



Geographic-didactical games as interactive tools to test and improve student's basic knowledge in Physical Geography

S. Winkler and A. Tintrup gen. Suntrup

University of Würzburg, Department of Geography, Am Hubland, D-97074 Würzburg, Germany
(stefan.winkler@uni-wuerzburg.de, +49 (0)931 888 5544)

Due to an increasing disproportion between experienced teaching staff and student numbers at German universities, the time available for teaching the fundamental basic knowledge in Physical Geography was condensed during the past decade. Unfortunately, this mainly has been achieved at the expense of practical lessons of testing student's knowledge. The recent introduction of the Bachelor/Master degree has not solved this problem, but rather accelerated that trend. The "losers" of this tendency are those students enrolled in trainee teacher studies in Geography. In conjunction with the recent modifications of the study programs putting more focus on applied or specialized fields of Geography and its methodology, the trainee teacher students often express their critics and urgently demand opportunities to improve and test their basic knowledge (because it is especially that knowledge, they need at school and for their traditional examination).

As the study program is quite dense, there is no room for special courses or seminars. By contrast, one has to use some free time slots available e.g. in the evenings of the usually quite long German excursions or of weekend seminars. However, after a day in the field or in the classroom, the teacher has to find a method owing enough excitement and clearly visible benefit for the students to achieve sufficient motivation. Interactive geographic-didactical games have been developed exclusively for this purpose and applied at different occasions. Those games had the goal of testing student's basic knowledge in a rather unconventional and "casual" style in order to motivate active participation. Most of the games could be played in small groups of students with the teacher only occasionally being involved as referee. Of course, the games had the general aim of improving the basic knowledge – or at least give the students the possibility to discover their own strength (or weakness) just before it is too late (as it e.g. would be during examination).

Some examples of the games developed will be presented. Among those, games based on the principle of visualisation were most successfully. E.g. students had to describe and explain an image showing a geomorphologic landform or process, a geological rock formation etc. in front of the group to win some goodies. This game was considered as of very practical use by the students as such image interpretation is a common exercise in their oral examination. In addition, a special version of the child's favourite "Memory" containing selected geological and geomorphologic features was designed. As the students not only had to find the correct pair of photos, but as well were asked to name the feature and give as much information as available to the referee supplied with a related fact sheet, this game has shown great pedagogic value.

The application of games for the purpose of testing and improving the basic knowledge in Physical Geography was successful, and gained very positive evaluation by the students themselves. As they directly discovered their immediate benefit for their own studies, motivation was high throughout the (sometimes very late) evenings. Such games might be at least partially an appropriate substitution for the recent time deficit in teaching basic fundamentals of Physical Geography in the regular study program. Therefore, they should be considered as part of a modern way of teaching at university level. However, their conceptual and practical development requires last but not least much experience and routine of the teaching staff, and a high degree of motivation from their side, too.