ED11B-0856 - Can Building Seismic Resiliency Benefit from Emergent Technologies? Case Studies from the Projects KnowRISK and 3DTeLC

📅 Monday, 9 December 2019

🕐 08:00 - 12:20

📍 *Moscone South - Poster Hall*

Abstract

Building resiliency to natural hazards like earthquakes is a challenging engagement, starting from education and dissemination of good practice among the youths. Education of new professionals in the field of seismic risk takes nowadays advantage from the implementation of emerging technologies, such as Augmented Reality (AR) and Virtual Reality (VR), which can benefit from the huge amount of digital information available. These are tools that very well fit the world of Native Digital.

We present a few case studies from two European projects promoting education and communication also throughout the application of AR and VR. Targeted audiences of the two projects were schools and universities. KnowRISK (**Know** your city, **R**educe se**IS**mic ris**K** through non-structural elements; Grant agreement ECHO/SUB/2015/718655/PREV28) ended in 2018; it had a special focus on non-structural damage caused by earthquakes, exploring the causes of disruption and proposing preventive measures to reduce it. It relied on risk communication to school as a preventative strategy. 3DTeLC (Bringing the **3D**-world into the classroom: a new approach to **Teaching**, **Learning** and **Communicating** the science of geohazards in terrestrial and marine environments) is funded through the Erasmus+ Key Action 2 Strategic Partnerships for Higher Education scheme (Project Reference: 2017-1-UK01-KA203-036719) and will be completed in 2020. The project trains students to navigate 3D models of volcanic regions in Iceland, Greece, and Italy (at Mt. Etna volcano), allowing them to carry out virtual surveys also in hazardous contexts. Accordingly, the project aims at strengthening students' skills in Earth observation and data analysis.

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