PENCIL Science Teachers Conference
14 - 16 June 2007
Technopolis
Mechelen, Belgium

PENCIL Science Teachers Conference 2007

The final PENCIL Science Teachers Conference is a unique opportunity to participate in workshops and debates on how schools and science centres can come together at the forefront of science education.

This Conference will give concrete examples of best practice from 14 European pilot projects, covering a wide range of topics and student age groups. These projects have been tested and evaluated in schools, as well as in science centres and museums. Using these results, the Conference offers teachers pragmatic guidelines on the following key areas:

- The introduction of new topics in science;
- New approaches to teaching and learning traditional subjects; and
- Building relationships between schools and science centres and museums.

Teachers will have the chance to network and exchange their experiences with colleagues from all over Europe.

This Science Teachers Conference is organised within the PENCIL project (Permanent EuropeaN resource Centre for Informal Learning), a large scale European project, funded by the European Commission’s Directorate General for Research as part of Science and Society, to develop and test innovative methods for science teaching via a number of pilot projects.

PENCIL, which is coordinated by Ecsite (The European Network of Science Centres and Museums), combines field programmes and academic research with the aim of identifying the keys of success that transform informal science activities into innovative quality tools for science teaching. 14 science centres and museums have created networks involving schools, pupils, teachers associations, research laboratories, educational authorities and education and science communication specialists to run Pilot Projects on new ways to teach science.

A web based European science education portal, called Xplora.org, uses the most advanced communication technology to manage the project, set up the exchanges between partners and enable continuous monitoring and demonstration of the projects to the science teachers’ community. The members of this network are the core users of Xplora.

The first PENCIL Science Teachers Conference was held at CERN, in Geneva in June 2006. After the success of this initial event, the second and final Teachers Conference in Mechelen will use the 14 PENCIL pilot projects as a starting point to highlight best practise through workshops and presentations, and to spark debate on the issues that arise when schools and science centres work together.

Discovery Days Advanced Technologies meet Science and Culture

On Saturday 16th June 2007, Technopolis® will host a Discovery Day. Participants at the Conference will have the chance to see how new technology can transform science museum visits in the Doehoek room.

Discovery Days presents the Virtual Manscepebouck. This augmented reality technology allows science museum visitors to interact with historical artefacts, turning the pages of an ancient manuscript in a way that would be impossible in the real world. This exhibit allows visitors to learn about cultural heritage using a futuristic interface.

At Technopolis®, Discovery Days participants will also have the chance to try out wearable computers and intelligent sensors that make everyday life into a zone for experimentation, data collection and storage. The system is the result of the In the Lab Of Tomorrow (InLOT) project which introduces innovation both in pedagogy and technology, reconnecting science with high school students’ day-to-day lives.

During 2007, eight Discovery Days will be organised in cities across Europe, building up to a final three-day International Conference in European Science Week in November. The Discoveries on offer are the advanced technologies that can now be used by young visitors of science centres and museums, in order to improve their experience of the visit.
Day 1 - Thursday 14th June 2007

From 11:00 – 13:00 buses circulate between hotels and Technopolis®

11:30 Registration (F)*
12:30 Lunch (F)
14:00 Opening words (K)
   Catherine Franche, Executive Director, Ecsite, Brussels, Belgium
   Stephen Parker, Deputy Head of Unit, Scientific Culture and Gender Questions, Direction for Science, Economy and Society, Directorate of General Research, European Commission, Brussels, Belgium
   Erik Jacquemyn, Chief Executive Officer, Technopolis®, the Flemish Science Centre, Mechelen, Belgium

14:30 Plenary presentation:
   What science centres can do for you (K)
   Catherine Franche,
   Opening words (K)
   Brussels, Belgium
   CDT – Conference closes. Bus transfer to the hotels

Day 2 - Friday 15th June 2007

8:30 Bus transfer from hotels to Technopolis®
9:00 Plenary presentation:
   Making the most of students’ motivation (K)
   Hannu Salminen, Head of Research and Development, Heureka, Vantaa, Finland
   Christophe Chaffardon, Learning Manager, Cité de l’Espace, Toulouse, France

10:30 Coffee break / Poster browsing session (F)

11:00 Topics in science - choice of three parallel workshops:
   (a) Environmental Issues (D)
      Anne Solli, Project Coordinator, Universeum, Gothenburg, Sweden;
      Maria Adlerborn, Science Consultant, Teknikens Hus, Gothenburg, Sweden;
      Paul Cox, Learning Manager, and Caroline Johnson, Project Coordinator, National Marine Aquarium, Plymouth, UK
   (b) Maths and History of Science (O)
      Antonio Gomes da Costa, Director of the Education and Communication Department, Pavilion of Knowledge - Ciência Viva, Lisbon, Portugal;
      Silvana Barbacci and Jacopo Tonini, Project Coordinators, IMSS, Florence, Italy
   (c) Chemistry and Laboratories (C)
      Hannu Salminen, Head of Research and Development, Kati Tyystjärvi, Project Coordinator, Heureka, Vantaa, Finland

12:30 Lunch at Technopolis® (F)
13:00 Plenary feedback from workshops (K)
14:00 Poster session with presenters (F)
15:30 Workshops - choice of two parallel workshops:
   (a) eCourses (D)
      Karl Samnow, Project Manager, European Schoolnet, Brussels, Belgium;
      Serena Goracci, Elena Mosa and Palmira Ronchi, Project Manager, NEMO, Amsterdam, Netherlands
   (b) Building Relationships (C)
      Prof. Emilio Balzano, Responsible for the Technical School for Teachers, and Marco Serpico and Francesco Cuomo, Research Associates, Didactics of Physics Group, University of Naples, Italy

Day 3 - Saturday 16th June 2007

9:00 Bus transfer from hotels to Technopolis®
9:30 Three plenary presentations: (K)

Xplora Portal
   Karl Samnow, Project Manager, European Schoolnet, Brussels, Belgium

Resource Centre
   Prof. Emilio Balzano, Responsible for the Technical School for Teachers, and Marco Serpico and Francesco Cuomo, Research Associates, Didactics of Physics Group, University of Naples, Italy

Professional Development
   Serena Goracci, Elena Mosa and Palmira Ronchi, European Project Team, INDIRE, Florence, Italy

11:00 Coffee break / Poster browsing session (F)
11:30 PENCIL and other EU Projects (K)

13:00 Conference closes. Bus transfer to the hotels

Nucleus is a cluster of EU projects funded by the European Commission’s Directorate General for Research, as part of the European Science Education Initiative. The cluster comprises: PENCIL, ESTI, CISCI, Scienceeduc and Volvox.