

EduPARK, mobile Learning, Augmented Reality and Geocaching in Science Education

2018 winner of the ECIU Team Award

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Abstract

EduPARK (<http://edupark.web.ua.pt>) is a research & development project that promotes mobile game-based learning with Augmented Reality (AR) in the outdoors.

The EduPARK has been selected as the winner of the 2018 ECIU Team Award after a selection within the University of Aveiro applications.



Fig.1 EduPARK app

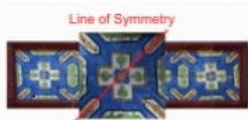


Fig.2 Augmented Reality

The EduPARK Project

The project integrates a multidisciplinary team, from Education, Biology and Computer Science, who created an interactive Augmented Reality app, supporting geocaching, for exploration in the Infante D. Pedro Park (Fig. 1 and 2).

The app integrates curriculum articulated educational guides for basic, secondary and higher education, as well as for the public. Each guide is a game with interdisciplinary questions and challenges that prompts founding AR contents at different locations, enhancing an authentic and contextualized learning [1, 2].

EduPARK synergies with the Community

The EduPARK is recognized as an interest point of the city (Fig 3) by the City Council.



Fig.3 City Council of Aveiro



Fig.4 Teacher Training Outdoor Credited Courses

Teacher training courses (Fig.4) and activities for students, teachers and tourists to collect systematic data to better understand mLearning in outdoor settings (Fig. 5).

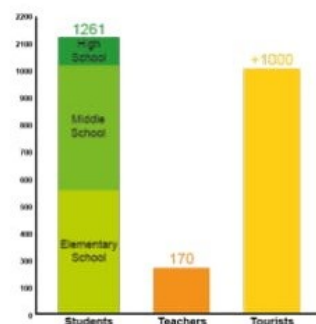


Fig.5 Public involved in EduPARK (81 activities)

The ECIU Team Award for Innovation in Teaching and Learning

The jury found the idea of adding Augmented Reality to every day technology (mobile phone) a very innovative idea. It was also highlighted that the project is strongly based on scientific literature and transforms the way of thinking about how people can learn (figures 6 and 7).

Why choose the EduPARK as the winner?



Fig.6 The essence of EduPARK.

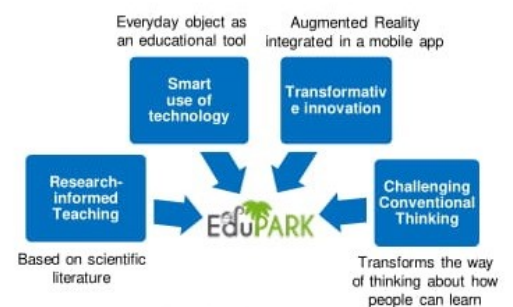


Fig.7 The EduPARK Project features.

References

- [1] Lombardi, M. (2007). *Authentic Learning for the 21st Century: An Overview*. Available at: <https://library.educase.edu/resources/2007/1/authentic-learning-for-the-21st-century-an-overview>
- [2] Giannakas, F. et al (2017). A critical review of 13 years of mobile game-based learning. *Educational Technology Research and Development*, 1–44