Experimental classes and outdoor activities: a successful way of learning
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**Introduction**

Today, more than ever, in this ever-changing Planet, humanity faces new and great challenges, which require citizens to have clear opinions and attitudes regarding scientific issues. Scientific literacy is therefore, fundamental for the conscious and full exercise of citizenship, and the contribution of experimental science teaching in its promotion is essential and unquestionable.

As science teachers, it is our responsibility to stimulate practical and experimental work, in the laboratory and out in the field, as well as to provide our students differentiated educational experiences.

In our School Cluster, the Biology and Geology teachers are developing many activities in order to promote the scientific literacy of future generations.

**Objectives**

- Include the largest possible number of experimental classes in curriculum planning;
- Promote student participation in open labs, science days and school shows;
- Promote student participation in national and international projects like Portuguese Biology Olympiads;
- Offer students differentiated educational experiences, like field lessons and field trips, which often involve Museums, Science Centres, Colleges and Institutes, places with geological and biological interest, like monuments and Protected Areas;
- Stimulate students to participate in extracurricular activities, namely our Science Club.

**Methodology**

- **FIELD LESSONS**
  - Promote the interconnection between theory and practice, between school and reality, facilitate satisfaction and highly motivating in the learning process.
- **FIELD TRIPS**
- **SCIENCE CLUB**
  - Created to reinforce, develop and train the inherent skills of experimental work, stimulate interest in Earth and Life Sciences, foster critical and scientific spirit and promote environmental awareness and values.

**Conclusions**

Experimental science teaching is very important for motivating students, giving them the tools and developing the skills that they will need in the future. In our School Cluster the promotion of scientific literacy has generated very good results: hundreds of science and technology students have today a successful career and work for a better world. Ultimately the merit will always be theirs, but we are proud to have contributed to their formation.