

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

Giulia Realdon¹, Roberto Greco²

¹ Istituto Superiore d'Istruzione Statale "M.Buonarroti" Monfalcone, Italy, giulia.realdon@virgilio.it ² Liceo Classico Statale "L.A.Muratori" Modena, Italy, roberto.greco01@yahoo.it

What are IESO?

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

IESO competition consists in

1. written tests
2. practical tests

based on the IESO syllabus, prepared by a local Scientific Committee and approved by the national delegation mentors who translate the questionnaires into their own language;

3. International Team Field Investigation intended to foster co-operation between students of different countries.



The Italian participation

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 procedure

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). Within the same national contest:

- students of grades 9-10 (14-15 years old) are chosen for the International Earth Science Olympiads
- students of grades 11-13 (16-18 years) are chosen for the International Biology Olympiads (IBO)

In 2010 411 Italian schools took part in the contest through three steps:

1. school phase
2. regional phase
3. national phase.

The best 10 students from the national selection attended a preparatory workshop for the international competition. The best 4 among them were chosen to be the Italian team.

Some organisational aspects:

- a working group of ANISN teachers prepares the tests of the regional phase, run on the same day throughout the country
- an ANISN appointee collects the registrations of the schools in every region
- the national phase is organized by ANISN National Executive Council and lasts 3 days



The training of the students

In 2010 the training 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, included:

- theoretical lessons
- simulation tests
- practical laboratories
- 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.

The impact on the schools and on the media

The Italian participation in IESO was covered by local and national media.

The finalist team was received by the Italian Minister of Education and awarded a national prize for excellence in study.

At present (24/03/2011) 443 Italian school are registered for 2011 national Olympiads.

