WIRTSCHAFTS UNIVERSITÄT WIEN VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS

EFMD EQUIS ACCREDITED

Transdisciplinary learning and teaching as answers to urban sustainability challenges

Copernicus Alliance Conference 2015, Madrid, Spain, 24.11.2015

Petra Biberhofer
WU Vienna/RCE Vienna

Transdisciplinary teaching and learning…

- …is ideally driven by the interconnections **between and beyond disciplines**
- …is ideally built on **problem-based learning**
- Ideally allows and strongly enhances **"real-life" feedback** and
- the **co-creation of knowledge** due to the integration of (non-academic) stakeholders from outside the classrooms

Regional Center of Expertise on Education for Sustainable Development Vienna

WIRTSCHAFTS UNIVERSITÄT WIEN VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS

Key objectives

- **Inter-connect already existing SD and ESD research activities**
- Provide the **institutionalized umbrella for better presenting already existing ESD projects** and sustainability initiatives which tackle the context of "**socio-economic development and the environment**".
- **Enhance knowledge interaction** and new ways of learning and teaching through new projects dealing with collaborations between science and education and transdisciplinary knowledge exchange

EFMD EQUIS ACCREDITED

The Case - Sustainability Challenge

Program	Inter- and transdisciplinary course
Main project partners	BMWFW, WU Vienna, University Vienna, Vienna University of Technology, BOKU
Project period	Since 2010 – ongoing
<u>Project Aims and Implementation</u>:	- Promote **understanding** of social, environmental and economic development - **Interface** between science, business and politics - **Integration** of sustainable development as a fundamental topic in university curricula - Promote a common knowledge base in the **head** of participants and a common experience base in the **heart** of the decision-makers of tomorrow
Project Website	http://www.rce-vienna.at/sustainabilitychallenge/

Applied Science-Society Interface

WIRTSCHAFTS UNIVERSITÄT WIEN VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS

Inter-connects students and universities

Encourages exchange between students and stakeholders

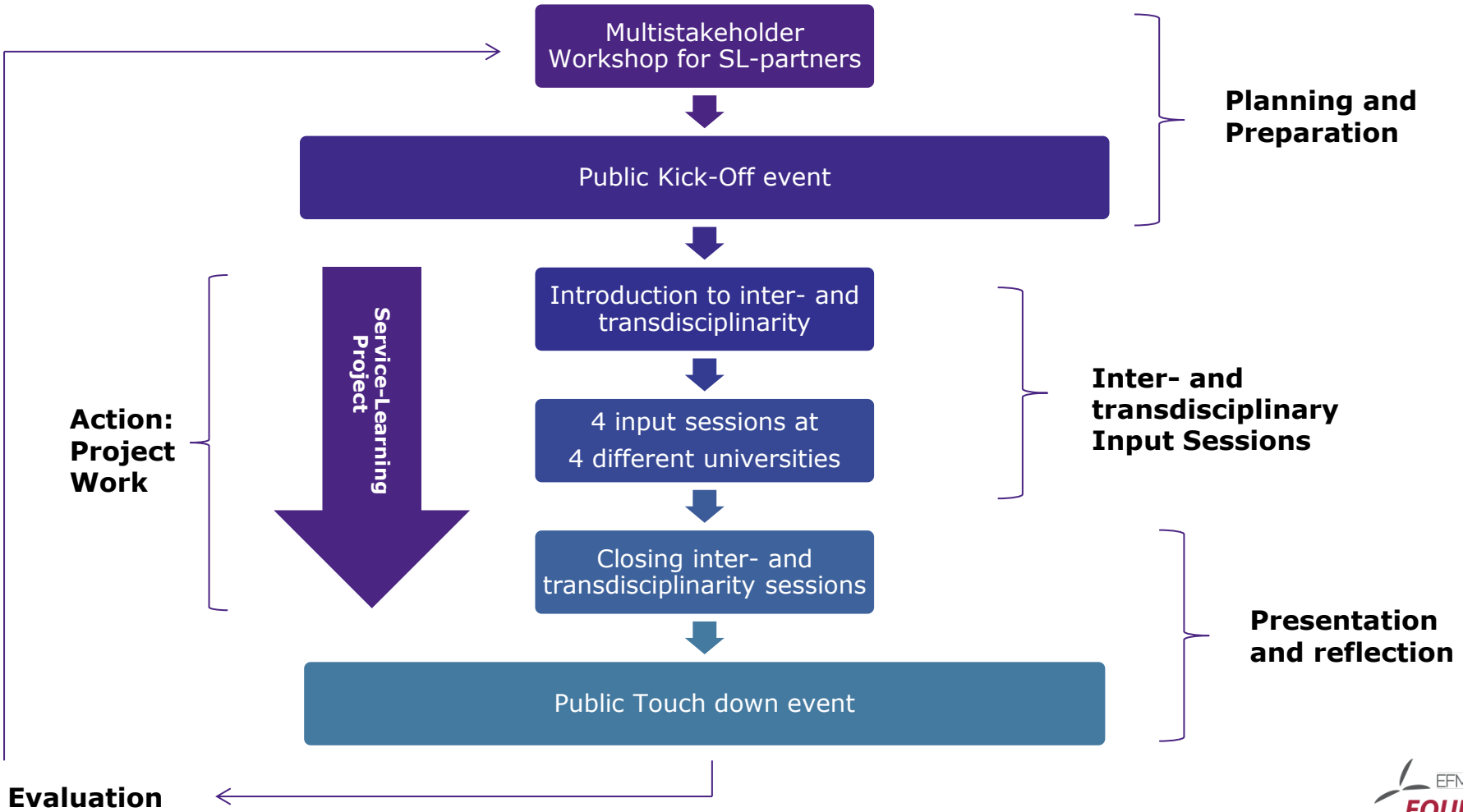
RCE Vienna
Regional Centre of Expertise on Education for Sustainable Development

