



A framework for high-school teacher support in Geosciences

B. Bookhagen, A. Mair, G. Schaller, and C. Koeberl

Natural History Museum, Vienna, Austria (britta.bookhagen@univie.ac.at)

To attract future geoscientists in the classroom and share the passion for science, successful geoscience education needs to combine modern educational tools with applied science. Previous outreach efforts suggest that classroom-geoscience teaching tremendously benefits from structured, prepared lesson plans in combination with hands-on material. Building on our past experience, we have developed a classroom-teaching kit that implements interdisciplinary exercises and modern geoscientific application to attract high-school students. This “Mobile Phone Teaching Kit” analyzes the components of mobile phones, emphasizing the mineral compositions and geologic background of raw materials. Also, as geoscience is not an obligatory classroom topic in Austria, and university training for upcoming science teachers barely covers geoscience, teacher training is necessary to enhance understanding of the interdisciplinary geosciences in the classroom. During the past year, we have held teacher workshops to help implementing the topic in the classroom, and to provide professional training for non-geoscientists and demonstrate proper usage of the teaching kit. The material kit is designed for classroom teaching and comes with a lesson plan that covers background knowledge and provides worksheets and can easily be adapted to school curricula. The project was funded by kulturkontakt Austria; expenses covered 540 material kits, and we reached out to approximately 90 schools throughout Austria and held a workshop in each of the nine federal states in Austria. Teachers received the training, a set of the material kit, and the lesson plan free of charge. Feedback from teachers was highly appreciative. The request for further material kits is high and we plan to expand the project. Ultimately, we hope to enlighten teachers and students for the highly interdisciplinary variety of geosciences and a link to everyday life.