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# Novel Digital Tool and Embedded Learning Approach for the Use of Augmented Reality in Rural Tourism and Related Sectors

Nowadays new media play an important role in education due to mass development of new Information and Communication Technologies (ICT). New media enhance teaching methods using interactivity, promote communication and feedback. There are typical features of new media such as multimodality, virtuality, communication, globality, internationalization, distribution, diversification, mobility and collaboration. The studies show also the importance of new media in tourism industry. Research and development in this field is more concerned because it affects the business environment. The innovative and impressive new media can attract more tourists. The technology of Augmented Reality can help for new media.

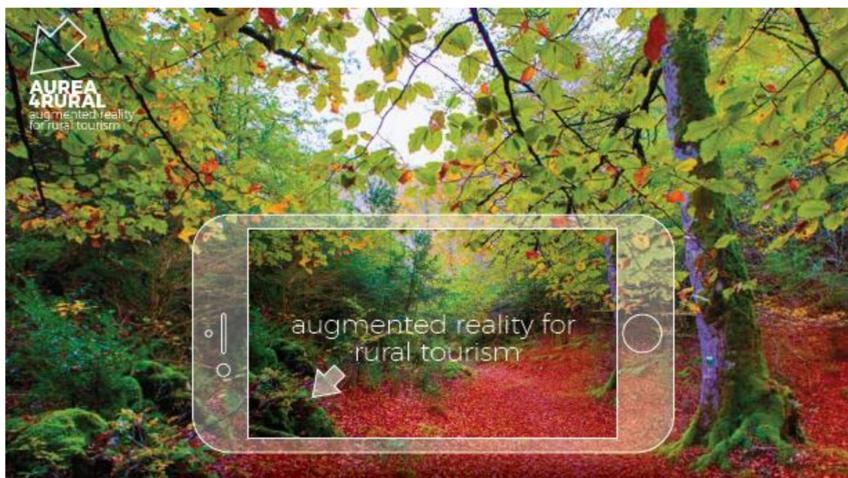


Fig. 1: AUREA4RURAL [www.facebook.com/Aurea4Rural/](http://www.facebook.com/Aurea4Rural/)  
(Design by Centro Tecnológico del Mueble y la Madera de la Región de Murcia. CETEM)

The Novel Digital Tool and Embedded learning approach in Augmented Reality is a method which can be used to develop Rural tourism. Having an easy to use tool (App) is the important characteristic to achieve this goal. In addition the approach of teaching the application of augmented reality in rural tourism and making motivation to use AR in education for teachers in schools or institutions and to teach the lessons in an interesting way to the students is also an important factor which cannot be ignored. AR can help students to be more involved during classes using

new methods of content presentation and increasing collaboration. Having a good interactive content presentation with context-aware information on the learner's devices will help students associate with the lesson on a deeper level. For tourism industry, if the organizations which are more engaged with tourist want to reach wider audiences, they should build attractive multimedia content that attracts tourists.

This study focused on both research and application of augmented reality in rural tourism and the education (Embedded learning approach). The final aim was to create an android mobile application as a digital tool. The implementation of the tool achieved using different AR technologies, programming languages and environments and features and database. In order to manage the contents of the AR tool (media) a content management system (CMS) as a web tool implemented. Furthermore, the learning approach which is embedded in this study is the e-learning platform which completely teach and educate the participants who wants to use augmented reality in rural tourism and improve teaching methods in schools. The e-learning platform provided guidelines about using the implemented AR application. These contents are either short videos or texts as PDF. Both the mobile application and e-learning platform are freely available.



Fig. 2: AUREA4RURAL Transnational project meeting in Tallinn

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