Transdisciplinary Research in Post-Communist Central European States

Andrew Barton, andrew.barton@czp.cuni.cz
Dr. Jana Dlouhá, jana.dlouha@czp.cuni.cz
Charles University Environment Center, Prague
czp.cuni.cz

Features of tertiary education systems & science before '89

- Hierarchical structures – supervised by the Party, teachers generally Party members
- Used as an ideological tool – Marxism used as cross-cutting them & basis
- Marked by central planning – technology a leading force in the economy
- Linear technical development vs. Western innovation
- Science institutions & personnel separate from higher education
- Fragmented training, basic & applied research, development

Environmental & sustainability policy before '89

- Planned economy – resource intense, highly inefficient, quota system, ineffective production through COMECON
- Environment devastation – no thought given to consequences of drive for heavy industrialisation , corresponding health problems
- Environmental civic movements – e.g. Brontosaurus in Teplice, CZ; states responded by censoring environmental data

Transformation of higher education post-1989: three phases

1. 1990-1993 – decentralisation & liberalisation, de-politicization, reconnection with research
2. 1993-1999 – challenges of systemic transition (student numbers, resource shortfalls, private providers, quality issues), Bologna & Lisbon processes
3. 1999 to date – promotion of the 'knowledge society', education as the driving force of the economy, changes in degree structure & quality assurance

Present challenges to education for sustainable development & transdisciplinary research

- Ossified institutional structures & culture within HEIs; weak understanding or support for the 'third role' of universities; national funding settings that favour primary and applied research only
- Lack of awareness of the concepts of SD and transdisciplinarity within the public at large; overreliance on the leadership of a few individuals
- Next to no political support; SD perceived as an unaffordable luxury
- Few financial resources & an overemphasis on economic growth & achieving economic parity with the rich West at any cost; proportionally low public spending on research
- Tendency to pay lip service & window dress issues of sustainability at the European level

Czech Republic

- Low proportion of public spending on R&D in the tertiary sector – 0.21% of GDP
- Research funding agencies' priorities (GAČR, TAČR) emphasize primary and applied research only
- Strategy for ESD 2008-2015: support for accredita of interdisciplinary study programs, student mobility between programs & faculties, cooperative networks in education and research
- Action Plan 2010-2011
- Working Group for ESD within the Government Council for SD no longer functions

Slovakia

- Lowest share of GDP spent on R&D of all CEE post-communist states: 0.12%
- Action plan for the implementation of an Environmental Schooling & Education Plan at All School Levels in SK and within the Lifelong Learning System, approved 2006, but ambitious goals not fulfilled due to weak political and financial support
- Nationwide HE debate on ESD strategy – led to new environmental studies courses accredited, but no holistic approach
- Few outreach activities

Poland

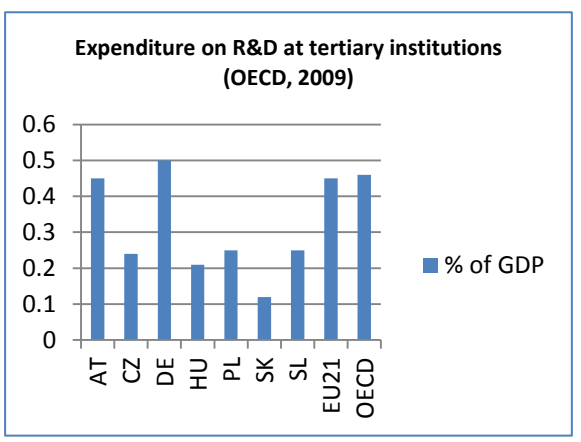
- Low share of GDP spending on R&D: 0.25%
- Emphasis on socio-economic issues; ongoing debate over SD definition
- Studies in "environmental protection", but no SD courses; few green campus facilities
- Polish National Strategy for Environmental Education University of Warsaw: informal WG on DESD

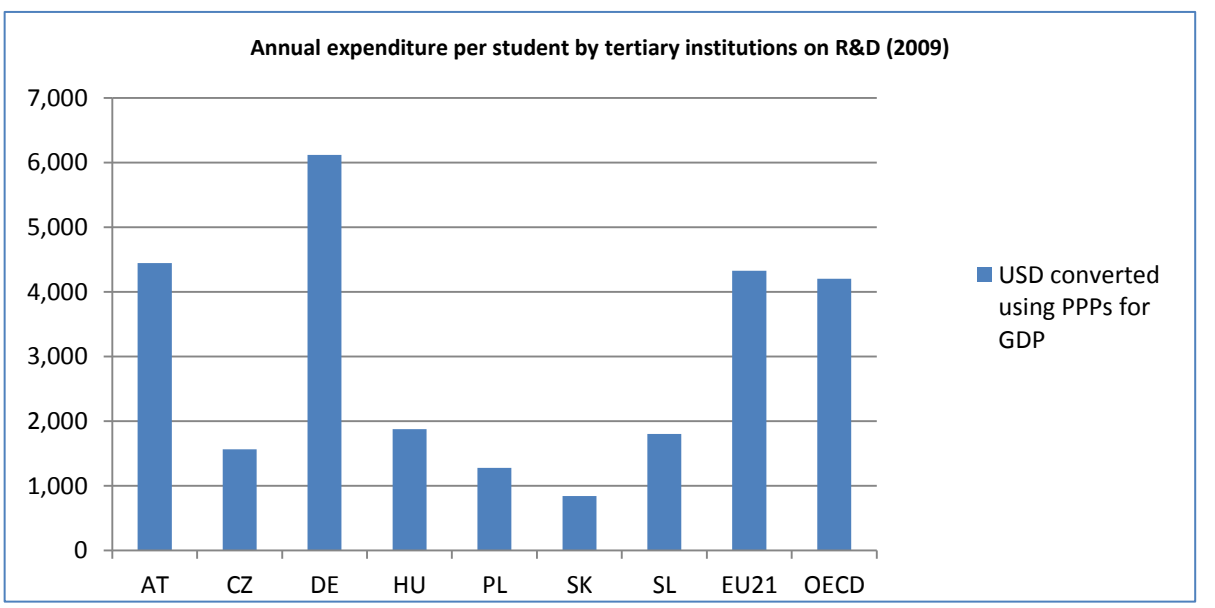
Slovenia

- Low share of GDP spending on R&D: 0.25%
- Highly developed SD understanding compared to other post-communist countries
- "Green Growth Declaration" 2009 signed by Slovenia & 31 OECD: green investment and sustainable management of natural resources - relevant to the education sector, especially HE, by increasing familiarity with SD concepts

Hungary

- Low share of GDP spending on R&D: 0.21%
- National SD Plan stresses exploring the complex relationships between health, environment, economy, and society, by coordinating research activities.





evropský sociální fond v ČR
EVROPSKÁ UNIE
MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY
OP Vzdělávání pro konkurenceschopnost
UNIVERZITA KARLOVA V PRAZE
MOSUR
MEZIOBOROVÁ SÍŤ UDRŽITELNÉHO ROZVOJE
OP VK CZ.1.07/2.4.00/17.0130
INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