

Evaluate results of the simulation game "Earthquake for Kids"

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Earthquake for Kids (E4K) is a simulation game designed in 2011 by F. Paglino, B. Pace and D. D'Amato, under the supervision of prof.ssa P. Rizzi on the model of Urban Simulation Games previously used in environmental education (Rizzi 2003, 2011 – ISPRA 2011 – Pace et al. 2011 – Paglino and Rizzi 2013).

E4K was experienced with secondary schools of first and second grade of L'Aquila in 2011 (2 years after the M6.3 L'Aquila earthquake) and Pescara in 2014 and 2016.

During the game participants are asked to decide an urban development plan in a high seismic risk area. A debriefing conference usually takes place in the same day or the day after.

By the game teenagers learn optimal strategies regarding urban development and environmental protection; they also develop the control and management of environmental emergencies; finally they improve knowledge of seismic risk of their own region.

In order to assess the efficacy of this educative strategy, 60 high school students of Pescara were involved in the game (May 2016) and completed a battery of ex-ante/ex-post questionnaires : the Seismic Risk Perception Questionnaire (SRP-Q, Crescimbene et al. 2013); the General Ecological Behavior (GEB) (Kaiser, 1998); a questionnaire to assess ecologist thinking, New Human Interdependency Paradigm (NHIP; Corral-Verdugo, Carrus, Bonnes, Moser, Sinha, 2008).

In this paper we discuss the E4K's capability to promote in teenagers both an accurate seismic risk perception and adequate environmental protection strategies.