Geography Education for Sustainable Development

Hartwig Haubrich
Objective of UNDESD 2005-14

- „A world, where everyone has the opportunity to benefit from quality education and learns the values, behaviour and lifestyles required for sustainable future and for positive societal transformation“

(http://portal.unesco.org/org.education/).
Action Themes of UNDESD

- Environment
- Water
- Rural Development
- Sustainable Consumption
- Sustainable Tourism
- Intercultural Understanding
- Cultural Diversity
- Climate Change
- Disaster Reduction ……. 
What is an ecosystem?

- Eco = oikos = household
- Ecology is the science to keep the house:
  - the house of nature
  - the house of society
  - the house of economy
Model of a System

Innerworld

Matter  
Information

Energy

Outerworld
Model of the Ecosystem Human-Earth

- Society
- Education
- Services
- Resources
- Energy
- Space
- Earth
- Individual
- Sinks
Sustainability – Sustainable Development

- Sustainability is the potential of an ecosystem to subsist over time in a balanced way.
- Sustainable development includes environmental considerations in the steering of societal change.
The Three Pillars of Sustainable Development

- „The social: this relates to human mores and values, relationships and institutions
- The economic: This concerns the allocation and distribution of scarce resources
- The ecological: this involves the contribution of both the economic and the social and their effect on the environment and its resources“ (Ekins 2000)
Characteristics of Sustainable Development/SD

- SD is an ongoing process across space, time, societies and cultures.
- SD will be different in different societies but needs common normative principles.
- SD is a dynamic, comprehensive concept of modernising living patterns (Baker 2000).
Paradigm of Sustainable Development

- Changing the quality of growth
- Reducing population growth
- Food security
- Maintaining biodiversity
- Establishing safe energy
- Ecological modernization of industry
- Guiding land use and urbanization

(Brundtland Report/WCED 1987)
The Concept of Sustainable Development
Strategies for Implementing Sustainable Development

- Efficiency-Strategy
- Consistency-Strategy
- Permanency-Strategy
- Sufficiency-Strategy
- Educational and Social Commitment

( E. U. von Weizsäcker 1997)
Aim of Education for Sustainable Development

• „The aim of education for SD is to put people in a position to play an active role to shape an ecologically sustainable, economically efficient and socially just environment, while remaining mindful of the global dimension.“

(BMBF 2006)
Principles of Education for Sustainable Development

- ESD is relevant to everyone
- ESD is an ongoing process
- ESD promotes societal change
- ESD is a cross-sectoral task
- ESD aims to improve life situations
- ESD creates new opportunities
- ESD promotes global responsibility
- ESD is relevant to all levels of learning
- ESD is open to new forms of co-operation
- ESD enriches individuals‘ lives
Geographical Qualifications for Sustainable Development

Knowledge and Understanding of
- Major natural systems and
- Major socio-economic systems

Skills in
- Using communication-, thinking-, practical and social skills to explore geographical topics from local to global scales

Attitudes and Values to
- Dedication to seeking solutions to local, regional, national and international problems

(International Charter on Geographical Education 1992)
Interdisciplinary Qualifications for Sustainable Development

- System analysing
- Systemic thinking
- Anticipating thinking
- Creativity
- Research comp.
- Self-evaluation comp.
- Value orientation
- Team skills
- Social orientation
- Learning in networks
- Situation-orientation
- Decision-making com.
- Participation comp.
- Self-organisation
- Evaluation comp.
- Lifelong learning
- Holistic learning
- Global perspective

Action Competency for Sustainable Development
Change to Sustainable Development through Geography Education

Size

Time

Consumption

Population

Today

Knowledge, Skills

Values, Attitudes

Action Competence
Local Agenda 21

- LA 21 plans are built on the concept of SD
- LA 21 facilitates dialogue between groups
- LA 21 develops a sense of community
- LA 21 creates educated forums
- LA 21 enhances the quality of decisions
- LA 21 eases acceptance and legitimacy
- LA 21 enhances civil society
- LA 21 develops democracy
- LA 21 needs education to succeed in the thorny field of decision making and acting for SD
Driving Force: Population Growth
Pressure: Waste Water
Sewage System
Purification
State: Water Quality
Impact: Health
Limitation
Response

DPSIR-Method: Water Quality of a River (UNEP 2006)