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Gaming towards a sustainable future

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A sustainable future is both dependent on and of the utmost importance for all people living on the planet. In 2015, the United Nations member states adopted the 'Sustainable Development Goals' (SDGs) as 'a blueprint to achieve a better and more sustainable future for all'. Higher Education plays a critical role in achieving the SDG agenda as it engages students with the 17 goals both cognitively and affectively through research, teaching, collaboration with stakeholders, and campus practices. Achieving the ambitions described above requires innovative thinking and going beyond standard ways of curriculum development to account for how the goals affect students not just professionally but also personally. Hence, over the past 3 years, we developed a unique location-based, multiplayer mobile serious game: Utrecht2040. This game aims to teach students from all backgrounds and disciplines about key sustainability challenges in a systemic, interdisciplinary, and applied manner. Moreover, it aims to give them the tools to bring in their own personal and disciplinary perspective, and become agents of change. Utrecht2040 focuses on sustainability in urban contexts and can be played in any city.

So far, over 2000 students played the Utrecht2040 game, across different faculties and bachelor programs. Our research team has conducted pre- and post-questionnaires with a total number of 225 participants. The players reported a positive effect on their knowledge and appreciation of the SDGs as a proxy for sustainability, specifically in urban contexts, which was significant for all groups. Students also indicated that playing in a group and interacting with citizens gave them new insights about the future possibilities for the city as well as the motivation to act on these insights. Over the next years, we will extend the game to all bachelor students at Utrecht University, as well as to other universities at the (inter-)national level, e.g. within the European University CHARM-EU, an alliance of the European Universities Initiative, where they will play it in their master's program 'Global Challenges in Sustainability'.