

GREEN PEDAGOGY: EMPOWERMENT FOR CHANGE*

Wilhelm Linder

Introduction

Environmental education, too, is facing major challenges. It is certain that education for sustainable development is a forward-looking concept. But analyzers, like the UNESCO tell us "... much of environmental education is far ashore of what is needed. The latest global conference for environmental education in Ahmedabad (2007) states: "We need an educational framework that not only follows such radical changes but can take the lead..." The British environmentalist and Author Ken Webster criticizes in his book "Rethink, Reuse Reduce" that up to now we do not see any changes in lifestyle.... Information about environmental problems like climate change or loss of biodiversity is not enough: we need new ways of learning, new ways of thinking in order to change behavior towards a sustainable living.

In agricultural as well as in environmental pedagogy we must not only think about implementing proven concepts, but we have to rethink learning and teaching itself.

One of the most important contributions for Education for Sustainability comes from Gerhard deHaan (Freie Universitat Berlin): He requires competences for constructing a sustainable future (Gestaltungskompetenzen). These are competences for applying knowledge on sustainable development or realising problems averting sustainable development. It is about the ability to foresee and analyze trends, to identify and assess risks, hazards and uncertainties, to plan together with others and be able to act and motivate others to take action. To develop these skills, constructivistic-systemic concepts are particularly suitable. Competences needed for a sustainable development show us the aims of Green Pedagogy, constructivist-systemic concepts offer ways to achieve these aims.

As a first step it is necessary to analyze areas in more detail, in which environmental education has not been able to achieve perceptible effects. The German educationalist Jurgen Rost (IDN Kiel) mentions unsolved problems of environmental education, among them the motivation for the acting in a sustainable way, the ability to handle complexity or making decisions under conflicting requirements.

Based on such open problems Green Pedagogy defines areas in which the

development and evaluation of new concepts is necessary. These are so-called “hot spots” of Green Education. They include the ability to handle contradictions, polyvalent decision situations or the ability to act in spite of the obvious ineffectiveness of one’s own actions in the light of global developments. They also include the ability of bridging the gap between theoretical knowledge and practical action or the reflection of one’s own consumer behavior. For challenges like those mentioned above learning arrangements are developed, accompanied by research.

Below, an example for a learning arrangement will be presented. It was developed at the University College for Agrarian and Environmental Pedagogy by Wilhelm Linder and Andreas Schelakovsky and presented and tested at the University of Klagenfurt in autumn 2013. The arrangement shows, how a very well known and widely used educational program is contextualized in a new way. Green education responds to research-based criticism, that claims that the ecological footprint may cause feelings of helplessness instead of empowering learners for acting in a sustainable way.

Ecological Footprint

Footprint Calculators are among the most popular instruments for environmental education. Their aim: to check the viability of lifestyles - accompanied by proposals to reduce the amount of consumption of resources. The Ecological Footprint is the easiest way to test the sustainability of our lifestyle.

The basic concept, developed by Mathis Wackernagel and William Rees in 1994 is very clear and easy to understand. It is a measurement for the impact of human activities in terms of the area of biologically productive land and water required to produce the goods consumed and to assimilate the generated waste. More simply, it is the amount of the environment necessary to produce the goods and services necessary to support a particular lifestyle. (www.wwf.panda.org)

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Sustainable living – an illusion?

For people living in industrialized countries, it is impossible to reduce their footprint to a sustainable amount: even if someone sells his/her car, does not eat meat and lives in a very small flat, the footprint will at least be two times as high as it should be according to sustainability. This may cause a feeling of helplessness.

Amara Brook (Santa Clara University, Department of Psychology) examined in 2011 whether working with Footprint Calculators may motivate students to more commitment to environmental protection. The study suggests that working with a footprint calculator may fail to promote or even reduce sustainable behavior. (Brook, A. (2011). Ecological footprint feedback: Motivating or discouraging? *Social Influence*, 9, 113 – 128) The inability to bring their own lifestyle in harmony with the idea of an eco-friendly life (cognitive dissonance) leads to emotional rejection. It is easier to ignore even provable information than to rethink an entire worldview (Vera Birkenbihl).

Brooks demands: ‘Understanding how to modify footprint feedback to more effectively motivate sustainable behaviour is urgently needed.’ Green Education accepts this call seriously.

Educational work with footprint calculators has to leverage the strengths of the footprint as well as discuss the limits of validity. It has to deal with emotions such as resignation, sadness, anger or rejection. Green education is more than making visible the boundaries of the ecological carrying capacity or developing specific guidelines for ecological behavior: It focuses on emotions linked to the work with the ecological footprint, it discusses contradictions and possibilities of acting sustainably. The first and primary objective is to encourage the learners to make their own and independent considerations, to enable them to develop appropriate activities and to strengthen their ability to make decisions under uncertain, even contradictory information.

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