



**Environment & Health
in Science Education
International Conference
18. – 21. August 2010**



Universität Zürich
Institut für Gymnasial- und Berufspädagogik

Panel of keynote speakers

Rodger W. Bybee

BSCS, Colorado Springs, USA

Justin Dillon

King's College London, GB

Peter Fensham

Monash University, Victoria, Australia

Paul Hart

University of Regina, Canada

Alla Keselman

National Institutes of Health (NIH), Bethesda, USA

Regula Kyburz-Graber

University of Zurich, Switzerland

Constance L. Russell

Lakehead University, Canada

Peter Schulz

Università della Svizzera Italiana, Lugano, Switzerland

Albert Zeyer

University of Zurich, Switzerland

Conference location

University of Zurich

Rämistrasse 71, CH-8006 Zurich

Organizers

Prof. Dr. Regula Kyburz-Graber/Dr. Albert Zeyer

University of Zurich, Institute of

Upper Secondary and Vocational Education

Beckenhofstrasse 35, CH-8006 Zurich

www.igb.uzh.ch

Rationale

Environment and health have always been important learning areas in science education and are gradually becoming more important. Not only are they socially highly relevant regarding sustainable development discourses, but also and particularly they are close to students' interests and needs and can help to open up science to individually relevant questions, especially also for girls.

Nevertheless, these issues have often been neglected in science education research. This may also be a question of methodological difficulties. Traditional pretest and post-test experimental design approaches do presumably not adequately meet the needs of learners and teachers. When it comes to these issues, it is not so much the question of measuring immediate effects of elaborated teaching procedures, but much more the interest to understand how learners interact with complex issues, what concept images of the environment and health they have, how they deal with controversial perspectives in these fields, and what images they have of sciences in this context, and how and why those images have emerged. Researching those ontological and epistemological questions asks for approaches actively involving learners and teachers, for example by participatory research designs. Participants in such research are encouraged to develop learning settings into reflective science classrooms, where students' questions and perceptions are starting points for thoughtful activities and growing awareness of multiple perspectives on complex issues.

The conference will offer keynote lectures by researchers who are prominent in the field, as well as a broad variety of workshops, where both advanced and young researchers present their research studies for in-depth discussions.

Costs

Conference fee: 140 Euro; Social Event (optional): 50 Euro

Hotels

Hotel Leoneck ***: 125 Euro

Hotel Rütli ***: 145 Euro

Hotel Scheuble ***: 115 Euro

Hotel Limmathof **: 95 Euro.

Hotel booking for conference days on: http://www.zuerich.com/de/page.cfm/landingpage_kongress_science_education_2010

Hotel rooms are also available at: Zurich Tourismus, hotel@zuerich.com, 0041 44 215 40 40

Conference schedule

▶ Wednesday, 18.8.10

Afternoon – Welcome address

Environment and Health in Science Education. Regula Kyburz-Graber

▶ Thursday, 19.8.2010

Morning – Concepts/Theory

Keynote 1 Health Literacy – a Link Between Health Education and Science Education. Albert Zeyer

Keynote 2 Science, Environment and Health Education: Towards a Reconceptualisation of Their Mutual Interdependences. Justin Dillon

Keynote 3 The Concept of Health Literacy. Peter Schulz

Afternoon – School practice

Poster Session

Evening

Keynote 4 Scientific Literacy in Environmental and Health Education. Roger Bybee

▶ Friday, 20.8.10

Morning – Empirical Research

Keynote 5 The Impact of Scientific Literacy on Lay Health Cognition. Alla Keselman

Keynote 6 Secondary School Integrated Environmental Studies Programs: An Alternative Approach to Environmental Education in Canada. Connie Russell

Keynote 7 Exploring Critical Pedagogies of Environment and Health in Challenging Both Cultural Narrative and Subjectification Processes of Science Education. Paul Hart

Afternoon – School practice

Poster Group Session

Evening

Social Event / Meeting Book Authors

▶ Saturday, 21.8.10 – Morning

Keynote 8 Preparing Citizens in a Complex World – New Demands on Science Education. Peter Fensham

Podium Discussion and Final Session

Springer Science+Business Media will compile an edited book of the keynote presentations and of selected poster presentations. The book will also elaborate on a theoretical framework for the topic. It intends to provide a platform to further promote the issue of research and development in this area.