



## **WASsERLEBEN – High school students, teachers, students and scientists together in action**

Gerda Holzapfel and Florin Florineth

University of Natural Resources and Life Sciences, Vienna, Soil Bioengineering and Landscape Construction, Civil Engineering and Natural Hazards, Austria (gerda.holzapfel@boku.ac.at)

Sparkling Science is a program of the Austrian Federal Ministry of Science and Research (BMWF) which promotes young scientists. Scientists and young people work active together in current research projects. They collaborate in the conception and conducting of investigations, collect data, analyse and interpret it together with the scientists and present the results at schools, universities and even at scientific conferences. Their interest for natural science studies should get more attractive and science should become more transparent. The project “WASsERLEBEN” conducted by the Institute of Soil Bioengineering and Landscape Construction of the University of Natural Resources and Life Sciences (BOKU) in Vienna deals with revitalized rivers in Mödling/Lower Austria and Schlanders/South Tyrol.

The main objective is the involvement of two schools from Mödling/Lower Austria and one school from Schlanders/South Tyrol with one class each. High School students, teachers and scientists and students of the BOKU work together.

The scientific objective of the project is the monitoring of soil bioengineering measures after river restoration. Especially the development of the plants and their impacts on the microclimate in these newly created green spaces are being measured and citizens are surveyed about possible usages of these green spaces.

The project started in October 2009 with workshops for the high school students. In these workshops they learned about Soil Bioengineering by the example of the revitalized rivers in their hometowns. To consolidate their knowledge teachers and high school students work under supervision of a scientist at the river and measured cross-sections and soil bioengineering measures and presented the new knowledge. In step two high school students and teachers worked in a team with students. For the monitoring of the specified areas they worked on-site. With measuring instruments they documented the shading conditions of the rivers and the vegetation development. Afterwards they analysed and presented the data.

Measurements concerning the microclimate will be done the next semester. After a start workshop of scientists, high school students and teachers will collect and analyse this data. Over the whole period of the project high school students have contact with scientists and visit the BOKU to listen to a lecture or work on the analysis.

By working and being in dialogue with the high school students and teachers the conclusion can be drawn, that all partners benefit from this project. High school students became interested in natural science, doing the measurements and in being in dialogue with the scientists. After analyzing the data they understood what the scientific aim of this project is, what research work in this sector of natural science means. As all involved schools have a focus on natural subjects the teachers will distribute their knowledge to following high school student generations. For involved scientists the produced data is important for further long-term measurements at these rivers.