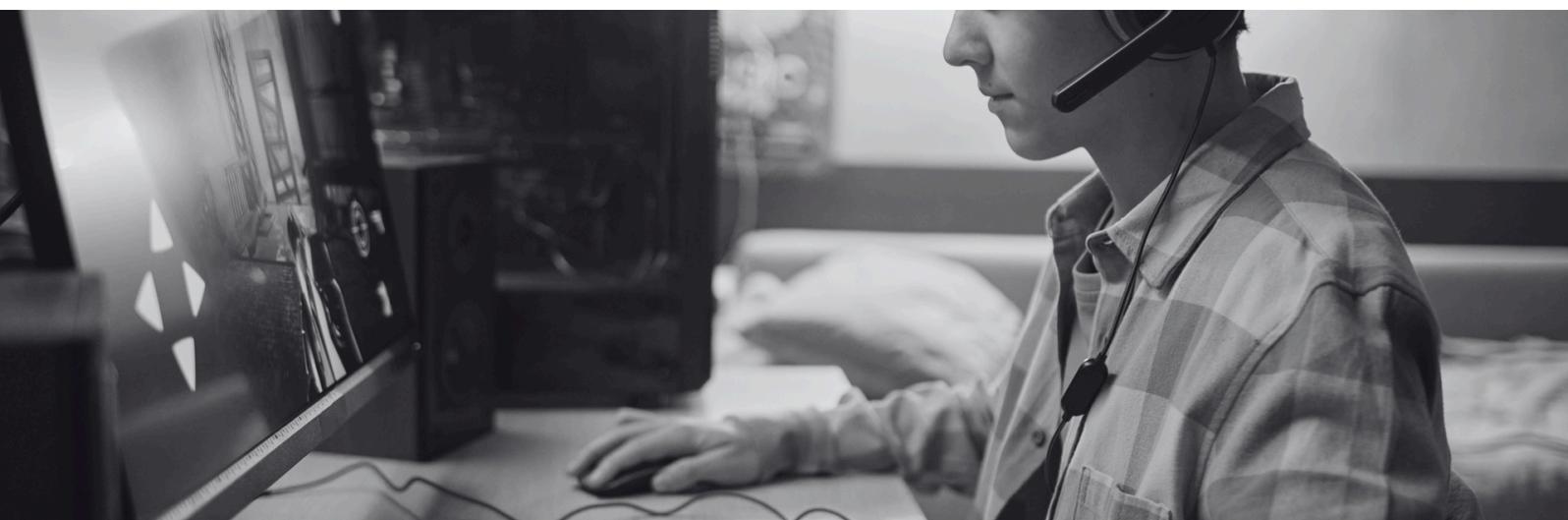


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# Introduction

The YIELDS Digital Serious Game represents an innovative response to the growing need for accessible, engaging tools that educate young people about sustainability, responsible citizenship, and emotional intelligence in the context of global environmental challenges. This digital game integrates the pedagogical principles of experiential learning, gamification, and socio-emotional education to help learners build key competencies for the 21st century. It transforms abstract sustainability concepts into interactive, narrative-based experiences where players must think critically, act responsibly, and connect emotionally with real-world issues.

The YIELDS Digital Serious Game serves a dual function: as a learning platform that enhances understanding of environmental systems and as a reflective tool that encourages empathy, cooperation, and social awareness. The overall aim is to create a holistic educational experience that combines knowledge acquisition, emotional growth, and behavioral transformation.

This manual provides a detailed explanation of the game's educational objectives, structural design, content, and implementation strategies. It is intended for project partners, educators, youth workers, and IT developers who will utilize, adapt, or disseminate the game within the Erasmus+ framework and beyond.



# Educational Framework and Rationale

The YIELDS Digital Serious Game was conceived to align with the strategic priorities of the Erasmus+ Programme and the European Green Deal, focusing on environmental sustainability, digital transformation, and inclusive education. It contributes directly to the European Union's efforts to foster environmental awareness, civic responsibility, and youth participation in the green transition.

- **Pedagogical Philosophy**

The design of the game is rooted in the principles of experiential learning and emotional intelligence development. It emphasizes the process of “learning by doing,” allowing players to interact with meaningful situations that mirror real-life sustainability challenges. Each decision they make requires them to weigh both ecological reasoning and emotional awareness demonstrating that effective action arises when logic and empathy intersect.

The educational purpose of the game is to:

- Enable learners to understand how individual and collective choices affect environmental, social, and economic systems.
- Strengthening emotional and interpersonal competencies, such as empathy, communication, and conflict resolution.
- Motivate youth to participate in sustainable initiatives in their communities.
- Promote critical reflection on the links between personal responsibility, collective well-being, and global citizenship.



- **Learning Approach**

Through its two levels, the game follows a progressive pedagogical approach:

- Awareness and Understanding: Players explore the causes and consequences of unsustainable behaviors.
- Application and Action: Players design and lead virtual campaigns for sustainability, applying knowledge in practical and emotionally intelligent ways.

This dual structure reflects Bloom's taxonomy of learning, moving from knowledge acquisition to synthesis and creation. It also mirrors the GreenComp framework (European Sustainability Competence Framework), which stresses the integration of systems thinking, values-based reflection, and collective action.

## Game Concept and Design

- **Narrative and Role of the Player**

The YIELDS Digital Serious Game places players in the role of World Travelers, young explorers who journey through Europe and partner countries to uncover the realities of sustainability challenges. These travelers, symbolized through customizable avatars, are not mere observers, they are Change Makers tasked with understanding the world's environmental problems and inspiring solutions.

The narrative encourages players to view sustainability not as a distant political agenda, but as a personal and social responsibility. Throughout the game, players experience how choices, from waste sorting to community engagement, have immediate and long-term consequences for the environment and society.

