

The GLESE Program

The Growth of Leadership in the Earth Science Education Program

A. Introduction

There is a wide gap between the importance of Earth sciences for humankind's quality and ability of life and the low profile of the educational potential of Earth science in schools. The IGEO was established 22 years ago to narrow this disturbing gap. However, so far, its success is partial. Moreover, while the founders of IGEO are getting older, there is insufficient growth of a younger generation of leadership in Earth science education.

B. Goal of the program

To identify potential national leaders in ESE and provide them with a wide range of tools for raising the status of ESE in their countries.

C. The program

The GLESE program will provide its participants with a wide range of practical and theoretical tools for implementing the Earth systems approach with earth science and science teachers.

The program will include a 7-days' workshop (in Israel) and online monthly meetings.

During the workshop, participants will experience and acquire the following facets of the Earth Systems Approach:

- Inquiry-based learning.
- Adjusting the learning for a variety of learners with different competencies.
- Integrating the outdoor environment as an integral component of the learning.
- High-order thinking skills such as System thinking and Logic thinking.
- Environmental insight.
- Lesson plans and innovative educational resources.
- The emotional and social aspects of learning and the learning instinct

Then, the participants will submit a work plan with a schedule for implementing ***The Earth systems approach*** in their education schools.

During the implementation phase of the work plans, the participants will present their progress and the difficulties they encounter. After each presentation, a discussion and brainstorming session will be held regarding possible solutions to the problems that will be raised.

If the budget will allow us, the program will be concluded in a physical workshop where participants present their outcomes and conclusions.

D. A pilot

A pilot of about 10 participants will be conducted in 2023.

E. Who are we looking for?

Earth Science Education is a profession. Thus, educational leadership can only rely on a solid practical and theoretical background—the ability to accomplish what you are preaching for by modeling.

The GLESE is designed for Earth science teachers and researchers who can demonstrate ability and vision.

Educational leadership in Earth sciences also includes creating an active and effective support of leading geoscientists to convince the Ministry and the Minister of Education to incorporate it within the curricula.

Thus, the program will also be open to geoscientists with an educational vision who want to get the tools to act and contribute to raising the status of Earth science education in schools.

The new generation of leaders will be designated from the following three resources:

- Early-career ESE researchers.
- National exemplary ES teachers.
- Geoscientists who are keen on promoting ESE at the school level.

F. Application and criteria for selecting the suitable candidates.

All those who consider themselves suitable candidates for the program are invited to submit the following documents to nir.orion@weizmann.ac.il :

1. CV
2. A motivation letter with this information:
 - My experience in contributing to the promotion of ESE in schools.
 - My vision of ESE in schools (0.5-1 page).
 - What do I expect to gain from participation in the GLESE program?