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Observing tectonic structures in the region of Valencia, Spain.

Simon Laplanche and Alice Ergün
Lycée Français de Valence, Valencia, Spain (laplanche.simon@ent-lfval.net)

In order to have our students become more interested in science, especially in geology, we decided to take them at the very heart of the region of Valencia for a one-day field trip. Studying geology is often perceived as something boring, so we intended to have them question this idea.
This trip takes place every year with 16-years old students, as we begin to work on the geology theme of our curriculum.
Less than an hour drive, not far from our school, we can easily reach two sites of geological interest: Chulilla and Sot de Chera. These two villages are located in an area made of limestones and calcareous rocks of Mesozoic age. Therefore, we can teach the basis of sedimentology, rock dating, and erosion process.
But most of all, we can see how sediment can be affected by crust movements:
- in Chulilla, the pupils are told to observe and describe a huge normal fault, proving extension movements.
- in Sot de Chera, they can observe folds at differents scales, proving compression movements.

Our pedagogical goals are :
- to make our students understand that geology can be comprehended easily by hiking near their homes, while enjoying the beauty of landscapes.
- to remind them of the basis of geology that they learned in their previous school years, and to help them learn some new vocabulary.
- to make them observe geological structures at different scales (from landscape to rocks), and to link it to the geological history of the region.
- to make simple experiments directly on the field (like pouring acid over a calcareous rock to determine its nature, or measuring dip angle)
- to draw simples sketches (of the fault and folds that are observed)
- to use a geological map.

It has come to our attention that after this trip, the additional geological work we intend to do in our classrooms is better received by our students, as they now understand where the data comes from. It makes more sense to them to use these data as tools to answer a problem. They understand better the importance of observing rocks (including with polarized light microscopy), of knowing how to relate several differents data and of communicating conclusions in an appropriate way. And above all, we feel that pupils tend to reject less studying about geology : they feel more enthusiastic, and therefore, so do we.