

# Environmental education content in university study programs: concept and development trends

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#### Environmental education

National Environmental Education Advisory Council (1996)

Environmental Education is a learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address these challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action.

#### Five categories of EE objectives

(UNESCO/UNEP 1978)

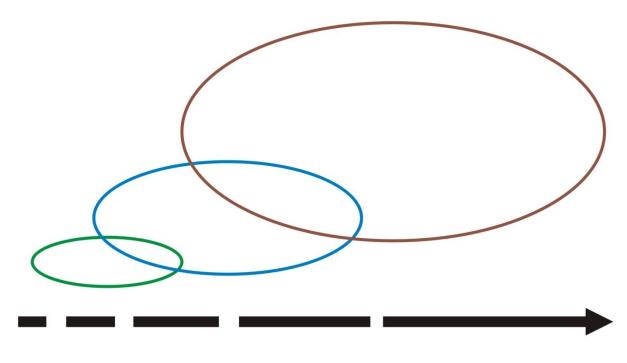
- Awareness: to help social groups and individuals acquire an awareness of the total environment and its allied problems.
- Knowledge: to help social groups and individuals gain a variety of experience in, and acquire a basic understanding of the environment and it associated problems.
- Attitudes: to help social groups and individuals acquire a set of values and feelings of concern for the environment, and the motivation for actively participating in environmental improvement and protection.

- Skills: to help social groups and individuals acquire the skills for identifying and solving environmental problems.
- Participation: to provide social groups and individuals with an opportunity to be actively involved at all levels in working toward resolution of environmental problems.



#### Development of concepts of education

mission of environmental education



Ecology, nature protection etc.

Environmental education

Education for sustainable development

(by Blewitt and Cullingford, 2004)

#### Guiding Principals of EE

- **1. Consider the environment in its totality** natural and built, technological and social (economic, political, cultural, historical, moral, aesthetic).
- 2. Be a continuous lifelong process
- **3. Be interdisciplinary** in its approach, drawing on the specific content of each discipline in making possible a holistic and balanced perspective.
- 4. Examine major environmental issues from local, national, regional and international points of view
- 5. Focus on current and potential environmental situations
- 6. Promote the value and necessity of local, national and international cooperation in the prevention and solution of environmental problems.

#### Guiding Principals of EE

- 7. Explicitly consider environmental aspects in plans for development and growth.
- 8. Enable learners to have a role in planning their learning experiences
- 9. Relate environmental sensitivity, knowledge, problem-solving skills, and values clarification to every age
- 10. Help learners discover the symptoms and real causes of environmental problems.
- 11. Emphasize the complexity of environmental problems and thus the need to develop critical thinking and problem-solving skills.
- 12. Utilize diverse learning environments and a broad array of educational approaches to teaching/learning about and from the environment, with due stress on practical activities and firsthand experience (UNESCO 1978).

#### Major challenges for EE

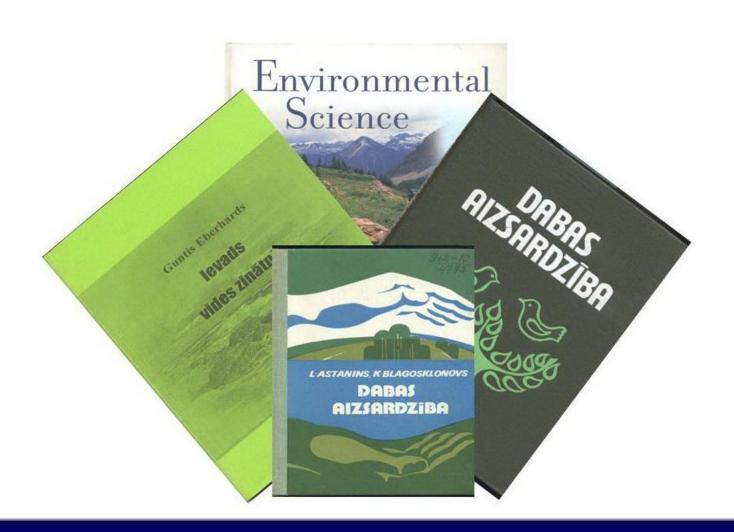
- EE is not a priority across the country
- EE efforts need greater resources and support
- Resources are limited, and no one educational sector can support the entire field
- Professional development for teachers and nonformal educators needs greater support and improvement
- EE is not well integrated into education reform and improvement
- Important audiences are not being reached
- Evaluation, quality assurance and access to materials and information on programs are limited.
- More well-trained environmental professionals are needed

#### Need in environmental education

- UN ECE 5th ministerial conference in Kiev 2003
- UN Committee on environmental education declaration 2005 Vilnius
- Latvian national strategy on environmental communication
- Environmental Protection Law of the Republic of Latvia (2.11.2006) chapter VII article 42 "...in a mandatory part of all study programs of universities and colleges an environmental education course is included..."



#### Just few examples...





### Brief characterization of existing study materials/study programs

- Attempts to cover basic characteristics of environmental and social systems: still looking from perspective of some "background" sciences
- Desire to mention and address most important problems and their manifestation: nearly impossible to avoid shallow analysis of some topics
- Growing complexity of the study topics and volume of study materials
- Problems related to desire "catch up" new trends and problems



How we can look to the content of environmental science studies...

"Hard Times" (Title "Hard Times." Blind men feel different parts of an elephant, each of them think an elephant is like unemployment, global warming, and the recession.)

ID: 125662, Published in The New Yorker October 6, 2008



## Challenges for further development of the environmental education study content

- Growing complexity of the study topic vs. need in easy accessible study topic motivating in further studies
- Need to combine much differing levels of environmental problems starting from very basic level of the study topic up very complex issues both in scale both in dimension, both in respect to topic dealt



## Challenges for further development of the environmental education study content

- Compliance of the study content with the expectations of students, society, stakeholders
- Desire to develop study content to meet high standards of research based education avoiding sticking to "science of everything" status
- Combination of local level and global environmental problems

### Guiding principles for environmental education study content

- Environmental study content should give the first insight in the area of problems and motivate for independent studies in future – in respect to study area
- Provide basic information relevant for university study level in respect to content of the study area – environmental science: the course content can not consist by "hot topics"
- Environmental studies should advance the study methods and study content: they can be considered as a tool on a way towards education for sustainable development



#### Thank you for attention!