

Feeling and Understanding Plate Tectonics – How can We attract Museum Visitors Attention?

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Earthquakes, volcano eruptions and other natural hazards are commonly paid attention to, if news about disastrous events reach us. The mission of an Earth Science or Natural History Museum, however, goes beyond explaining the causes of natural disasters, but should also present science history and cutting edge research. Since dealing with a subject, especially with one, which seems to be in the abstract, is more effective, we realised two new projects where our visitors can feel and understand plate tectonics in a more exciting way.

In 2015 we installed an earthquake simulator in our permanent exhibition to allow our visitors the physical experience of an earthquake. Because of static restrictions the simulator is housed in a container outside the building where it can be visited as a booked program upon prior reservation or by joining public tours on Sundays and special occasions. The simulation of six real earthquakes in two spatial directions is accompanied by a movie presenting facts about the earthquake itself (e.g. location, magnitude, damage and victims), but also general information about plate tectonics. This standard program takes about 20 minutes.

During an educational program, however, not only the simulator is visited, but also the permanent exhibition, where the guide can focus on different aspects and then might choose specific earthquakes and information blocs in the simulator. In addition workshops with experiments are offered for school classes and other groups. This allows us to offer an individual program fitting to the visitor group.

In 2016 we converted an old movie room to a state of the art media room. In cooperation with Media Informatics students we developed a quiz for three different levels and various themes like earthquakes, volcanoes, history and plate tectonics in general. Starting the quiz, a virtual earthquake destroys a building which will be reconstructed if the participants answer multiple choice questions correctly. Though, the rebuilding of the house is faster if a group of participants plays together.

A first statistic evaluation of the media room shows that the quiz is greatly accepted by the visitors: The quiz is played on an average six times per hour and abortion rate is very low with less than 10%.