Involves stakeholders from practice

Provides plattform for universities, students and stakeholders

EFMD EQUIS ACCREDITED

"Sustainability Challenge" Design



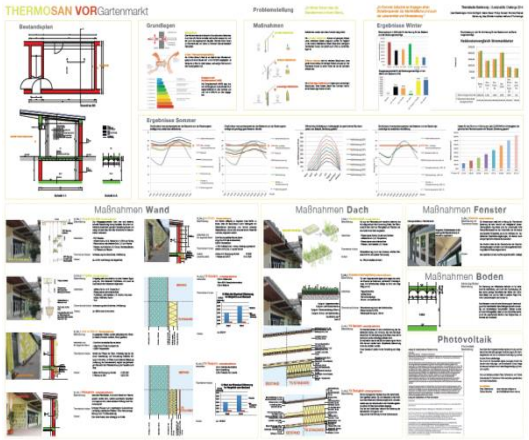
WIRTSCHAFTS UNIVERSITÄT WIEN VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS

Service Learning Project Example

EFMD EQUIS ACCREDITED

Thermosan - Energy concept for the Vorgartenmarket/ second district of Vienna (SC 2014)

WIRTSCHAFTS UNIVERSITÄT WIEN VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS



Presentation of catalogue of measures for a market stall to foster energy efficiency and wellbeing. Students planned and conducted a two-day wall greening event with a focus on facade greening options.

Project Partners:

Gebietsbetreuung Stadterneuerung

AIT AUSTRIAN INSTITUTE OF TECHNOLOGY TOMORROW TODAY

EFMD EQUIS ACCREDITED

Lessons learned from applied science-society interface

WIRTSCHAFTS UNIVERSITÄT WIEN VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS

- **Process and forms of organization** that enhance knowledge exchange
- **Restructuring and re-conceptualizing** the governance of knowledge via supporting process of **sharing and co-creating knowledge**

Umbrella function of science society interface provides key elements:

- **Moderator role**, inclusive atmosphere, knowledge alliance
- Concrete **problem-oriented** focus based on **existing activities** to create applied interface
- Composition of **relevant partners,** critical dialogue platform
- Providing a **trustful** space, reducing barriers bet. academic and non-academic world, common language

Main requirements for opportunity space for TDLT provided by science-society interfaces:

- **Common** interest, **specific** goals and **clear** working division
- The **ability** of students to develop project tasks and aims by themselves
- **Real action** and implementation
- **Interdisciplinary** student group composition
- **Reflection** phases
- **Long** time frames

EFMD EQUIS ACCREDITED

Coclusion

✔ Students (400 Alumni) and project partners act as **multiplicators and agents of sustainable change** in urban areas

✔Higher education institutions must provide a **transdisciplinary learning space**

✔ **Institutionalized science-society interfaces** such as RCEs can provide such a learning space and enhance TDLT in HEI

✔ **Key aspects and basic requirements** for applying TDLT and to support mainstreaming processed of institutionalized science-society interfaces

✔ **Competencies for sustainability** such as interpersonal-, normative-, strategic-, system thinking and anticipatory competence are fostered

✔ Helps HEI to **channel transformation processes** in dialogue with cities

WIRTSCHAFTS UNIVERSITÄT WIEN VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS

Thank you for your attention!!!

Petra Biberhofer
Vienna University of Economics and Business
RCE Vienna/Institute for Ecological Economics
Welthandelsplatz 1, A-1020 Vienna
Phone: +43-1-31336-5683
E-Mail: petra.biberhofer@wu.ac.at
Internet: http://www.rce-vienna.at
http://www.case-ka.eu

EFMD EQUIS ACCREDITED