At the end of the journey, players emerge with a deeper understanding that achieving sustainability requires both knowledge (to understand systems) and emotional intelligence (to connect, communicate, and collaborate).



- **Structure Overview**

The game is divided into two levels, each with a specific focus, learning outcome, and gameplay style:

- Level 1: “Learn & Explore”
  - Introduces sustainability concepts through short, interactive flashcards and global missions. The player discovers how energy production, waste, and resource use affect the environment, population, and economy.
- Level 2: “Act & Inspire”
  - Empowers the player to design and lead a sustainability campaign in one of the partner countries. Players select a cause, make strategic and ethical decisions, and witness how empathy and reasoning influence the success of their campaign.

The two levels together ensure a smooth transition from awareness to action — mirroring the process of personal transformation that the YIELDS project aims to inspire in learners.

## Gameplay Mechanics

- **Level 1 – Learn & Explore**

In the first level, players embark on an educational exploration across Europe, where they complete tasks, solve mini-scenarios, and participate in short “expeditions.” The player navigates a map, discovering the impact of excessive energy use, pollution, and waste generation.

The learning format is built around 10 flashcards, each presenting a real-life dilemma such as waste sorting, energy consumption, transportation choices, or food waste. Each scenario offers three possible actions, each representing a different combination of practical and emotional awareness. Upon selecting an action, players receive instant feedback that explains the environmental and emotional implications of their decision. The tone of the feedback is always encouraging and reflective, guiding learners toward better understanding rather than penalizing mistakes.

Players earn Sustainable Coins for environmentally responsible actions and Empathy Hearts for compassionate, inclusive responses. At the end of Level 1, their combined score becomes their “Change Maker Profile,” which carries into Level 2.



- **Level 2 – Act & Inspire**

In the second level, players apply what they have learned by developing and implementing a virtual sustainability campaign. This level is strategic, narrative-driven, and reflective.

Players begin by choosing one of five possible causes:

1. Protect Clean Oceans
2. Promote Renewable Energy
3. Reduce Food Waste
4. Encourage Sustainable Mobility
5. Support Local Green Spaces

Each cause connects directly to one or more UN Sustainable Development Goals (SDGs) and includes informative pop-ups with relevant EU policy references, ensuring educational consistency with European environmental frameworks.

Players then progress through four campaign decisions, choosing audiences, methods, communication styles, and responses to challenges. Each choice adds or subtracts points from two internal indicators:

- Sustainability Impact: measuring effectiveness and eco-efficiency.
- Empathy & Inclusion: measuring emotional intelligence and human-centered leadership.

At the end of the campaign, the game evaluates these scores and assigns one of four narrative outcomes, each reflecting a leadership style:

- Community Champion – balanced, impactful, empathetic leader.
- Efficient but Distant – technically skilled but emotionally disconnected.
- Trusted Connector – compassionate leader needing stronger eco-impact.
- Learning in Progress – developing awareness and skills for future growth.

Each outcome provides personalized feedback, reinforcing the reflective dimension of the learning experience.



# Emotional Intelligence Integration

A distinctive innovation of the YIELDS game is the integration of emotional intelligence (EI) throughout its mechanics and narrative. The game operates the four core components of EI, self-awareness, social awareness, relationship management, and responsible decision-making, within sustainability contexts. For example, when facing community resistance or interpersonal conflict, players are encouraged to choose understanding and collaboration over confrontation. When planning campaigns, they are prompted to think about inclusivity, shared responsibility, and motivation.

This dual focus ensures that players not only acquire factual knowledge about sustainability but also practice the emotional and social competencies necessary to act effectively within real communities.

## Visual, Technical, and Accessibility Features

The YIELDS Digital Game was developed as a web-based application, accessible from any modern browser on desktop, tablet, or smartphone. Its architecture is designed for low bandwidth and universal accessibility, enabling equitable participation across partner countries.

The user interface employs a clear, minimalist aesthetic with bright, eco-inspired color palettes (greens, blues, and neutrals). Icons such as leaves, hearts, and lightbulbs provide visual cues for learning progress. The design ensures high readability, multilingual display, and compliance with WCAG 2.1 accessibility standards, including keyboard navigation and screen-reader compatibility.

The average game duration is:

- Level 1: 10–15 minutes
- Level 2: 15–20 minutes

No registration or installation is required. The game can be integrated into educational websites, workshops, or blended-learning sessions as a fully open educational resource (OER).

# Learning Outcomes

Upon completing both levels, players are expected to:

- Demonstrate understanding of environmental systems and the consequences of human activity.
- Recognize the interdependence between ecological, social, and emotional well-being.
- Exhibit empathy, cooperation, and inclusive problem-solving skills.
- Identify sustainable behaviors aligned with EU environmental strategies and SDGs.
- Show motivation to participate in sustainability actions within their local context.

These learning outcomes contribute to the GreenComp competence areas: Embodied sustainability values, Embracing complexity, Acting for sustainability, and Envisioning sustainable futures.

# Evaluation and Pedagogical Use

The YIELDS Digital Serious Game can be used as both a self-directed learning tool and a facilitated group exercise. For educational institutions or youth organizations, facilitators may:

- Introduce the game within workshops focused on sustainability or emotional intelligence.
- Encourage reflection and dialogue after each level, using guiding questions such as “Which decision was hardest to make and why?” or “How does empathy change the effectiveness of action?”
- Integrate the game into blended learning modules, linking gameplay results with classroom discussions or local sustainability projects.

Feedback from test users and pilot sessions will be collected to evaluate user engagement, clarity, and perceived learning benefits. Quantitative data (number of plays, duration, completion) will complement qualitative insights (comments, focus groups) to inform future improvements.









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