

Renewable Energies as a Challenge for Geographical Education

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Prospects of the Integration in Theory and Practice.

Abstract:

The turn towards renewable energies is the key to the existence of further generations. On the one hand fossil resources of energy are limited and on the other hand the increased output of greenhouse gases connected with them involves incalculable dangers. But in the recent years the systemic-oriented understanding for the theory of renewable energies had the result that research in this field has only hesitatingly been established in Geography. Therefore the aim of this thesis is to minimize systematically these serious desiderata for research by the construction of a spiral curriculum which is based on nine didactic-methodical components. At the same time it shows in an exemplary manner specific didactic possibilities of approach. In addition a model for integrating the subject renewable energies into Geography constructs superior points of attachment for a further scientific discussion.

First of all the practical part of the research deals with basics of the philosophy of science. It is followed by the debate on the possibility of the integration of empirical-scientific investigation which brings together the quantitative and qualitative methodology. The description of a combination of different methods for integrated oriented research projects leads to the empirical study. For that 450 national schools in North-Rhine-Westphalia were questioned with the help of a proportionally layered random sample. The results of the combined quantitative and qualitative data collection offer an insight into how high the necessity as well as the potential of the subject renewable energies is rated by the school reality. Moreover the study discloses the possibilities of connecting the programmatic level (theoretical conception) with the pragmatic one (test for practical suitability).

Keywords: renewable energies, geographical education, environmental education.

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