

Tovel Lake's Mystery

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In the 8th class, the students study about Geology. The didactical strategy used to teach this subject is Clil. CLIL stands for Content and Language Integrated Learning and refers to teaching subjects such as Science through a foreign language. It's very important to use many different strategies (for example games, pictures, media playing and videos) to teach Science in another language and it's relevant to introduce the concepts with few, clear and accurate words. In team with the English teachers, we analyse, the earth's layers, the earthquakes, the volcanoes and other natural phenomena like subduction and orogeny.

We start with a global analysis, but our goal consists in focusing on local phenomena to understand in the best way the global causes and their effects.

It's very simple for the students to discover all the information about the moving plates using the Internet or the science book, but it's not so simple to understand how this movement has changed the places where we live. To fully understand the relation among Geology, climatic phases and Geography of the place, we give to the students the example of the Tovel Lake. It is certainly one of the most beautiful lakes in the entire Alpine range with an incredible scientific history for our students. Until 1964, for example, in the summer, the lake turned red. The colour was caused by an alga of the Dinophyceae group: *Glenodinium Sanguineum Marchesoni*.

But the most important fact for our study is linked to the origins of this lake. Tovel was created by a landslide barrier, after a glacial retreat. The falling rocks contributed to shape the current basin in two quite distinct phases: in the first one, the water invaded the central area, while in the second a large landslide was caused by ice and earthquake waves. After the second phase, part of the forest was submerged by water. During the last 10 years, a scientific equipe has been studying this submerged forest and the result of the wood's analysis have provided many important consequences, like, for example, the possibility of setting a date to St. John baptistery in Florence.