

# Technology Enhanced Learning

## Case Study: Serious games and Gamification



### Summary:

This case study aims to introduce how **serious games, simulations, and gamification can be used to lead to personal and professional development**, knowledge gain, engagement and motivation in both education, business, and other fields of life.

### Introduction:

**We at Trebag Ltd. are specialised in gamification. Throughout the last several years we have been involved in a wide range of different gamification and serious games related initiatives.**

To help you to understand the potential in gamification, game-based learning, serious games and simulations we will briefly describe the difference between these concepts and will showcase some examples from our repertoire.

### The main concepts:

#### Serious games:

Serious games are games that have another purpose besides fun and entertainment. They combine learning strategies, knowledge and structures, and game elements to teach specific skills, knowledge and attitudes.

#### Game based learning:

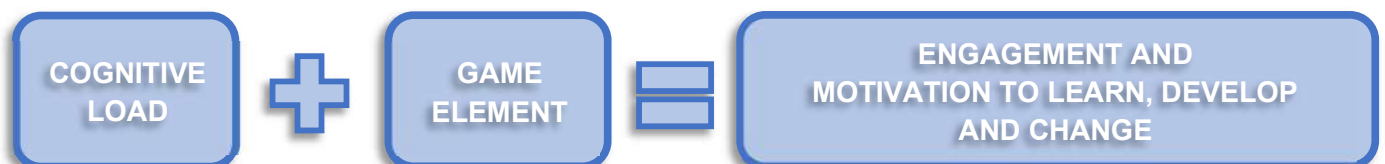
Game based learning is where game characteristics and elements are embedded within learning activities.

#### Simulations:

Simulation learning allows students to practice critical work skills in a controlled environment and gain relevant knowledge skills and experience, or became more familiar navigating in a certain environment.

#### Gamification:

Gamification attempts to enhance systems, services, organizations, and activities by incorporating game elements in non-game activities in order to motivate and engage users.



## Examples:

We will showcase a handful of initiatives that we at Trebag Ltd. have been working on throughout the last years to demonstrate different ways and approaches of applying and incorporating game elements in non-game environments for different purposes.

### Coop-in:

Coop-in was completed in 2019, with the aim of social innovation development. One of the main products of the project is an online serious game platform. This is a virtual place which reunites the fun of playing games and usefulness of learning practical social innovation & collaboration skills and competencies.

### CarCraft:

The overall objective of the CarCraft project is to modernize and assist the digital transformation of VET education.

The main output of the project is a simulation game for VET learners. It is based on the Minecraft world (education edition), an already existing and popular online game. The CarCraft simulation game is especially designed for the students who follow automotive mechanics classes.

The main reason why this project was formed was to provide a response to the COVID-19 situation, which has affected VET education

mostly. VET education relies more on hands on experience and web-based learning than theoretical education. COVID-19 has caused temporary lockdowns in March, for the majority of European countries, which meant that schools had to be closed and students had to rely on digital resources to follow classes.

### E-Growth, PROSPER:

With the current COVID crisis impacting on Europe's economy, we will need the small business sector to spear head the economic recovery – this will need to be achieved through growth.

The E-Growth for short, will train entrepreneurs throughout Europe how to plan and implement their own growth plans. To encourage this growth, we develop a business growth simulation game called PROSPER.

### Agropoly:

Agropoly aims to develop useful skills in agricultural entrepreneurship.

The game starts on a devastated agricultural area, it's the player's own farm (burned out fields and burned down forests, weak and skinny vagrant animals, weed on the fields, dirty river etc.). The overall aim of the game is to revive the countryside. By playing with the game, the area is becoming less sad looking and gradually becomes more and more cosier, agriculture starts to flourish.

E-Growth a project funded by the Erasmus+ programme. The project set out to explore the use of business simulations and Technology Enhanced Learning (TEL) in the delivery of Vocational Education and Training (VET). The TEL Handbook and E-Growth business simulation is available in English, Czech, Spanish, Greek and Hungarian.

### For further information visit:

<https://e-growth-project.eu/>



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