Science on Stage – Wolfsburg Conference

By Carlo Nati and Linda Giannini

calip@mbox.panservice.it

In the last years the attention of researchers in the area of formative process was focused on the evaluation of students’ competence about scientific topics. TIMSS and PISA studies show the interest of the E.U. about the issue. Besides these large international studies, several E.U. funded research projects where launched; they are aimed at disseminating scientific culture among young people, and to analyze critical points in the learning process of scientific disciplines. One of such project is “Science on stage”.

The goal of this project, promoted by the EIROForum committee, is to gather all the best, innovative, stimulating ideas available in Europe for the diffusion of knowledge in the area of physical, chemical, biological science.

The Wolfsburg Conference was held from the 22nd to the 24th of September, 2006, and was organized by “Science on Stage Deutschland”. The conference was a milestone of a two-year period, dedicated to the change and innovation of scientific teaching process, and, in particular, the discussion was about teaching strategies, support materials, and the contexts –formal, as well as informal– of learning/teaching.

The German committee extended the invitation also to the other nation committees involved in the project and planned several seminars and laboratory activities that were held at the European Wolfsburg School and at the wonderful Phaeno Science Center, designed by the Anglo-Iranian architect Zaha Hadid.

The opening session started with the speech of the organizing committee, and the presentation of some teaching experiences of European schools. In the subsequent days was presented the journal “Teaching science in Europe”, addressed to teachers and people working in the field of teaching. It describes the experiences of some thematic workshops that involved, since 2004, many teachers from different countries about the issue of scientific teaching. All the involved workgroups were characterized by a common factor, which is the interdisciplinary and “practical” approach. The discussions about some key issues, such as the scientific teaching in primary schools, the interdisciplinarity, the rule of experiments in scientific teaching, the relationship between art and science, the astronomy at school, were carried on inside each relevant working group. Starting from the consideration that cultural background is the base of scientific teaching process, the actions of “Science on Stage” try to strengthen the international discussion among the teachers, analyzing and sharing the different points of view and respective cultural influences.

The conference helped to spread good practices, new methods and techniques, also outside the traditional area of specialists, breaking some consolidated traditions, and leading to an approach based on the direct experience of scientific phenomenon. People involved in workgroups used the website configured by the organizers, enriching it with their teaching experiences, making available their national experiences to the other partecipants, and most of all, extending the discussion also to other school operators involved in scientific teaching. Infact the main goal of the European project was the innovation, in the sense of final objective of a continuous process of negotiation among different points of view. The symposium ended with two extremely interesting conferences; the first one was introduced with a series of clips taken from movies of James Bond. Some spectacular phenomena, represented in the movies, were analyzed under the physical-mathematical aspect. This led to demonstrate their absolute scientific impossibility through exhilarating counter-experiments. In the second scientific talk, Prof J. Lauterjung described the quality of tsunami monitoring systems available in Indian Ocean.

WEB addresses:

http://www.scienceonstage.net/main/default.asp
http://www.science-on-stage.de/
Tagung Teaching Science in Europe
22.-24.9.2006 in Weilburg

Dr. Guthardt bei der Eröffnungsrede

Prof. Lührs bei der Eröffnungsrede

EuroPhysioFun Physicshow

Fischkost the Fishy Jonglagehow

Präsentation eines Tschechischen Teilnehmers

Teilnehmer im Auditorium

Büchertisch der Publikation

EuroPhysioFun

Prof. M. Talam

Die Koordinatoren der Arbeitsgruppen

Teilnehmer der Podiumsdiskussion

Posterpräsentationen

Teilnehmer im Gespräch