

Some notes on education.

By Prof. Dr. A. Stein  
(chair - ITC, Netherlands)

On Friday morning, we had two presentations on education. The first was on the GLOBE program, the second was called 'students' given according to the program by three scientists, in reality by two. Both talks clearly aimed at setting up and carrying out joint educational programs. Both identified the importance of teaching, and both clearly identified the need for looking above the individual university programs.

The first talk, given by Dr. Henderson, discussed GLOBE, an integrating activity between students, teachers, scientists and partners. Stakeholders and financiers were identified. Individual disciplines emerge, like soil science, hydrology, ecology and atmosphere. Students actively participate in collecting data, generating the database and in identifying topics for learning. One new initiative to be spread worldwide concerns the GLOBE-by-night program. Students are questioned all over the world about how they see and interpret a night image of (parts of) the world. The GLOBE initiative will be pursued and expanded.

The second presentation consisted of two talks. The first of these (given by prof. Sokolik) identified the educational component in NEESPI. It showed the importance of an active involvement of students, leading to well-tuned courses for specialized education. Interdisciplinarity was an important issue in that respect. The second part of the talk, given by Gordov, identified the importance of education versus capacity building. Teaching has to be done both to students and to society. Teaching is also dynamic, as we are addressing changing problems in environmental science.

The presentations were clear and to-the-point. They raised quite some discussion, mainly having to do with the structure and admissibility of different student programs. Issues of educational quality were not addressed. Important issues to deal with concern the quality of the database as identified by the first speaker, and the realtion of joint educational programs as identified by the second presentation to pre-university teaching in the various countries. Many other issues may be identified as well on this matter. It may be advised that NEESPI has an educational program board that coordinates educational activities and ensures the quality and coherence of the different educational activities.

In the discussion, Nicolai Elanski made further contributions on the availability of data collected by railways in Siberia, like the Trans-Siberia railway. Dr. Anni Reisall mentioned the issue that there are some 100 people in the world who can talk fluently across a variety of disciplines, and not just between chemistry and physics. This is needed in integrated research projects. iLEAPS arranges cross cutting courses and conferences that serve the purpose of synthesis and integration. Finally, prof. Gordov drew attention to a range of seminars (ENVIRONMIS) organized in Tomsk, with various opportunities for young researchers.