

Geoeducation Strategies for Teaching Natural Hazards in Schools

Authors : Carlos Alberto Ríos Reyes, Andrés Felipe Mejía Durán, Oscar Mauricio Castellanos Alarcón

Abstract : There is no doubt of great importance to make it known that planet Earth is an entity in constant change and transformation; processes such as construction and destruction are part of the evolution of the territory. Geoeducation workshops represent a significant contribution to the search for educational projects focused on teaching relevant geoscience topics to make natural threats known in schools through recreational and didactic activities. This initiative represents an educational alternative that must be developed with the participation of primary and secondary schools, universities, and local communities. The methodology is based on several phases, which include: diagnosis to know the best teaching method for basic concepts and establish a starting point for the topics to be taught, as well as to identify areas and concepts that need to be reinforced and/or deepened; design of activities that involve all students regardless of their ability or level; use of accessible materials and experimentation to support clear and concise explanations for all students; adaptation of the teaching-learning process to individual needs; sensitization about natural threats; and evaluation and feedback. It is expected to offer a series of activities and materials as a significant contribution to the search for educational projects focused on teaching relevant geoscientific topics such as natural threats associated with earthquakes, volcanic eruptions, floods, landslides, etc. The major findings of this study are the pedagogical strategies that primary and secondary school teachers can appropriate to face the challenge of transferring geological knowledge and to advise decision-makers and citizens on the importance of geosciences for daily life. We conclude that the knowledge of the natural threats to our planet is very important to contribute to mitigating their risk.

Keywords : workshops, geoeducation, curriculum, geosciences, natural threats

Conference Title : ICAGM 2023 : International Conference on Advances in Geohazard Management

Conference Location : London, United Kingdom

Conference Dates : August 17-18, 2023