



Research School for Teachers, an example from Sweden

Niklas Wästeby (1,2)

(1) Thorildsplans Upper Secondary School, Stockholm, (2) Department of Geological Sciences, Stockholm University

In the autumn of 2008, the Ministry of Education and Research in Sweden started several research schools for active teachers as part of a national initiative to broaden teacher's knowledge. This research school for teachers is a two and a half year investment which will provide the teachers with a licentiate degree. The research school presented here, Climate and Water Resources Development, is focused on upper secondary school teachers who teach in general science, geography, chemistry and physics, and it is conducted as a collaboration between departments at Stockholm University and Södertörn University. The teachers are engaged in research at various institutions, but also serve as a teaching resource in their schools, where they continue to teach part-time.

The activities undertaken in the research school for teachers has a clear focus on sustainable development, particularly related to climate and water resources development. A deeper knowledge of natural science as well as social processes is a prerequisite for understanding the relationships between human activities and ongoing climate and environmental change. The research school for teachers will provide active secondary teachers in-depth knowledge in the field of sustainable development with a focus on water resources and climate evolution, i.e. topics that are essential in today's society in terms of environment-related research and development.

The scientific research is represented primarily by the Departments of Geological Sciences, Meteorology and Physical Geography and Quaternary Geology, at Stockholm University. School of Life Sciences at Södertörn University carries out teaching and research with a multidisciplinary profile and strong environmental coupling. Department of Mathematics and Science Education, Stockholm University, contributes with research expertise in the teaching field.

During the spring semester 2011, the teachers will present their licentiate theses and then return to their respective schools. As a participant in the research School for teachers, it is now time for me to summarize and present my own research and bring experience and new approaches to my school. The aim of my research is to enhance the understanding of water-rock interaction in seismic active areas, and have been conducted at the Department of Geological Sciences, Stockholm University. In addition to a development of my knowledge in my teaching subjects (natural science, chemistry and geography), I have also developed my ability to think and work scientifically. This newly acquired research experience, I intend to develop, together with my colleagues, both within my subjects and the school as a whole.