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**Stream** #9 Social Innovation Education

**Title** Game-based Social Innovation Education in Primary and Secondary Education

**Abstract**

Developing new skills and knowledge through the use of serious games and game-based learning in the school environment as part of social innovation education offers the potential for forward-looking and promising opportunities.

Social innovation education in schools can motivate and empower children and adolescents to engage as social change makers with relevance in primary as well as secondary education. Active participation in activities with social impact and the associated self-efficacy can be strengthened in particular through game-based learning formats and associated positive emotional learning experiences. Serious Games provide an authentic but protected environment to work on new and real problems through social innovation projects.

Achieving the educational goals of the game at both primary and secondary level depends on the user experience of the children and adolescents during the playing and learning process. Usability and playability are key determinants of a positive game-based learning experience and it is important to consider if the same needs and conditions lead to similar results in different age groups or if age-specific aspects need to be taken into account in future conceptual designs. In order to be able to draw conclusions in this context, this paper presents and compares the results of the empirical analysis of the user experience of primary and secondary school learners in the Serious Game for Social Innovation Education and the related effects on learning outcomes.

“The game, based on an adventure and open-world game, introduces social innovation to students. This is achieved by bringing the player to NEMESIS City with the aim of increasing the well-being of the inhabitants with his "social innovation power". There, the player gets the opportunity to work on new problems and implement social innovation projects in collaboration with non-player characters (teachers, social innovators, parents other stakeholders) in order to be rewarded with happiness points for the city” (Schorer & Protopsaltis 2021, p. 620).

The game focuses on topics of social innovation education - such as social value creation, examples of social innovation, self-efficacy expectations or the importance of the UN Sustainable Development Goals.

The evaluation process was conducted in three European schools (one primary school in UK, and two secondary schools in Greece and Romania) and the research design followed a pre- and posttest approach to evaluate the impact of the serious game in the areas of usability/ playability, narratives, play engrossment, enjoyment, creative freedom, personal gratification, visual aesthetics and learning success.

**References**
Schorer, A., & Protopsaltis, A. (2021). Learners’ User Experience Assessment of a Serious Game for Social Innovation Education. In Panagiotis Fotaris (Eds.), Proceedings of the 15th European Conference on Game Based Learning ECGBL 2021 (pp. 620-628). University of Brighton, UK, GB: Reading, UK: Academic Conferences International Limited.