

Projects in Middle and High Education to participate in the Young Geoscientists Congress

Gina Pereira Correia (1) and Estefânia Pires (2)

(1) Sé Middle and High School, Lamego, Portugal; CITEUC - University of Coimbra's Earth and Space Research Centre, Coimbra, Portugal (gina_maria@sapo.pt), (2) Pombal Middle and High School, Pombal, Portugal; CITEUC - University of Coimbra's Earth and Space Research Centre, Coimbra, Portugal (estefania_pires@hotmail.com)

In the scope of Geosciences teaching, middle and high school students developed a wide range of projects whose results were reported in the Young Geoscientists Congress (YGC). The YGC is an initiative of the Department of Earth Sciences (DES), University of Coimbra (UC), Portugal, which aims to promote working relationships and collaboration between teachers and students of middle and high schools and professors of this institution. This Congress started in the academic year of 2005/2006, has 13 uninterrupted editions, and we participated in 10 editions with 32 projects. For each edition, the Congress defines a specific theme and the students prepare a scientific abstract and a poster. The purpose of this work is to disclose and to highlight the importance of the participation in the Congress, and to reveal work methodologies. The participation in the YGC results from a joint effort of the students and their teachers who develop innovative projects. The topics covered are integrated into the concepts of Geosciences and the studies are carried out in the region where the school is located. Throughout most of the school year, students and teachers are involved in tasks that are organised in three distinct phases: pre-congress, congress and post-congress. In the pre-congress phase, the project is initially planned with the definition of the working group, the specific theme and the methodology, followed by its development. The final product is a scientific abstract from which a scientific poster is built. The follow-up of the first phase is done by the teacher who proposes the project and, in a more advanced stage, by professors of the DES. This phase ends with the acceptance of the abstract and poster and also with the selection of the abstracts for the oral presentation by the promoting institution. In a second phase, the students make their poster and/or oral communications. During the Congress, participants can also benefit from fieldwork and laboratory activities, mineral fairs or exhibitions. In the third phase the projects are presented to the local educational community with initiatives such as lectures, exhibitions at science fairs, on the web page, school newspaper and in the local and regional press. In one of the editions there was also an opportunity to publicise the projects on a national broadcast radio. Work methodologies used in the projects were diverse, such as, bibliographic research, documentary analysis, fieldwork and laboratory activities, qualitative and quantitative analysis, and work project, with a predominance of fieldwork activities and work project, which we consider relevant, given that the general theme of the projects falls within the field of Geosciences. This activity motivates the students to study the sciences contributing, simultaneously, to solve problems of their daily lives, acquisition of knowledge and development of skills. The development of projects of this type, taking into account the curriculum and the potentialities of the region, where the schools are inserted, is considered an innovative and motivating strategy to be implemented in middle and high schools, in Science Education in general and Geosciences in particular.