Sparkling Science >
Science linking with School
School linking with Science

Final Report, October 31st 2010

fe|male
Students design technology-supported learning scenarios

LEADING INSTITUTION
University for Continuing Education Krems,
Coordinator: Dr. Sabine Zauchner
Contact: sabine.zauchner@donau-uni.ac.at

SCIENTIFIC CO-OPERATION PARTNER
Berlin School of Business and Economics, Harriet
Taylor Mill-Institute for Economics and Gender
Studies, Germany

SCHOOLS INVOLVED
BG|BRG Purkersdorf, Lower Austria
BRG Krems, Lower Austria
Marie Curie Secondary School Berlin, Germany

BM.W_F a

Austrian Federal Ministry of
Science and Research

BMWF[a]

Sparkling Science >
Science linking with School
School linking with Science

fe|male
Students Design Technology Supported Learning Scenarios

The research project fe|male intends to inspire girls and boys to pursue new technologies: fe|male explores web 2.0 technologies under the gender aspect and identifies opportunities for their deployment on the basis of the competencies and needs of the students.

New media have increasingly been adopted in education, which is also reflected in the sharp increase of scientific attention given to this area. However, the professional deployment of innovative, technology-supported learning scenarios lags behind this development. Furthermore, until now the varying approaches of girls and boys toward new technologies have found little consideration in the pedagogical environment. The research project fe|male is devoted to this theme: fe|male places web 2.0 technologies in education in the centre of the research focus. These technologies are analyzed under the aspect of gender and also in relationship to their didactical deployment within the framework of a gender-sensitive academic education. A key aspect that distinguishes this project is that the current media world of youth is the point of departure. Popular internet activities such as social interaction through the networks MySpace, Twitter, SchülerVZ or Flickr, but also the production of content within a community serve as potential starting points for the development of future, technology-supported learning scenarios in schools.

Based on the internet usage habits of pupils, fe|male pursues three goals: to explore and to develop educational programs with a focus on gender aspects and to hereby awaken girls´ interest in technical applications, while taking into account their skills, competencies and content preferences. This is based on the assumption that web 2.0 technologies, which comprise the core ideas of the web, namely user-friendliness, standardization, participation and re-utilization will increasingly gain importance, and may even be referred to as the "passage point" of the technology-gender-discourse: "The results of the project tell us that especially girls appreciated web 2.0 based school projects. In particular, the opportunities offered by wikis with regard to group work, interactivity and self organisation are highly valued by girls", reported the project coordinator, Dr. Sabine Zauchner, Danube-University Krems.

Secondly, in accordance with the guidelines of Sparkling Science, from the very beginning the young students were integrated into the entire research. The project took place in collaboration with three partner schools in Austria and Germany (BG|BRG Purkersdorf; BRG Krems, Marie Curie Secondary School, Berlin/DE). Based on the media-centred world of today´s youth, web 2.0 applications were analyzed in terms of their feasible deployment in teaching. Almost all participating pupils (98.7%) used web 2.0 technologies for communication, information, networking in communities, and for entertainment.

Final Report, October 31st 2010, Dr. Sabine Zauchner, sabine.zauchner@donau-uni.ac.at

