



A game of improving soft skills

The HERA consortium, consisting of 4 institutions from Estonia, Denmark, Greece and Portugal, focused on the development of soft skills, critical thinking and problem solving in the economics and engineering industries. Since these are the competences necessary in the 21st century, the consortium members also focused on a modern approach to their education. For this reason, they have prepared a digital educational game that is designed to confront people with complex challenges to which the solution requires the integration of knowledge from various fields.

Game

From the point of view of the players, the gameplay resembles the typical landscape of a game such as SimCity, where you need to take various actions to properly create a city. The authors of the game have prepared several scenarios, each of which allows you to face problems inspired by the requirements of modern times. For example, players manage water supply, care for the environment, deal with virtual floods, as well as promote tourism and care for the well-being of citizens. Everything happens through making decisions related to design, choice of building materials, budget use, while taking into account the needs of the inhabitants of fictitious towns.

The game is designed for many people, and the various participants in the project play different roles, so their goals can be opposing, as well as the information and resources at their disposal. This necessitates interaction between players when making decisions and finding compromises. The exchange of views takes place on a virtual board, where ideas and discussions about their implementation appear. The game can be downloaded from the project website: heraproject.eu.

Results of action

Among the results of the entire project, the authors of the idea enumerate:

- analysis of players' problem solving skills,
- improving active, gamification-based learning methodology,
- development of digital educational services and competences enabling the use of new technologies in the learning process.

They also emphasise that the initiative contributes to the development of good practices for the best use of educational games.

The gamification mechanisms that have been proposed in the project to encourage and promote long-term student engagement in learning include:

- Engagement rewards
- Clear, relevant and inspiring missions
- A sense of belonging and integration
- Leaderboards
- Social recognition

Jak prowadzić naukę według projektu HERA

- Starannie wybierz scenariusze, które stanowią wartość dodaną do istniejących praktyk edukacyjnych.
- Na samym początku należy wprowadzić uczniów na stronę, wyjaśnić i pokazać jak wygląda.
- Następnym ważnym etapem jest zachęcenie uczniów (zanim przejdą do podjęciem współpracy z członkami grupy w celu rozwiązania scenariusza) do przeprowadzenia indywidualnych badań.



- Aby wprowadzić graczy do gry, należy wykorzystać scenariusz, który można rozegrać indywidualnie.
- Ocenic nowo zdobytą wiedzę uczniów poprzez debriefing.
- Ważne jest, aby jako nauczyciel działać w formie moderatora i przewodnika w nauczaniu opartym na problemach.
- Do zbudowania wiedzy i umiejętności należy użyć kilku, a nie jednej iteracji.
- Gdy uczniowie pracują nad problemem, bądź skutecznym i dobrym moderatorem nie narzucając na siłę swoich koncepcji.
- Zapewnij uczniom wystarczającą ilość czasu na pracę nad scenariuszami, nie pospieszaj ich.
- Pozwól uczniom na refleksję.
- Wprowadź zadania domowe.

How to conduct learning according to the HERA project

- Carefully select scenarios that add value to existing educational practices.
- At the very beginning, introduce students to the site, explain and show what it looks like.
- The next important step is to encourage students (before they go on to work with group members to solve the scenario) to do their own research.
- Introduce players to the game, use a scenario that can be played individually.
- Assess students' new knowledge through debriefing.
- It is important as a teacher to act as a facilitator and guide in problem-based learning.
- Several, not one, iterations should be used to build knowledge and skills.
- When students work on a problem, be an effective and good facilitator without forcing your ideas.
- Give students enough time to work on their scenarios, don't rush them.
- Allow students to reflect.
- Introduce homework.

(Materials where used from the <http://heraproject.eu/index.php/good-practice-guidelines/> website)