

Paper Number: 4896

Ten years experience of International Earth Science Olympiad: what is the worldwide impact on Earth Science Education?

Greco, R.¹, Baldin C.², Carneiro, C.D.R.³

¹ Univ. of Campinas, Unicamp, Campinas, SP, Brazil. Graduate Program of History and Teaching of Earth Sciences. greco@ige.unicamp.br,

² Univ. of Campinas, Unicamp, Campinas, SP, Brazil. Student, Graduate Program of History and Teaching of Earth Sciences, carolinabaldin@ige.unicamp.br

³ Univ. of Campinas, Unicamp, Campinas, SP, Brazil. Graduate Program of History and Teaching of Earth Sciences, cedrec@ige.unicamp.br

International Earth Science Olympiad (IESO) is one of the more recent international science Olympiads for school students. From the beginning in South Korea in 2007, it is held annually in a different country. The International Geoscience Education Organization (IGEO) promotes and coordinates these events. The best students, after being selected by a corresponding Olympiad at the national level, attend the international events. Each national team is generally composed by 4 schools students and two mentors but even guest students and observers are welcome. The official language is English but it is possible to translate the test in the participants' mother tongue languages. The tests are composed of two parts: written and practical. The topics of the test are described in the IESO Syllabus and include geosphere, hydrosphere, atmosphere, planetary system and Earth System. IESO includes non-competitive tasks, where students work in groups mixed for nationality in field investigation – the International Team Field Investigation (ITFI) and a research project – the Earth Systems Poster (ESP) which they then present their findings to a panel as oral or poster presentations. More than 45 countries have participated since 2007.

The IESO Statutes define the five main aims for the competition:

- to raise student interest and public awareness about Earth Science,
- to enhance Earth Science learning of school students,
- to improve the teaching of Earth Science in schools,
- to promote international cooperation in exchanging ideas and materials about Earth Science and Earth Science Education,
- to encourage friendly relationships among young learners from different countries, and promote talented and gifted students in earth science.

After almost a decade of IESO experiences, we present the outcomes of these events and analyse the level to which the IESO has met the stated aims. We have analysed the available data on the Olympiad included in official documents such as the website, annual reports and country presentations of their own national selection process. Additional information includes questionnaires and interviews with organizers and participants. The research shows that the IESO has caused some changes worldwide but more focused work is necessary to completely achieve the IESO aims.