BM.W_Fa

Sparkling Science >
Science linking with School
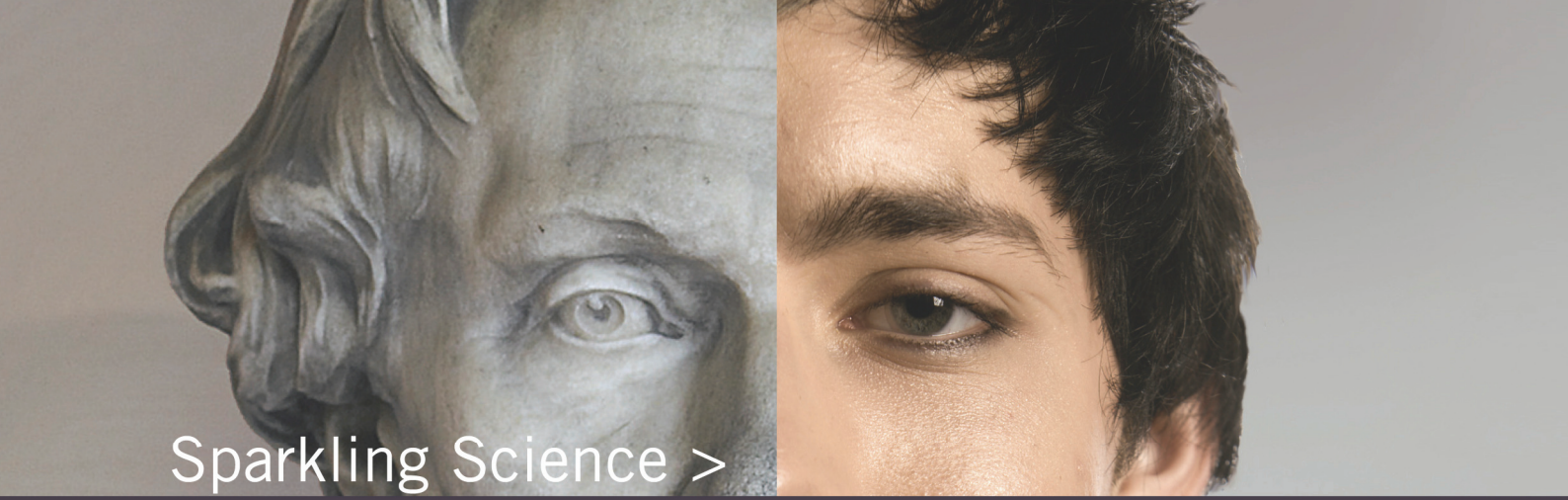## School linking with Science

After being assured that personal communication would continue to remain confidential, the participating pupils generally expressed a fundamental interest for using web 2.0 technologies in class. However, the pupils also emphasized that functionalities needed to make sense before being adopted in a wholesale fashion: „Generally speaking, MySpace is much better suited for private matters than for school matters, as there are too many private aspects (photos, comments, videos, news) that are not useful for school education. There are almost no functionalities which can be used in class", a pupil of the BG Krems stated during the evaluation.

The web 2.0 applications were implemented within the project works at the various partner schools and were evaluated in a formative design by the participating students and teachers. The evaluation focused on didactical and gender-specific aspects relating to the expedient deployment in education. Evelyn Stepancik, the project leader at the BG|BRG Purkersdorf, analysed her experiences with interscholastic and transnational school projects: "Key challenges for the successful realisation of web 2.0 based school projects are the organisational and topic specific integration, and the differing levels of knowledge and skills of the pupils." But also sufficient support for the school administration and technical support are significant organizational factors that determine the eventual outcome. Also, when viewed from a didactical perspective, establishing a well-conceived framework for providing support and project assessment, while simultaneously providing an utmost level of freedom in terms of content, were relevant factors affecting the eventual successful outcome. While the young students appreciated teamwork and work projects, fundamental skills and competencies need to be ascertained in the run-up to any project that is to be undertaken: "Communication and collaboration skills, time management and self-organization skills can not assumed to be present", elaborated Sabine Zauchner.

Beyond the active participation and incorporation of girls and boys in the research project, the ability of the pupils to exploit the insights and to share their acquired knowledge was the third focus of fe|male. Selected interested pupils of the respective project teams were empowered to pass on the jointly developed insights in regard to the didactical and gender-sensible teaching and learning scenario within their own educational context, and also within the context of other participating institutions of higher education by means of presentations and seminars. As a logical extension of the pupils' active participation in tangible research tasks and their increased competencies in the area of content, they actively participated during the utilization and dissemination phase of fe|male as well. "While it was initially difficult to reach all members of a university student audience, toward the end we felt fully accepted. I believe this was achieved because the audience realized that we were experts in the area of wiki technology", summarized a pupil of the Marie-Curie secondary school.

Sparkling Science >
Science linking with School
School linking with Science

OeAD'

OeAD-GmbH

BMWF[a]

Austrian Federal Ministry of
Science and Research