ESC4SDG

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Case Study

ESC4SDG Project

Escape Games and Gamified Challenges for Sustainable Development Goals

Erasmus+ KA220-SCH | Project No 2025-1-LT01-KA220-SCH-000356191

0. Case details

Title of the escape room	*Greitoji mada ir jos spąstai*
Country	*Šiaulių universitetinė gimnazija*
Subject(s)	*Technologijos, dailė*
Grade / age group	*2nd Year of Gymnasium (16–17 metų)*
Number of students	*12-14 students*
SDG addressed	*SDG 12 – Responsible Consumption and Production*

1. Pedagogical purpose

Subject and curricular unit / content	*Sustainable Design, Product Life Cycle, Environmental Impact of the Textile Industry.*
Learning outcomes (2–3, observable)	*1. Understand the impact of fast fashion on the environment and society.* *2. Analyze the product life cycle.* *3. Propose more sustainable alternatives for clothing production and consumption.*
Key competences	*Critical Thinking, Creativity, Collaboration, Problem-Solving, Sustainability Competence.*

2. SDG and playable problem

SDG chosen	Target 12.8: By 2030, ensure that all people have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.
Specific SDG target	*SDG Target 12.8 – Promoting awareness and knowledge for sustainable lifestyles*
Problem presented to students	*A clothing store offers new collections at extremely low prices every week. This consumption pattern leads to a rapid increase in textile waste. Students must investigate the true environmental impact of fast fashion and propose solutions.*
Curricular justification	*The topic helps develop an understanding of responsible consumption, sustainable design, environmental protection, and product development.*

3. Narrative and structure · MOOC Task 3

Students' mission	*Uncover the hidden environmental impact of fast fashion and find sustainable solutions before the city is overwhelmed by textile waste.*
Students' role	*Sustainability Researchers.*

Narrative context	*The year is 2040. Textile waste has reached a critical level. The International Sustainability Agency calls on students to investigate the problem and propose solutions.*
Opening story (max. 10 lines)	*"Hello, researchers. Every year, millions of garments are thrown away after being worn only a few times. Your mission is to uncover what happens behind the scenes of fast fashion, collect three secret codes, and help society make more sustainable choices before it is too late."*
Type of structure	*Linear. Each task unlocks the next stage.*
Final goal of the game	*Surinkti visus kodus ir sukurti tvarios mados veiksmų planą.*

4. Challenges and cognitive progression

At least three challenges, from basic to high cognitive level (Bloom's taxonomy). Add rows if needed.

Challenge / level	Description	Learning evidence	Planned hint	Solution
1. Basic (remember / understand)	*Arrange the journey of a T-shirt from raw material to the store.*	*Students correctly identify and arrange the stages of production.*	*Cards showing the stages of production.*	*The correct sequence reveals the first code.*
2. Intermediate (apply / analyse)	*Compare the environmental impact of different garments and determine which causes the greatest harm.*	*Students justify their choice using data.*	*A table showing water and energy consumption.*	*The correct answer reveals the second code.*
3. High (evaluate / create)	*Create a sustainable fashion presentation or design a clothing item using recycled materials.*	*Develop a creative solution and present it.*	*Questions about durability, reuse, and recycling.*	*An approved solution reveals the final code.*

5. Assessment and inclusion

Mini-rubric (3 observable criteria × 3 performance levels)

Criterion	Developing	Achieved	Excellent
1. Explains the environmental impact of fast fashion.	*Identifies at least one problem caused by fast fashion.*	*Identifies and explains 2–3 problems based on the information provided.*	*Thoroughly explains the impact on the environment and society, providing examples and supporting arguments.*
2. Proposes a solution to the problem.	*Suggests one general idea for solving the problem.*	*Proposes a realistic and well-justified solution.*	*Develops a creative, practical, and clearly justified sustainable solution.*
3. Collaborates in a group.	*Participates passively in group activities.*	*Actively completes assigned tasks and collaborates with others.*	*Takes initiative, helps others, and encourages teamwork.*

Self-assessment mechanism	*After the game, students complete a reflection sheet in which they assess their knowledge of the impact of fast fashion, their contribution to group work, and their ability to propose a sustainable solution. They conclude their reflection by answering the question: "What will I do differently as a consumer from now on?"*

Inclusive adaptations (UDL) – at least 2	*1. Information is presented through texts, images, and data.* *2. Students can choose the format of their final work (poster, sketch, presentation, or prototype).*

6. Implementation in the classroom

Implementation	*90-minute lesson. Students work in groups of 4–5. The activities involve cards, QR codes, data analysis, creative tasks, and presentations.*
Difficulties	*Data interpretation and time management while completing a creative task.*
Areas for improvement	*More digital tasks, QR code-based activities, and hands-on textile recycling workshops.*

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