



Communicating Geosciences via Environmental Education

Angela Michiko Hama (1), Michael Seitz (1,2), Johann Stötter (1)

¹Institute for Geography, University of Innsbruck, Innrain 52, 6020 Innsbruck, Austria
(michiko.hama@uibk.ac.at / Fax: +43 512 507 2895)

²alpS-Centre of Natural Hazard Management, Grabenweg 3, 6020 Innsbruck, Austria

Due to its integrative and interdisciplinary character, environmental education is a promising tool for communicating geosciences effectively. In this context, both the physical and human dimensions of global change are to be considered a core topic. Especially in mountain regions it is essential to educate and empower on these matters, as these areas are highly susceptible to all aspects of global change and experience its effects at first hand.

An environmental education concept designed for the community of Galtur, Austria, takes this into account and concentrates on these issues of highest concern for the population of the Alps. It aims at disseminating state-of-the-art research on global change processes, raising public awareness and creating a sense of stewardship for the environment by developing action- and decision-making competencies. The holistic approach, which incorporates geographical, sociological as well as pedagogic and didactic methods, is split into three integral parts. These comprise analysing the educational potential of the Alpine environment, recording the educational interest in the Alpine environment, and, finally, developing implementation strategies for environmental education programmes. In the first study, the informative value and meaningfulness of a landscape in respect of educational issues is assessed by a newly developed GIS-based multistep-multicriteria procedure. The second study deals with the educational interest of society in Alpine environments and extracts this interest by applying methods of empirical social research, such as standardised questionnaires, semi-standardised interviews as well as expert interviews. The third part of the concept combines and compares the results of the previous two studies, considers current environmental af-

fairs and logistic matters and adapts adequate teaching and learning methods for the programmes. Additionally, community participation and capacity building is attained via training local residents for running the centre. This paper will give insight into the approach by introducing its methodology, discuss the results obtained by the studies and report on test-runs made. Furthermore, ways of standardising the concept and transferring it to other Alpine regions will be presented.

The geosciences can contribute substantially to a sustainable future of mountain ecosystems by going public with their results and conclusions and integrating them into environmental education programmes. Thus, the goals of *Agenda 21* and the *UN Decade of Education for Sustainable Development 2005-2014* can be furthered on a local level.

An oral presentation is preferred.