

INFLU Institute for Environmental and Sustainability Communication

Sustainability in Higher Education: Developments in Germany

Institut für Umweltkommunikation 1

INFLU Institute for Environmental and Sustainability Communication

Overview:

1. The challenge of unsustainability and sustainable development
2. Sustainable development and (higher) education – international context and developments in Germany
3. Sustainability transition in higher education institutions – case study Leuphana University Lüneburg
4. Outlook: Sustainability in higher education in times of economic turmoil – risks and opportunities

Institut für Umweltkommunikation 2

INFLU Institute for Environmental and Sustainability Communication

The challenge of unsustainability and sustainable development

Institut für Umweltkommunikation 3

INFLU Institute for Environmental and Sustainability Communication

Long-term socio-economic dynamics

Steffen et al. 2004

Institut für Umweltkommunikation 4

INFLU Institute for Environmental and Sustainability Communication

Long-term natural dynamics

Steffen et al. 2004

Institut für Umweltkommunikation 5

INFLU Institute for Environmental and Sustainability Communication

On the way to sustainability?

Institut für Umweltkommunikation 6

INFLU Institut für Umweltkommunikation

Institut für Environmental and Sustainability Communication

Sustainable Development and (higher) education – international context and developments in Germany

Institut für Umweltkommunikation 7

INFLU Institut für Umweltkommunikation

Institut für Environmental and Sustainability Communication

International Context: institutionalization of sd

- Stockholm-Conference on the environment (1972)
- Brundtland-Commission report (1987)
- Rio-Conference on Environment and Development (1992)
- Several global conferences on different aspects of sustainability during the 90ties: climate change, biodiversity, urbanization etc. (emergence of global governance); multi-level, multi-sector, multi-stakeholder activities started
- Copernicus Charter for Sustainable Development / Confederation of European Union Rectors Conference (1993)
- Global Environmental Change Conference Amsterdam (2001)
- Johannesburg Conference on Sustainable Development (2002)
- UN Decade on Education for Sustainable Development (2005)

Institut für Umweltkommunikation 8

INFLU Institut für Umweltkommunikation

Institut für Environmental and Sustainability Communication

International context: shared understanding

- Regulative idea (comparable to 'democracy'):
 - "Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (WCED (ed.; 1987): *Our Common Future*. Oxford, New York)
 - Anticipatory co-optimization of ecological stability, social justice and economic development.

→SD is analytically based and normative endeavour: challenge for academic self-understanding

Institut für Umweltkommunikation 9

INFLU Institut für Umweltkommunikation

Institut für Environmental and Sustainability Communication

International context: Sustainability Sciences – emerging scientific field

- Sustainability Studies programs – mostly developed out of environmental science departments – at many Universities around the world including top Universities such as Tokio University, Columbia University, MIT, Harvard, ETH Zürich
- Sustainability Sciences Journals; Conferences & Networks; Chairs, Postdoc positions, doctoral programs
- Sustainability Science:
 - interdisciplinary (economics, ecology, climatology, sociology, political science etc.)
 - transdisciplinary (collaboration between science and societal actors)
 - transition-oriented (human-nature-interaction)

Institut für Umweltkommunikation 10

INFLU Institut für Umweltkommunikation

Institut für Environmental and Sustainability Communication

Germany: developments and contributions

- Education for sustainable development ('BLK 21', 1999)
- Socio-ecological research program (Ministry for Research and Education; 1999)
- Research for Sustainability (Ministry for Research and Education; 2004)
- German Commission for UNESCO: National Committee Education for Sustainable Development (450 prize-winning projects, only 50 higher education)
- 45 Higher education institutions have signed the Copernicus Charta
- Regional Network for ESD of North German States (2005-2014)

Institut für Umweltkommunikation 11

INFLU Institut für Umweltkommunikation

Institut für Environmental and Sustainability Communication

Institutionalization of SD in higher education in Germany:

Curricula:

325 sustainability-related study offerings:

- 54,6% study modules in disciplinary curricula
- 30,8% sustainability studies
- 14,2% some content in disciplinary modules

- 47,7% of all offerings are from engineering
- 26,8% of all offerings are interdisciplinary

But:

- almost no systematic integration of sd in general studies
- only very few Universities have systematic approach to integrate sd in operations (sustainability management / reporting)
- research is mainly focused on environmental sustainability
- professional community / stakeholder relations in the context of sd rarely
- networks and centres in its infancy, growing out of established environmental research networks

Institut für Umweltkommunikation 12

INFLU Institut für Umweltkommunikation Institut für Environmental and Sustainability Communication

Sustainability transition in higher education – case study Leuphana University Lüneburg

Institut für Umweltkommunikation 13

INFLU Institut für Umweltkommunikation Institut für Environmental and Sustainability Communication

Development of SD at Lüneburg University

- 1997 Copernicus network
- 1999 Research and development project 'Agenda 21' (German Environmental Foundation)
- 2000 Task Force Environment
- 2000 Environmental Guidelines adopted by University
- 2000 Certification EMAS (ISO 14.001)
- 2001 Lüneburg Declaration "Higher Education for Sustainability – Towards the World Summit on Sustainable Development"
- 2002 New position: Environmental Coordinator
- 2003 Task Force Health Management
- 2004 Research and development project 'Sustainable University'
- 2005 UNESCO-Chair "Higher Education for Sustainable Development"
- 2006 Foundation Department "Environment & Engineering"
- 2008 Foundation Department "Sustainability Science"

Institut für Umweltkommunikation 14

INFLU Institut für Umweltkommunikation Institut für Environmental and Sustainability Communication

Lessons learned:

- Sustainability research needs to be integrative and transdisciplinary (analytical-normative transformation process)
- Initiatives for sd need to be developed from within the University
- Sustainable development of higher education institutions need organizational change and learning process
- General rules for implementation and concretization of sd limited - openness to multiple ways to sd
- External structures may support successful implementation and further development
- Network building may support successful implementation and further development

→ Each institution of higher education has to find its way to sustainable development - strengthened by a supportive context

Institut für Umweltkommunikation 15

INFLU Institut für Umweltkommunikation Institut für Environmental and Sustainability Communication

Outlook: Sustainability in higher education in times of economic turmoil – risks and opportunities

Risks:

- financial pressure at Universities
- interpretation of sd as soft issue and as marginal relevant
- decreasing interest of students

Opportunities:

- proactive communication: not too much, but not enough sustainability-orientation has caused the crisis
- ecological, social and economic master trends demand sd experts
- ecological, social and economic master trends demand general 'sustainability literacy'

→ Sustainability is like democracy – it's not a given, we have to live it every day!

Institut für Umweltkommunikation 16