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Interactive Volcanoes - Exploring the volcanic activity around the Mediterranean Region

Ramona Mercieca
Malta (ramer.16@hotmail.com)

Since we live on a small island and very close to the most active volcano in the Mediterranean the students are guided to embark on an interactive journey to learn more about these powerful wonders of nature.
The teacher starts by projecting the initial world map of Google Earth and zooms down to locate the Mediterranean turning on the volcanoes layer to view the location of volcanoes around the Mediterranean Sea. Students are provided with an outline map of the Mediterranean and by referring to an atlas or Google Earth they build up a map showing the distribution of the most important volcanoes in the Mediterranean. They have to identify and name each volcano and indicate in brackets the date of its last eruption. Students will then watch images and video footage of volcanoes and volcanic activity that took place in the Mediterranean in order to introduce the main characteristic features of these landforms.
The students get closer to the volcanoes through the use ClassVR. When students put on the ClassVR headset they get a totally new perspective on the quite abstract scientific concepts and get to interact with something far more tangible than that provided by the alternative flat 2D image.. Through the use of virtually reality they end standing close to a volcano and see it erupt and following that they will enter a 3D cutaway model of an active volcano, showing the magma chamber, lava and ash layers, and a branch pipe. This is perfect for exploring how volcanoes form. Following the ClassVR session students can label a cross-section diagram of a volcano.
Through research the students are encouraged to build a fact file on one volcano with information about its shape, location, state (active, dormant, extinct), descriptions of past eruptions and damage done. These investigations can be displayed in the classroom for students to read and discuss each other's findings.
The activities presented get all students fully engaged in the active learning process. Such a student-centred approach promotes discovery learning, strengthens students' motivation, promotes peer communication, reduces disruptive behaviour, builds student-teacher relationships and above all allows students to become responsible participants in shaping their own learning.
Actually, this is not the final conclusion of the session: other apps are then used to do revision sessions later...