



Minerals and rocks, what a passion! A CLIL unit in an Italian lower secondary class

Piera Papini (1) and Beatrice Fiorineschi (2)

(1) Istituto Frank Carradori, Pistoia, Italy (piera.papini@alice.it), (2) Istituto Frank Carradori, Pistoia, Italy (beatrice.fiorineschi@alice.it)

CLIL means Content and Language Integrated Learning. Since September 2014 the teaching of a discipline in a foreign language has been compulsory in the final year of all high schools of Italy and recommended in lower secondary schools.

So I decided to take part in a training course about “CLIL in Sciences teaching “ that ANISN (Associazione Nazionale Insegnanti di Scienze Naturali) was being held in Bologna from October to December 2014.

There I learned that CLIL is much more than the translation of a traditional lecture to a foreign language. It is actually a set of new methodologies, largely based on Bloom’s taxonomy, and making use of many kinds of technical support often referred to as “scaffolding” . It provides a context to improve communication because “natural language is never learned divorced from meaning”. But CLIL is even more effective in order to learn the content, which is more important here than in immersion methodology. In the course we had to chose a subject , develop it in a structured unit, experiment the unit in a class of ours, using just English, and finally present it to the colleagues in Bologna.

I decided to do the activity with 13 year old students. We had started the science lessons with chemistry, this year and I needed a subject consistent with that. So the choice was: Minerals! Because they belong to chemistry, being chemical compounds. Subsequently, even when the course in Bologna had come to an end, we continued with: Rocks! Since the pupils were pleased to do it and I was satisfied with their results. I worked together with my colleague who teaches English in the same class.

We developed the subject following the instructions I had been given at the course: we showed the students videos found on line, providing them with the script; we made the text easier for them; we made them work in couples; I organized lab activities to improve learning skills to which they could apply their knowledge . Cross – curricular links are an important advantage of such a unit; minerals and rocks are linked to physics, chemistry, geomorphology, and also to geography , history, economics, and maths.

The follow up activities were even more interesting. When we found that the weathering of feldspars to clay can increase the probability of a landslide, I gave the students an example of one of the most famous landslides in the world, Vajont. The students were so interested that they looked by themselves for further information about that tragedy, and the context in which it was possible to happen. Another concept which turned out to be fascinating to the students was how rocks can tell us the geological history of a region .

The results of the activities were quite good in Sciences and good in English; the students accepted the challenge, they played along with us and had fun explaining their activities during the open labs devoted to the families of younger students.