

Changing Attitudes Through Play: A Web and Mobile Game for Sustainability Education in Higher Education

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Abstract

TIME2ACT is a European Erasmus+ cooperation project that leverages digital game-based learning to promote sustainability awareness and behavioral change among higher education students. At its core is Time2Act: Sustainability Quest, a cross-platform 3D educational game developed using Unity and deployed for desktop, mobile, and web browsers. The game immerses students in interactive missions aligned with real-world sustainability challenges, encouraging reflection on waste reduction, ecosystem restoration, social equity, and civic action.

By integrating systems thinking and sustainability literacy into engaging gameplay, the project fosters motivation, critical thinking, and agency in young adults. The learner-centered approach is reinforced through co-creation with educators and students across Europe, ensuring pedagogical relevance and cultural diversity. Testing began with a student bootcamp in Belgium in May 2025, collecting feedback to refine the experience.

TIME2ACT provides scalable tools and open educational resources for educators, aiming to transform students into proactive changemakers capable of addressing global challenges through informed and responsible action.

Keywords: Sustainability, Game-Based Learning, Higher Education, Digital Tools, Student Engagement

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