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Can we do something different to enhance public awareness on earthquakes? MOBEE - a new and innovative approach!

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MOBEE stands for Mobile Earthquake Exhibition and certainly represents, at least at a national level, a novel approach on raising earthquake risk awareness and creating the means for education and mitigation. The involvement of scientists in public education is a necessary task, and MOBEE facilitates the link between researchers in the field of earth science, in general, and seismology, in particular, and large audiences, enabling also the implication of graphic artists and education informatics.
The MOBEE project intends to tackle a very problematic topic for the present and future of Romania: the quality of education, in the perspective of a future major earthquake. And not just in a declarative, formal way, but in a practical manner, by translating modern approaches from science, arts and computer science into end-products with a direct impact in forming and developing the interest for earth science, at different levels and at a significant scale. In this way we believe that a large number of people will have the chance to better understand earthquakes during a journey from earthquake origins to present monitoring capabilities, from myths to scientific evidences, taking one by one the standpoint of observer, active participant and scientist!
The exhibition was designed considering what people remember from such museum visits and more importantly, what factors seem to contribute the most to visitors forming long-term memories; to asses all this,a comprehensive needs assessment study (based on a questionnaire with more than 700 answers) has been carried out,using online tools. Concluding from the answers, the exhibition should involve hands-on learning, photo-video and graphical information, theoretical presentations or interactive experience. Also based on the need of analysis study and on the expertise of the project members, we created the framework of the exhibition. It comprises five thematic sections, each with combinations of interactive displays, hands-on exhibits, physical models, games and posters. The areas and main highlights are:
- “The Anatomy of the Earth”: geologic timeline application, 3D model of the Earth and its interior , tectonic plates puzzle, collection of rocks;
- “What is an earthquake”: large map of worldwide earthquakes and volcanoes, real-time earthquakes application, seismic waves movement replicator;
- “How do we measure earthquakes?”: “Produce your own earthquake” exhibit, seismometers and other equipment, magnitude-intensity application;
- “The effects of earthquakes on natural and artificial environment”: shake table for testing building models, videos and photos from real earthquakes, tsunami animation;
- “How can we protect from earthquakes?”: computer game – “What to do in case of an earthquake?”, illustration of emergency kit.
The objective behind an exhibition is always to communicate with the visitor, in order to provoke a “transformation”. This objective is targeted by MOBEE by increasing the information and understanding of visitors regarding the earthquake phenomena and also by producing an outstanding experience using an approach based on innovative exhibits, illustrative hands-on activities and digital media content. We aim to share our work and encourage other similar experiences.