

Forschungsexpress (Research Express)

A mobile laboratory for primary schools in Schleswig-Holstein

Background

The curriculum for social studies in Schleswig-Holstein contains only a narrow range of natural science topics. Nevertheless it is necessary to give children in primary school specific offers in this area to provide them with a better understanding of natural phenomena and ease the acquirement of knowledge in secondary school. Additionally, teachers who have never studied natural science should be enabled to teach physical and chemical topics competently.

Aims and scientific monitoring

The project Forschungsexpress introduces primary school children to scientific questions, procedures and ways of thinking. It is demonstrated how to investigate interesting questions out of children experiences with means that are easily available to every school.



What is burning easier? Children examine the differences in combustibility of wood logs and wood shavings during a visit of the Forschungsexpress.

Studies have shown that teachers mostly prefer biological topic to physical and chemical ones. In our teacher-in-service training program they gather materials and suggestions to integrate all these fields in their courses. The teacher-in-service training was

monitored. It was investigated how scientific capacity and subject-specific ability is enhanced during the training and whether this leads to an increased entrance of these subjects into their courses. The results of these studies are published in several papers and the dissertation of Enken Schröder 2008.

A visit of the Forschungsexpress

Teachers in Schleswig-Holstein wanting to break new ground in their social studies courses can invite the Forschungsexpress to their school. The staff of the Forschungsexpress instructs two parallel classes through the experiments of two different topics. All the materials necessary are provided free of charge. Interested colleagues may sit in on the class so that they can take back the ideas to the staff room for discussion. One period of 2 hours can for examples be filled with experiments concerning the character of air while the second period deal with the subject "fire". In an additional hour the courses are discussed with the teachers (rsp. all staff interested) and further information and material is provided to enhance the experimental and science part in the social studies courses.

Teacher-in-service training

To fulfill the need of in-service training of natural science subjects for social studies in primary school, the IQSH in cooperation with the IPN and NaWiKiel has set up a series of in-service courses. Schools interested in a course at their school can arrange visiting dates by contacting Barbara Grotemeyer per E-Mail: b.grotemeyer@nawikiel.de. For further information on the topics like "Fire", "Air is not nothing", "Plastics" and "Energy" read the webpage of the IQSH: <https://www.secure-lernnetz.de/lehrerfortbildung>.

Financial Support

The Forschungsexpress was financially supported by the Foundation for Innovation Schleswig-Holstein until the end of 2009. The project is also financed by the Christian-Albrechts-University of Kiel. Since January 2010 the associated NaWiKiel GbR takes care of the school visits.