The Zone becomes a metaphor for Ukrainian persistence in the face of catastrophic odds, offering foreign students a visceral connection to the national psyche that remains unbreakable despite external threats.

COIL as a Space for Digital Diplomacy

Finally, this paper argues that sharing these franchises in an international educational setting creates a Low-Stakes/High-Engagement environment for language practice. By discussing game mechanics, lore, and the real-world contexts of development (such as wartime production), students transition from formal classroom English to Student-Centric Communication. This exchange allows Ukrainian students to act as cultural ambassadors, utilizing their digital legacy to dismantle stereotypes and build institutional resilience through peer-to-peer success stories.

Conclusion The 'Big Three' of Ukrainian game development offer a robust framework for internationalized learning. Through these games, the COIL project achieves its dual goal: bridging the linguistic gap through B2-targeted interactive support and showcasing the Unbreakable Spirit of a nation that continues to create world-class culture amidst destruction.

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STEAMPUNK MYSTERY LAB: DEVELOPING AN EDUCATIONAL ESCAPE ROOM FOR TEACHING DATA VISUALIZATION SKILLS

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In the modern world, data is used in science, medicine, business, and everyday life. People see charts and graphs in the news and at school. The ability to read and understand visual data - called data literacy - is an important skill for teenagers today. However, many students do not know how to read graphs correctly or understand what a chart is showing [1]. This makes data visualization education a real and urgent challenge.

The goal of this paper is to describe the development of an educational escape room called "Steampunk Mystery Lab", which was created to teach data visualization skills to teenagers aged 14-19. The project was developed during the European Project Semester (EPS) as part of the Erasmus+ academic mobility programme at the University of Applied Sciences St. Pölten, Austria, in 2026.

1. Educational Escape Rooms as a Learning Tool

An escape room is a game where players must solve puzzles to complete a mission within a time limit. Educational escape rooms use this idea to teach new knowledge and skills in an engaging way. Research shows that game-based learning helps students stay more focused, be more motivated, and remember information better than in traditional lessons [2]. When students work together in teams, they also practice communication and critical thinking.

The main benefits of educational escape rooms are: high student motivation, active participation, development of problem-solving skills, and the ability to practice real-life tasks. These features make escape rooms very effective, especially for complex topics like data analysis [3].

2. Project Description: Steampunk Mystery Lab

The escape room is set inside a deserted research laboratory. The story is about a dangerous virus that transforms people into snails. The last scientists were close to finding a cure - but they disappeared before finishing their work. Players arrive as elite specialists by zeppelin. Their mission is to search through the lab, solve all the puzzles, and find the cure within one hour [4].

The game is designed for groups of 20-30 students, divided into 5 expert teams: doctors, physicists, chemists, malacologists, and geographers. Each team works at its own puzzle station and must analyze specialized data. All teams must complete every station to collect the clues needed for the final challenge. This structure forces real teamwork and communication between groups [4].

All puzzle stations are built using custom 3D-printed mechanisms and designed in a brass-and-steam visual style. The game was tested with real student groups during a playtesting session in Linz, Austria (fig. 1).

Step 1: Solve station puzzles (5 teams, parallel) → Step 2: Collect clues and keys → Step 3: Complete extra room puzzles → Step 4: Unlock the final box → Step 5: Prepare the cure and save the world

Fig. 1. Game flow of the Steampunk Mystery Lab escape room

3. Puzzle Structure and Data Visualization Skills

Each puzzle in the escape room teaches a specific type of data visualization. Table 1 shows the five main puzzles and the chart or diagram type each one uses.

Table 1

Main Puzzle Stations and Data Visualization Types

	Puzzle Name	**Data Visualization Type**	**How it works**
	Shadow Puppets	Bar chart	Build a physical bar chart with blocks; read its shadow on a grid
	Microscope	Network diagram	Examine charts under a microscope; link names to find the virus spread
	The Body	Bubble chart	Study the snail's mechanical rhythms; press buttons in the correct order
	Light Sensitive	Heatmap	Place regions on a map; read brightness to find the outbreak area
	Laser Maze	Line chart	Use lasers and mirrors to draw a line chart on the correct grid

In addition to the main stations, the room has two extra puzzles: "Stars on the Ceiling" (a scatter plot hidden in glowing stars on the ceiling) and the "Magnet Puzzle" (a scatter plot formed by iron shavings reacting to hidden magnets). These extra puzzles give early-finishing teams additional clues before the final challenge [4].

The final puzzle combines all collected keys to unlock a box with ingredients. Players must follow the "recipe" they found throughout the game to prepare the cure and complete the mission.

4. Website Development

As part of the project team, I was responsible for the complete development of the official project website. This included all stages of work: planning, design, and coding. The website was built using GitHub Pages, which is a free platform for hosting open-source projects online. The site includes all puzzle designs, game rules, detailed project documentation, and team information [4].

The documentation covers the full puzzle structure, testing results from the Linz playtesting session, and the complete design process. This was done to make it easy for other teachers or event organizers to reproduce and run the escape room themselves. The website also includes answer-checking pages for each of the five teams, so students can verify their solutions after the game.

Conclusions

The Steampunk Mystery Lab is an effective and creative tool for teaching data visualization skills to teenagers. It covers five key chart types - bar chart, network diagram, bubble chart, heatmap, and line chart - through real physical puzzles with a strong narrative. The game was developed during Erasmus+ academic mobility at the University of Applied Sciences St. Pölten, Austria, and was successfully tested with real students in Linz. The open-source website makes the project available for any school or educational event. Future work could include developing the two remaining puzzle concepts and creating a digital version of the escape room.

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BREAKOUT LEARNING AS A TOOL FOR OVERCOMING LANGUAGE BARRIERS IN THE U.S.-UKRAINE BUSINESS COMMUNICATION & CULTURE EXCHANGE COIL PROJECT

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In today's globalized educational landscape, international collaborative online international learning (COIL) projects are becoming an effective tool for developing students' cross-cultural competencies. At the same time, one of the key challenges of such projects remains the language barrier, especially in asymmetric language teams, where English is the native language for some