UH Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

UNIVERSITÄT HAMBURG

GEFÖRDERT VOM

Bundesministerium
für Bildung
und Forschung

Printed climate-neutral on 100% recycling paper

HAMBURG SUSTAINABLE DEVELOPMENT SUMMIT

HSDS GUIDE 2017

Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG

HAMBURG SUSTAINABLE DEVELOPMENT SUMMIT 2017

HSDS GUIDE

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DER FORSCHUNG | DER LEHRE | DER BILDUNG

Welcome to the Universität Hamburg
Sustainable Development Summit

In order to show their commitment towards a global transformation for a sustainable world, Higher Education Institutions play a key role in analyzing an implementing sustainable development processes within their own organizational structures. We need ambitious Higher Education Institutions that are committed to science and education for sustainable development and ask questions about the world of tomorrow today.

Based on the UNESCO Global Action Program on Education for Sustainable Development (ESD), Germany recently-passed a "National ESD Action Plan". It holds the potential to redevelop the German education system towards sustainability and to promote change in Higher Education Institutions following a whole institution approach where different fields of action are addressed and integrated: science and research, teaching, learning, education, governance, management, and operations.

To become a "University of a Sustainable Future" is a challenging task for the Universität Hamburg, one of Germany's largest universities. In 2011, the Universität Hamburg Center for a Sustainable University was set up to be a transdisciplinary platform and laboratory for creating joint perspectives on sustainable development at the Universität Hamburg, and beyond.

The University of Hamburg is proud to host the first Hamburg Sustainable Development Summit this year. A warm welcome to all our colleagues and guest who strive with us for fostering global sustainable development within a global system of reflective and conscious science to shape a sustainable and peaceful tomorrow.

gez. Univ.-Prof. Dr. Dieter Lenzen
President of the Universität Hamburg

KOMPETENZZENTRUM
NACHHALTIGE UNIVERSITÄT (KNU)

Welcome to the HSDS

Welcome to the 1st Hamburg Sustainable Development Summit! It is a great pleasure for the Universität Hamburg Center for a Sustainable University (KNU) to host and organize this event that is meant to bring together different national and international networks on sustainable development.

The HSDS guidebook introduces these networks and shows how fruitful inter- and transdisciplinary collaboration on sustainable development topics may look like. With the HSDS we hope to offer a breaking ground for new perspectives within research, teaching, operations and cross-sectional areas for sustainable development – at Higher Education Institutions and beyond.

Performing an event like the HSDS requires planning, patience and the support of a great team! We want to thank all of the ambitious colleagues of ours who assisted in preparing and conducting the HSDS. We wish all of the participants exiting summit days and a magnificent stay in Hamburg.
Enjoy the HSDS with us, get inspired and help to create an exhilarating atmosphere that fosters a joint vision for a valuable future!

gez. Prof. Dr. Alexander Bassen & Dr. Claudia Schmitt
Head of the Center for a Sustainable University (KNU)

SUMMIT CONCEPT

The Hamburg Sustainable Development Summit (HSDS) 2017 focuses on aspects of sustainable development at Higher Education Institutions. There will be a special focus on the contribution to the UN Sustainable Development Goals within education, research, governance, operation and outreach initiatives.

Highlights of HSDS

A rich interdisciplinary summit program addresses experts of all sectors, professors, post-graduates, students and all others who are interested in sharing their professional perspective on sustainable development issues.

The HSDS 2017 aims at setting new horizons for collaborations, uses innovative network formats and invites sustainability researchers and agents to be part of the global community to foster sustainable development, in Higher Education Institutions as well as in society in general.

We like to stimulate exchange on key questions on sustainability at Higher Education Institutions such as:

- How is sustainability integrated into education, research, governance, operation and outreach?
- What good practice examples and cases can be identified for "whole institution approaches"?
- How can institutional sustainability strategies be developed and implemented?
- How do the global Sustainable Development Goals (SDGs) impact Higher Education Institutions and vice versa?

Topic Rooms

In order to have in depth discussions on the presented topics that resume over the span of the conference we meet in different topic rooms:
- Education for Sustainable Development (ESD)
- Reporting and Governance
- Steering our cities towards sustainability
- Higher Education Institutions – Aims, Agendas, Actors
- Methods and Perspectives for Transformational Processes

Market of Ideas

HSDS provides a "Market of Ideas" as an open space with different events: poster walk, information booths and methodic innovation circles. Moreover it is a central spot to meet, discuss and exchange ideas (Room No. 221).

The Market of Ideas in offers:

- An overview over the results of topic rooms
- Information board on the HSDS participants
- Information stands
- Further poster presentations
- SDG corner
- Lounge area, interactive elements, media corner
- An open and interesting space to network, discuss and engage with other participants

Aside from the rather „technical" side of the conference the open space is also the emotional center of the event. It is the place to gather for networking, socializing and to feel connected to the topics and people that constitute our summit.

