



## Introduction

Over the last years, special efforts have been made by a number of European institutions in the fields of science, research and education to develop inquiry-based science education (IBSE) in primary school through joint collaborations.

As a follow up to several European conferences on science education (Amsterdam 2004, Stockholm 2006, Grenoble 2008), this conference intends to contribute to the international agenda on science education in primary school. It will provide a platform for discussion about a variety of outstanding contributions, reflecting the diversity of innovative science education projects, with the aim of setting a milestone towards the generalisation of such an approach in Europe.

Co-organised by the Freie Universität Berlin, the Berlin-Brandenburg Academy of Sciences and Humanities and the Pollen FP6 EU project, this conference will focus on 4 major issues around IBSE in primary schools in Europe:

- inquiry-based science education as a key approach
- community participation and support for dissemination
- · involvement of the scientific community
- science and cross-disciplinary teaching.

The conference programme includes key speakers, 4 panels, video presentations, exhibition stands and poster sessions.

Around 200 participants from across Europe are expected, including members of the scientific community, policy makers on science education and teacher trainers. This event will be held at the Berlin-Brandenburg Academy of Sciences and Humanities.

On the eve of this conference, two seminars will gather the POLLEN coordinators and the German working group to draw the main conclusions about the project and to prepare future collaborations.

The scientific committee of the conference is composed of the following distinguished persons:

- Prof. Georges Charpak, Chairman of Honour Nobel Prize for Physics 1992,
   French Academy of Sciences
- Prof. Peter Csermely, Semmelweis University, Hungarian National Talent Support Council
- Prof. Mauricio Duque, Pequeños Científicos, University of the Andes, Colombia
- Prof. Sven-Olof Holmgren,
   Royal Swedish Academy of Sciences
- Anna Pascucci, President of the National Association of Science Teachers, Italy
- Prof. Pierre Léna, Delegate for education,
   French Academy of sciences
- Prof. Dieter Lenzen, President,
   Freie Universität Berlin
- Sally Goetz Shuler, Executive Director,
   National Science Resources Center, USA
- Prof. Günter Stock, President,
   Berlin-Brandenburg Academy of Sciences
   and Humanities
- Prof. Karen Worth,
   Education Development Center, USA

# **Programme**

No fees will be charged to participants for attending the conference. All communications will be delivered in English. Open for all participants on the 29<sup>th</sup>.

#### Thursday 28 May 2009

Botanical Garden, Freie Universität Berlin Königin-Luise-Straße 6-8, 14195 Berlin

- 12.30 Welcome Prof. Dieter Lenzen (Freie Universität Berlin)
- **12.**45 Lunch
- 13.30 Pollen Working group Main achievements and extention of the network Closed workshop (for Pollen members only, programme will follow)
- 13.30 German Working group TuWaS! the follow-up program for Pollen in Germany - Background topics
  - Will Germany have a qualified workforce in the future?
     Dr. Carsten Schröder (acatech, German Academy of Science & Engineering)
  - Impact of inquiry-based science programs on student achievement Dr. Michael Klentschy (San Diego State University, USA)
  - How to scale up an inquiry-based science education program Sally Goetz Shuler (National Science Resources Center, USA)
  - The important roles of business and industry in inquiry-based science education. Dr. Anders Hedberg (Hedberg Consulting LLC, USA)
- 15.30 Break / Exhibition stands
- 16.00 German Working group Strategy for the future of TuWaS!
  - Development of TuWaS!, an inquiry-based science education program in Germany. Dr. Petra Skiebe-Corrette (Freie Universität Berlin, Germany)
  - Discussion Points
    - Adapting TuWaS! to different German states
    - Starting a TuWaS! pilot
    - Scaling up TuWaS!
- 17.30 Break / Exhibition stands
- 18.00 Dinner

#### Contact and registration:

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#### Friday 29 May 2009

Berlin-Brandenburg Academy of Sciences and Humanities, Leibniz Hall Markgrafenstrasse 38, 10117 Berlin

- 9.00 Welcome
  - Prof. Günter Stock
  - (Berlin-Brandenburg Academy of Sciences and Humanities)
  - Prof. Christine Keitel-Kreidt (Freie Universität Berlin)
- 9.30 Panel 1 Inquiry-based science education (IBSE) as a key approach
  - The strategic importance for Europe of science education in the Lisbon framework. Jean-Michel Baer (DG Research, European Commission)
  - A long-term model for IBSE in primary school: the French case Prof. Pierre Léna (Academy of Sciences, France)
  - An Australian innovation in inquiry-based primary science education Prof. Mark Hackling (Edith Cowan University, Australia)
  - Evaluation of IBSE pedagogy and programs Prof. Wynne Harlen (University of Bristol, UK)

Moderator: Ana Serrador (DG Education and Culture, European Commission)

- 11.00 Break / Exhibition stands / Press briefing
- 11.30 Panel 2 Community participation and support for dissemination
  - The role of science centers in the community: a meeting point for scientists, teachers and the public
     Dr. Ana Noronha (Ciencia Viva, Portugal)
  - Not just funding: contributions from charitable foundations Prof. Derek Bell (Wellcome Trust, UK)
  - 12 years adapting the NSRC approach in Sweden: a model for scaling up Prof. Sven-Olof Holmgren (Royal Swedish Academy of Sciences, Sweden)
  - Strategy for dissemination of Pollen in Germany Dr. Petra Skiebe-Corrette (Freie Universität Berlin)

Moderator: Pierre-Antoine Ullmo (PAU Education, Spain)

- 13.00 Buffet / Exhibition stands
- 14.30 Panel 3 Involvement of the scientific community
  - The role of the scientific community as a stakeholder
     Dr. Carsten Schröder (acatech, German Academy of Science & Engineering)
  - Supporting teachers through scientists' involvement Dr. David Jasmin (La main à la pâte, France)
  - Practical work in schools: What does the research tell us?
     Dr. Justin Dillon (King's College London, UK)
  - The European Space Agency's involvement in science and technology education: a must to build tomorrow's "space workforce" Hugo Marée (European Space Agency)

Moderator: Prof. Yves Quéré (Academy of Science, France)

- 16.00 Break / Exhibition stands
- 16.15 Panel 4 Science and cross-disciplinary teaching
  - Cross-disciplinary science Prof. Tina Jarvis (University of Leicester, UK)
  - Stimulating acts teach mathematics as an experimental science Prof. Peter Baptist (University of Bayreuth, Germany)
  - The science and literary connection: myth or reality?
     Dr. Michael Klentschy (San Diego State University, USA)
  - Curious minds cross disciplinary borders
     Prof. Jan de Lange (Program VTB-Pro, Netherlands)

Moderator: Prof. Ana Blagotinsek (University of Ljubljana, Slovenia)

17.<sup>45</sup> Conclusions & closure: Prof. Reinhard F. Hüttl (acatech, German Academy of Science and Engineering)

Pollen is a 12 country initiative coordinated by La main à la pâte, Ecole Normale Supérieure de Paris, France

Further informations: www.pollen-europa.net

### **Supporting institutions:**

















