

Centrum pro otázky životního prostředí Univerzita Karlova v Praze Transformation in the Education of Environmental Economics in Historical Context

The Case of the University of Economics, Prague





**EVBOPSKÁ UNIE** 



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ



pro konkurenceschopnost



UNIVERZITA KARLOVA V PRAZE

### EE and Transition Towards Sustainability

- transition of the society towards sustainability
- future leaders of economies (Faculty of Economics and Public Administration)
- principles and pre-requisites of efficient teaching-learning EE

Former Czechoslovakia faced enormous environmental problems: Ostrava air pollution (Wikimedia Commons)



### **Historical Context**

- growing environmental degradation
- raising demand for practical technological and policy solutions
- on-going research initiatives
- have led to a penetration of these agenda to education systems (also supported with conclusions of the international conference devoted to environmental education organized in Tbilisi (1978))

### **Historical Context**

- EE beginning in 1970s with step-by-step development over time:
- single lectures explaining the forms of environmental degradation
- courses and first theses on environmental management problems in 1980
- Department of Environmental Economics and study program in 1990
- research projects also in pedagogical area: from exploration of EE curricula, analysis of internal and external actors' viewpoints (employers' and students expectations') to students' perception and evaluation of EE courses

### **Historical Context**

Development after great societal transformation in 1989

 from multiparadigmatical approaches to prevailing neo-conservative or even libertarian paradigm, which tends to derogate the importance and validity of environmental issues

#### **UEP** Survey information

- quantitative survey (with open comments) conducted in two academic years 2008-2010
- students of two obligatory courses in Environmental Economics and Policy
- together 464 students attended
- 131 respondents represented smaller group of Environmental Economists and
- 333 were from Public Administrators.

**Environmental Concern** 

- New Environmental Paradigm (NEP) scale
- ...measure of endorsement of a fundamental paradigm or worldview, as well as of environmental attitudes, beliefs, and even values (Dunlap el al., 2000).
- fifteen statements, 5 point scale of agreement

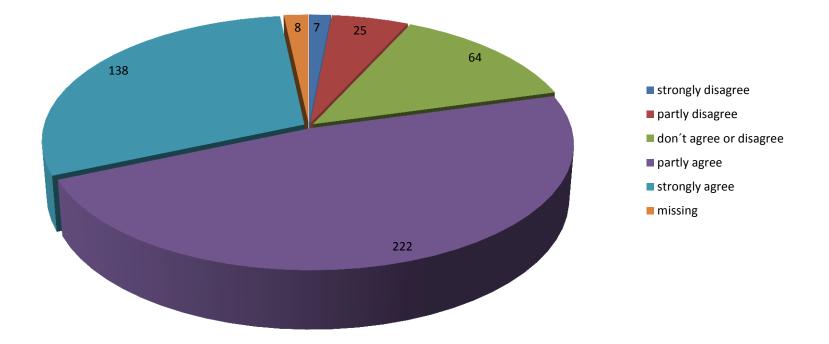
### **NEP Scale**

- 1. We are approaching the limit of the number of people the earth can support. (Limits)
- 2. Humans have the right to modify the natural environment to suit their needs. (Antianthro)
- 3. When humans interfere with nature it often produces disastrous consequences. (Balance)
- 4. Human ingenuity will insure that we do NOT make the earth unlivable. (Anti-exempt)
- 5. Humans are severely abusing the environment. (Eco-crisis)
- 6. The earth has plenty of natural resources if we just learn how to develop them. (Limits)
- 7. Plants and animals have as much right as humans to exist. (Anti-anthro)
- 8. The balance of nature is strong enough to cope with the impacts of modern industrial nations. (Balance)
- 9. Despite our special abilities humans are still subject to the laws of nature. (Antiexempt)
- 10. The so-called "ecological crisis" facing humankind has been greatly exaggerated. (Eco-crisis)
- 11. The earth is like a spaceship with very limited room and resources. (Limits)
- 12. Humans were meant to rule over the rest of nature. (Anti-anthro)
- 13. The balance of nature is very delicate and easily upset. (Balance)
- 14. Humans will eventually learn enough about how nature works to be able to control it. (Anti-exempt)
- 15. If things continue on their present course, we will soon experience a major

Perceptions and preferences

- 1. Do the students find the course orientation on environmental issues beneficial?
- 2. If they do, then why?
  - What benefits are perceived as being provided by the course?
  - What aspects of the course do students value?
- 3. Are there any specific type of students?

#### I find the course orientation on environmental issues beneficial



Reasons for agreement

- 1. important because it is a widely discussed social problem;
- 2. it is important to know the context of social problems, to gain wider perspective.

Reasons for rare disagreement:

- 1. absence of personal interest in topic;
- no link to my professional orientation and career (often stressed also in alternative 3 = don't agree or disagree);
- 3. I already know the content from other courses.

### Conclusions

- overall support for environmental issues at the UEP declined over years
- interest of students in gaining environmental knowledge is still relatively high
- reasons not solely in terms of commitment to environmental values:
  - also ability to understand wider context of economic activities
  - ability to enter critical discussions in society about environment in an informed, knowledgeable way
  - this interest was shared by "environmentalist" and "antienvironmentalist"

## Conclusions

- students, who are critical towards concepts of sustainable development, raise discussions and actively participate in communication
- no correlation between environmental concern and students' results in environmental disciplines
- environmentally oriented courses might be successfully held also for students with low environmental preferences
- diversity of viewpoints supports willingness to exchange perspectives and hence promote active approach of all involved

#### Conclusions

Students are motivated to study the topic because they see link to their professional career.

Role of media, politics, science, civil society organizations, business and education

Once the topic becomes part of wider social discourse - is "socially constructed" (cf. Hannigan 2006: 64) as an important issue, and related politics start to be applied - it naturally raises a need of its reflection in education. In the social construction concept.

### Resources

- Dunlap, R. E., Van Liere, K. D., Mertig, A. G. and Jones, R. E., 2000. Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale. Journal of Social Issues, Vol. 56, No. 3, pp. 425–442.
- Hannigan, J., 2006. Environmental Sociology: A Social Constructionist Perspective, second ed., Routledge, New York.
- Hawcroft, L. J., Milfont, T. L., 2010. The use (and abuse) of the new environmental paradigm scale over the last 30 years: A meta-analysis. *Journal of Environmental Psychology*. Vol. 30, pp. 143–158.

