



Geology in East Africa

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I had the chance to work in the very beautiful country of Djibouti. This place can be considered as a real open lab for geologists. One of the missions of a teacher is to ensure that students are able to describe and understand how the environment that surrounds them was created. The Afar region is a very interesting area to turn the abstract concept of geology into a very concrete experience.

As you all know, the East African area is the place where human humanity began. So it was particularly interesting to underline interaction between biodiversity and geological mechanism, through climate variation for example. Geological event where part of our everyday life

-Almost everyday in class and at home, we could feel seismic vibrations most particularly on the first floor.

-The school was located only two hours' bus ride from the Assal Lake, a very famous place to illustrate rifting.

-A part of my students has an Afar ethnicity therefore they believed in legends regarding earthquakes and volcanic eruptions.

To develop a real interest for Geology I used various strategies :

-The first method was to take my student to the field. Our field trip would place near the Assal Lake and Ali Sabieh (close from Ethiopian border). The Field exploration enabled not only to collect many rocks but also to take pictures. Then, back in class my student with the result of their investigations; they could reimagined the geological story of the area. We had the chance to be helped by university researchers in Geology. After that we could replace the local knowledge in the global tectonic model.

This approach allowed student to understand how geological knowledge progress and how the model of global tectonic has been conceived.

-The second method was to consider them as real Geologists so, in order to do so we had a seismic station installed in the class. We developed a partnership with French universities and the pupils would send them seismograms of the area to their university counterparts. Furthermore, we would using the station directly in class on a regular basis, which would prompt us to use data (and to do tasks based on them) in real time.

-The third method was to develop in the youngest pupils an interest for Geoscience. I worked with a primary school on lab activity. The main purpose was to help them to understand where do the rocks comes from and what they will become on the geological time scale. Most of the kids where going to the beach every day without even knowing where the sand comes from and what is was. The lab activities were the occasion to use scientific tools, such as binoculars and microscope in order to sharpen they observations skills.

It is always very gratifying for a secondary school teacher to see how excited the young students were during our lab-based task..

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