

OPEN LETTER FROM LAIGEO TO THE AUTHORITIES AND THE GENERAL PUBLIC

September 15, 2020

On September 15, 2020, the Latin American Chapter of the International Organization for Geosciences Education sent the following letter to the authorities and the general public:

After a series of meetings held in recent months, in which the issue was debated in extense, LAIGEO, the Latin American Chapter of the International Geoscience Education Organization (IGEO), decided to make public its deep concern due to the enormous perceptible deficit in compulsory education programs in Latin America and the Caribbean with respect to teaching in Earth sciences.

The latest research by UNESCO (Montevideo) on the teaching of Earth sciences in the region, as well as the experience of the scientists and teachers who are members of LAIGEO, clearly indicate the scarce or no curricular presence of Earth sciences in primary and secondary education, contrary to its usual presence as a career at the university level in the same countries. Their absence at pre-university levels is not compensated by their presence in university careers, since access to them is minimal compared to other disciplines such as law, architecture or economics. For example, the lack of basic scientific knowledge on the subject in society makes the task of information and dissemination extremely difficult.

LAIGEO, in compliance with its objectives and with the purpose of contributing to the improvement of this situation, has considered it a duty to alert the citizens, authorities, the media and the scientific community of the region of this situation and urges all They to generate the necessary initiatives to promote a political and academic discussion that allows stimulating the dissemination of knowledge in the area of Earth sciences outside of scientific and specialized professional fields and especially at the levels of primary and secondary education.

Capítulo Latinoamericano de la International Geosciences Education Organization (LAIGEO)

E-mail: igeo.latin@gmail.com; Facebook: <https://www.facebook.com/igeolatinoamerica/>, el LinkedIn: <https://www.linkedin.com/groups/10396771/>; Twitter: [@LAIGEO1](https://twitter.com/LAIGEO1).



IGEO oversees and supports the annual International Earth Science Olympiad (IESO) and is affiliated to and sponsored by the International Union of Geological Sciences (IUGS)

At the same time, it recommends that both in literacy and in the dissemination of Earth sciences the humanistic approach of geoethics be systematically incorporated, in order to promote the comprehensive education of citizens and their commitment to sustainable development. Its insertion in formal education implies research and reflection on the values that sustain appropriate behaviors and practices, wherever human activities interact with the earth system, the ethical, social and cultural implications of knowledge, education, research, practice and communication in Earth sciences (Di Capua & Peppoloni, 2017). In this sense, the role of educators is essential to promote society's awareness of the geosphere as "our home" and in the transfer of scientific information applied to the development and wellness of the communities in the region.

For this, it is necessary to recognize that there are different levels of action that require different initiatives, by different actors who should coordinate their work within the framework of consensual and lasting educational and academic policies. Among the most important actions that must be taken, the following can be pointed out:

1. Promote the recognition of the importance of community Earth science literacy; so that it can include, for example, the influence of geological processes in the distribution of mining resources, in adequate urban planning and in the distribution, frequency and intensity of geological hazards that affect the countries of the region. In this way, a sufficiently informed society will contribute to the choice of better decisions that contribute to sustainable development.
2. Promote the implementation of the necessary reforms in the contents of the educational curriculum, in order to incorporate the necessary knowledge of Earth sciences, in an integrated way with the other natural sciences and with a systemic perspective that highlights the relationships that regulate the integral functioning of planet Earth.

Capítulo Latinoamericano de la International Geosciences Education Organization (LAIGEO)

E-mail: igeo.latin@gmail.com; Facebook: <https://www.facebook.com/igeolatinoamerica/>, el LinkedIn: <https://www.linkedin.com/groups/10396771/>; Twitter: @LAIGEO1.



IGEO oversees and supports the annual International Earth Science Olympiad (IESO) and is affiliated to and sponsored by the International Union of Geological Sciences (IUGS)

- Promote academic, professional and curricular recognition of the work of those involved in the training of human resources, in the work of dissemination and extension and educational research in the teaching of Earth sciences. Without a positive assessment of these activities, it will be very difficult to encourage new generations to prepare in these areas of study.

LAIGEO as an organization, and each of its members, make themselves available to the authorities, institutions, media and civil society organizations to contribute to this task, whose purpose, as has been indicated, is none other than to promote a quality Earth science education for all for the good of our nations.

LAIGEO COMMITTEE

Ana María Castillo Clerici - General Coordinator (University of Asunción, Paraguay)
Sandra Villacorta - Secretary General (Peruvian Section of the IAPG, Peru)
Anete Maria de Oliveira - Scientific Coordinator (University of Brasilia, Brazil)
Rita Rodriguez - Communication and Image Coordinator (Technological University of Panama)
María Julia Solari - Planning Coordinator (University of La Plata, Argentina)
Diego Arias Regalía - Web Coordinator (University of Buenos Aires, Argentina)
María Jesús Bravo - Dissemination Coordinator (University of Concepción, Chile)
Diego Lopez - Logistics Coordinator (University of Asunción, Paraguay)

Reference

Di Capua, G., Peppoloni, S. and Bobrowsky, PT (2017). Cape Town Declaration on Geoethics. *Annals of Geophysics*, 60.

Capítulo Latinoamericano de la International Geosciences Education Organization (LAIGEO)

E-mail: igeo.latin@gmail.com; Facebook: <https://www.facebook.com/igeolatinoamerica/>, el LinkedIn: <https://www.linkedin.com/groups/10396771/>; Twitter: @LAIGEO1.



IGEO oversees and supports the annual International Earth Science Olympiad (IESO) and is affiliated to and sponsored by the International Union of Geological Sciences (IUGS)