ERASMUS+ SHOEGAME

DEVELOPING KEY COMPETENCES IN VET FOR THE FOOTWEAR INDUSTRY THROUGH SERIOUS GAMES (REF: 2021-1-RO01-KA220-VET-000028078)

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SERIOUS GAMES AS NEW LEARNING METHODS

In a world where new technologies and innovations are constantly developing, it is vital for sectors such as footwear to stay on the cutting edge, providing the necessary training to make the most of these advances. The Erasmus+ SHOEGAME project intends to showcase such an advanced and innovative reality of a footwear company to the new generations in a different manner: entering a serious game. Attracting new generations and combating the mismatch between training and education provision is one of the main challenges of the footwear industry.

With the SHOEGAME serious game, partners will bring the sector closer to the real world and implement innovative learning methodologies. The game will also provide students with digital and technological skills which are crucial to keep up with the constant modernisation of the sector.

The first project phase called “SHOEGAME Learning Methodology” is now complete. This part allowed the partners to create an analysis of the training and education needs of pre-VET and VET students, to prepare a compilation of the best experiences in other sectors, to complete the methodology and training contents and, finally, to develop the game content. You can already find the 5 training units **here** translated in 6 languages (ES, FR, GR, IT, PT and RO).

Then, during the past few months, partners have been focusing on the second main result of the project namely, the SHOEGAME Serious Game. This game is aimed at current, future and potential VET students in the footwear manufacturing field. It will also be very innovative for the footwear sector since it will:

Be used as learning tool in classrooms

Allow the students develop their digital skills

Prevent VET students to abandon their studies, as well as motivate potential future students

Represent a “step-in” to the technological area of game development for educational purposes, and the application of these tools in the classroom

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After developing the content of the game, partners are now focusing on its design. They have also launched the Alpha and Beta versions of the game which were a success! Moreover, the consortium received a lot of interesting suggestions and will and will take them into account when updating and developing the game.

This issue of the newsletter will focus on the latest technologies used in the footwear sector and on serious games as learning tools in order to better understand the usefulness of these methods for the future of the footwear industry. We invite you to follow the progress of the project directly on our **website** and **Facebook** page!

Serious Games for the Footwear Industry
An article by Virtual Campus

Videogames appeared on the consumer market about 50 years ago and their societal impact steadily grew until becoming today a fundamental societal and cultural object. Games are endogenous systems, with problem-solving activities structured by game mechanics and game rules. The engagement of playing games is internally motivated, meaning individuals participate in them voluntarily. This promotes the player immersion, a phenomenon experienced by an individual when they are in a state of deep mental involvement like when they are deeply involved in the game narrative or the game challenges.

Games help improve various cognitive and interpersonal skills like logical thinking, perceptiveness, attention, memory, visual and auditory, analysis and synthesis, comparison, classification and generalisation. They develop character traits such as consistency, perseverance, self-discipline and a sense of justice. They develop both the ability to undertake tasks independently and to co-operate in a group. Playing games together fulfils social needs for interaction that may arise from the desire for competition, companionship or recognition.

Therefore, while initially thought as simple entertainment objects, the design and/or use of games for other purposes was seen as a logic step to take advantage of the motivation and engagement that users experience while playing. Accordingly, games are now extensively used for education and training, awareness raising, advertising, research studies, public health campaigns, etc. These games, called Serious Games, are generically defined as 'games that do not have entertainment, enjoyment or fun as their primary purpose' (Michael and Chen 2006, p. 21) or as 'a mental contest, played with a computer in accordance with specific rules, that uses entertainment to further government or corporate training, education, health care, social awareness, public policies, crisis management and strategic communication objectives' (Zyda 2005, p. 26).

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Education is the area with more successful examples of the use of serious games (also known as "game-based learning"): users can 'learn by doing' and 'learn by error' in controlled environments that support the development of knowledge, skill and competences (Juzeleniene et al. 2014). Game-Based Learning aims at combining the components that make gaming appealing with the desired information and knowledge to be transmitted to the user, creating an interactive source for learning that, motivates each user to extend their own knowledge and to deepen their study in a challenging and fun approach (Prensky, 2003).

On a different approach, the concept of 'gamification' refers to the deployment of games elements in non-game settings, such as learning (Sailer, 2017). Educational contexts can benefit from the use of gamification processes to reinforce the motivation of learners. To be more effective, the adopted game mechanics and dynamics should be selected according to the desired serious purposes (Baptista et al. 2015).

The use of Serious Games for industries is still quite limited, and it is practically non-existent in the footwear industry. This means that the sector still needs to understand the advantages and benefits of Serious Games for training purposes or for raising the attractiveness of the industry to the youngsters. Below, we present some examples that clearly show the limitations of the existing offer: on one side, there are serious games like business simulators that are broadly scoped (can be applied in most industrial fields) and, on the other side, there are games that although addressing the footwear industry have a limited serious approach:

Business strategy game (https://www.bsg-online.com/help/users/WhatIs.html)

A online business strategy game where class members are divided into teams and assigned the task of running an athletic footwear company in head-to-head competition against companies managed by other class members.

(https://store.steampowered.com/app/914070/Shoemaker/) **Shoemaker**

The player has to manage a small footwear repair/creation workshop.

Design My Shoes (https://www.atmegame.com/games/design-my-shoes)

The player can design their own shoes selecting different options from a limited set of possibilities.

(https://simuladores-empresariales.com/simuladores-de-negocios/) **Business simulators**

Several business simulators on resource management, strategic management, innovation, entrepreneurship, financial management, marketing and business plans.

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Preventing school drop-out and maintaining students' interest and motivation through serious games
An article by CEC

Early school leaving is a well-known phenomenon in the EU. In a 2021 Resolution on a strategic framework for European cooperation in education and training for the European Education Area and beyond (the EEA framework) the European Council identified four major factors have been identified responsible for early school leaving of young people aged between 18 and 24:

Learning disabilities problems

The socio-economic conditions in the family context

The commitment and support for the student

The school

Faced with this growing problem, innovative and engaging learning tools such as serious games have resulted beneficiary for industries and education stakeholders. A serious game is a computer application that combines pedagogical, informative or communication intentions with a video game that helps teachers and trainers to increase the precision of the learning experience. Students are given the opportunity to experiment with tasks that are unlikely to be carried out in the everyday school environment. Among their advantages for educational purposes, serious games express certain ideas and values that can influence players' thoughts and actions once the situation is brought back to real life. Moreover, they are attractive tools that can create strong motivation to help learning and generate interest in a given subject. This means that, as well as making education and training more interesting, they have a strong potential to retain students who are not or are less receptive to more traditional learning methods, or who are at risk of dropping out of school.

KEY FIGURES

- Since 2002, the ELET rate has fallen continuously in the EU.
- The overall EU ELET rate dropped by 3% since 2012.
- In 2022, the EU reached 9.6%, putting it well on the way to achieving the 9% target for 2030.
- 18 out of 27 EU Member States have already reached the 2030 targets.
- The proportion of male early leavers is higher (11,1%) than the female (8%).
- Less than 1 out of 2 early leavers (45.8%) are employed.
- Of the 45.8% of unemployed early school leavers, 31.3% were willing to work, while 21.9% were not.

TO FIND OUT MORE ABOUT PREVENTING SCHOOL DROP-OUT AND KEEPING STUDENTS' INTEREST ON EDUCATION, WE INVITE YOU TO READ THE FULL ARTICLE ON THE PROJECT WEBSITE!

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SHOE game

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