



## Selection and preparation of a national team for International Earth Science Olympiads (IESO): the Italian case

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The International Earth Science Olympiads (IESO) are the most recent among the international Science Olympiads for secondary school students. In fact they were first held in 2007 in South Korea by initiative of the International Geoscience Education Organization (IGEO).

IESO competition consists in written and practical tests, based on the IESO syllabus, prepared by a local Scientific Committee, then approved by the national delegation mentors who, finally, translate the questionnaires into their own language. The competition ends with an International Team Field Investigation, intended to foster co-operation between students of different countries.

At the moment really few European countries take part in IESO. Italy participated in IESO Olympiads since 2009 and was the first European country that took part with a full selected team. The Italian experience about IESO students selection and preparation could be useful for other European countries interested in participating to this competition.

The selection of Italian IESO students is achieved by means of a national competition, the "Olimpiadi delle scienze naturali", run by ANISN (the Italian National Association of Natural Science Teachers). This association, within the same national contest, chooses students of 9/10-grade (14-15 years old) for the International Earth Science Olympiads and students of 11-13 grade (16-18 years) for the International Biology Olympiads.

The "Olimpiadi delle scienze naturali" are disputed in upper secondary schools all over the country: in 2010 there were 411 participating schools. In this national selection there are three steps: the school phase, the regional phase and the national phase. The best 10 students from the national selection attend a preparatory workshop for the international competition.

In 2010 the students workshop was managed by ANISN and by the University of Camerino (Earth Science Department) from 10 to 17 July. The preparatory activities, held by school teachers and university professors and researchers, ranged from theoretical lessons to simulation tests, practical laboratories and fieldwork; the topics covered, according with IESO syllabus, were geology, geophysics, oceanography, meteorology, astronomy and environmental sciences.

During the workshop the students lived in Camerino University Campus and were tutored by four science teachers appointed by ANISN. Two of them (the authors) were the student mentors at IESO.

In this work we analyse the students' experience during the preparatory activity and during IESO, considering the impact of these events in the schools and in the media.