



Sparkling Science >

Science linking with School

School linking with Science

Research Project

01.10.2009 – 31.03.2012

GEOKOM-PEP

Geovisualisation and Communication in Participatory Decision Processes

LEADING INSTITUTION

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SCHOOLS INVOLVED

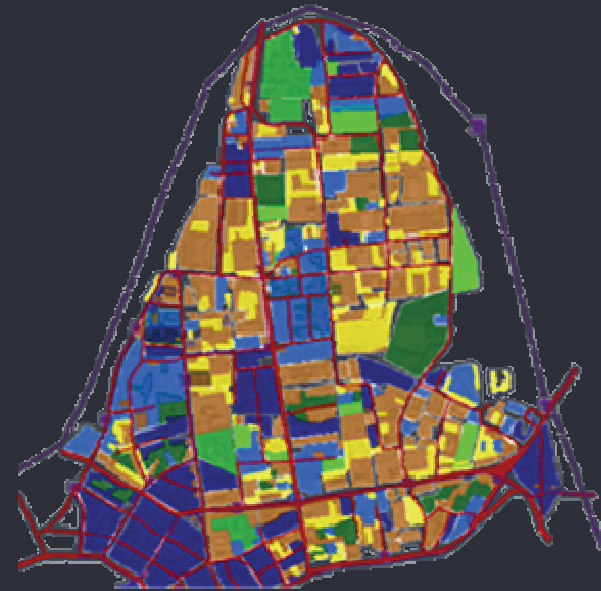
Europagymnasium und BG Salzburg-Nonntal, Salzburg
Akademisches Gymnasium, Salzburg

SCIENTIFIC CO-OPERATION PARTNERS

University of Salzburg, Z_GIS Zentrum für Geoinformatik
Regionales Fachdidaktikzentrum Geographie & Geoinformatik,
IMST Zentrum, Salzburg
University of Education Salzburg, Institute for Lifelong Learning
AHS, Salzburg
University Koblenz-Landau, Geography Teaching Unit, Landau,
Germany
Institut National de la Recherche Pédagogique, Lyon, France
Danube University Krems, Centre for E-Government, Lower Austria

PARTNER FROM ECONOMY AND SOCIETY

Bundeskanzleramt, Bereich IKT Strategie des Bundes, Vienna



Basic Information about Sparkling Science

Sparkling Science is a research program of the Federal Ministry of Science and Research (BMWF) which started in 2007 and adopts an unconventional way in the promotion of young scientists that is unique in Europe.

The specific characteristic of the program: so far 168* projects (94 of them have already been completed) scientists work side by side with young people in current scientific research projects: Sparkling Science supports big research projects and supported from 2007 until 2010 also smaller school research projects.

In the 114 big research projects (42 have already been completed) the young colleagues take an active part and work independently on parts of the research projects. As junior colleagues they introduce important suggestions into the research approach. They collaborate in the conception and conducting of investigations, conduct polls, collect data, interpret these together with the researchers and present the results at schools, universities and even at scientific conferences.

In a second initiative within the Sparkling Science program the BMWF awarded grants to smaller projects that were submitted and conducted not by the involved research institutions, but by the schools, who designed and lead the projects themselves. In these projects, too, schoolchildren worked closely together with researchers, supporting state-of-the-art research activities and contributing to the results.

Both sides of the program is/were open to a broad thematic spectrum. Research is carried out on all sorts of different topics: from mechatronics and molecular biology to migration research, from acoustics and biometrics to literature research.

* Status quo: January 2012



One Example out of 168

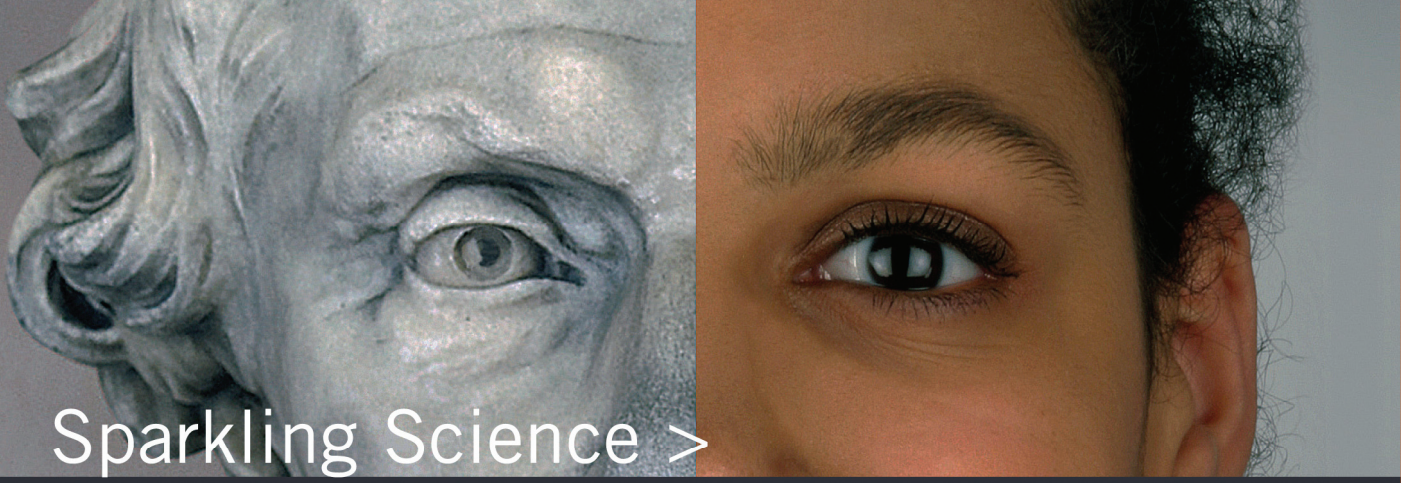
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This project develops a collaborative and discursive spatial planning environment based on virtual globes. It does so by using lab situations that include pupils as developers and later as evaluators of the platform they have been conceiving. Pupils therefore are participating in all aspects of the R&D process in a continuing and ongoing cooperation between researchers and education partners.

The discussion on participative planning environments so far has developed a wide variety of different planning tools. These are partly based on face2face situations, partly on blended learning principles and partly already use Web 2.0 technologies. One of these tools supporting planning under the conditions of global change with specific use of scientific data in the decision making process is "Surfing Global Change". Here, a democratic and discursive decision making process will be emphasized. This toolset has been tested in both real world planning situations as well as in interdisciplinary teaching and learning situations at universities and schools. Spatial planning here offers a support for learning processes. This conception follows the idea that collaborative spatial planning can be considered as a learning process by trading participants' views on a specific problem.

However, as with most other collaborative planning tools, "Surfing Global Change" (SGC) is missing out on (geo-)spatial visualisation. Current thought in spatial visualisation hints at support function for hypotheses generating in discursive processes. GEOKOM-PEP tries to enhance spatial planning by developing and evaluating a geovisualisation for the existing SGC planning tool that can be used by laypersons. At the same time, pupils are involved in developing a specific learning environment. It is supposed that the project helps pupils to use tools of e-participation and e-democracy, as well as developing a sense of spatial citizenship.





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