What we strive for at HSDS

Network-friendly
- a rich, interactive and diversified program that offers lots of opportunities for discussion and participation
- a positive, open and stimulating atmosphere
- inter- and transdisciplinary perspectives that allow for collaborative innovation processes to occur
- systemic, visual and medial methods of documentation

Climate-friendly
- voluntary compensation of CO_2-emissons caused by event-related travels
- eco-friendly conference materials
- vegetarian food from regional sources where possible, organic and fair-trade certified coffee and tea, Viva con Agua mineral water supporting global water projects
- a venue that is easily reached by public transportation
- easy to use information on public transport and eco-certified accommodations in Hamburg
- power from renewable energy sources in the building

Accessible
- a venue that is easily accessible for wheelchairs
- translation into sign language if necessary
- barrier-free website design and registration process

HSDS Guide

This booklet shall provide you with useful information regarding the Hamburg Sustainable Development Summit 2017 and the city of Hamburg. We hope this guide will support your preparations and your stay in Hamburg. It contains information on the summit and its partners, all scientific abstracts of the summit as well as further background information. It is also intended to encourage you to discover some of the green and sustainable landmarks of the city.

If you have any further questions, suggestions or concerns, please do not hesitate to contact the HSDS Team: hsds.knu@uni-hamburg.de

TOPIC ROOMS

- Education for Sustainable Development (Room No. 122)
- Reporting & Govewrnance (Room No. 123)
- Steering our cities towards sustainability (Room No. 120)
- Higher Education Institutions – Aims, Agendas, Actors (Room No. 121)
- Methods and Perspectives for Transformational Processes (Room No. 222)

CENTER FOR A SUSTAINABLE UNIVERSITY (KNU)

The Hamburg Sustainable Development Summit is hosted by the Universität Hamburg Center for a Sustainable University (KNU). Established in 2011 the KNU brings together expertise from all areas and disciplines of the Universität Hamburg. It focuses on sustainability related issues in order to position the Universität Hamburg as a "University for a Sustainable Future".
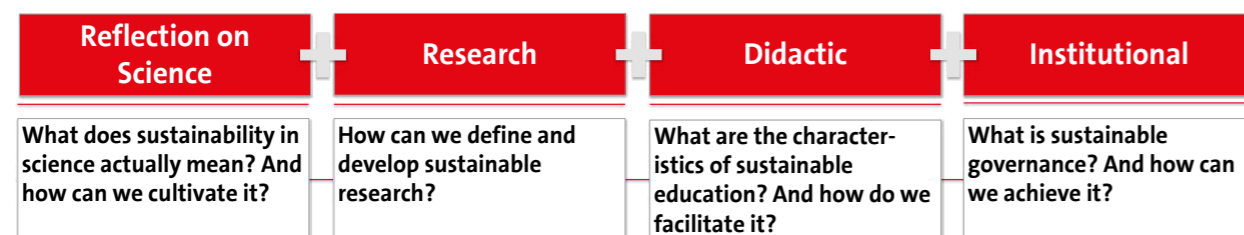
Laboratory for Innovation

The KNU acts as a research network, a laboratory for innovation and an incubator for new approaches, concepts, procedures and methods in the context of sustainability. It accompanies and supports transformational processes at the Universität Hamburg (UHH), which, as a facilitator of education through science, contributes to the future viability of society.

Whole-Institution Approach

The KNU operates using a whole-institution approach at the Universität Hamburg. Thus, it seeks to include all parts of the university (i.e. students, faculty, administration and operations) and implement transformational processes at an organizational level.

Four Reference Dimensions of Sustainability

The four reference dimensions for university-wide sustainability trigger transformational processes that develop common theoretical and practical perspectives of the UHH as a "University for a Sustainable Future":

Reflection on Science	Research	Didactic	Institutional
What does sustainability in science actually mean? And how can we cultivate it?	How can we define and develop sustainable research?	What are the characteristics of sustainable education? And how do we facilitate it?	What is sustainable governance? And how can we achieve it?

KNU Steering Committee from left to right: Dr. Hilmar Westholm, Prof. Dr. Alexander Bassen, Dr. Claudia T. Schmitt, Sophie Palm, Prof. Dr. Axel Horstmann, Prof. Dr. Florian Grüner (Photo: UHH)

Current Projects and Initiatives

- Initiating research projects regarding sustainability and sustainable development at the Universität Hamburg – the KNU currently offers five channels for funding in order to create incentives for the implementation of such projects.

- Strengthening university internal and external networks and collaborations for sustainability issues – e.g. through interdisciplinary forums for discussion and workshops (e.g. Wissenschaftscafé) as well as by participating in: initiatives for sustainability reporting for universities, the Climate Week, international sustainability alliances etc.

- Providing information and implementing innovative pilot programs to promote environmentally and socially friendly practices at the UHH – e.g. in regard to sustainable procurement and event organization, organizational citizenship behavior (OCB), best practices for university teaching etc.

KOMPETENZZENTRUM NACHHALTIGE UNIVERSITÄT (KNU)

HEAD OF KNU

Director:
Prof. Dr. Alexander Bassen

Managing Director & Scientific Coordinator:
Dr. Claudia T. Schmitt

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INTRODUCTION OF PARTNERS

The event brings together national and international academic sustainability networks and offers unique networking opportunities through the combination of the following events

- HOCH[N] Network Day – the project HOCH[N] on Sustainability at Higher Education Institutions is granted by The German Federal Ministry of Education and Research (BMBF)
- COPERNICUS Alliance – European Network on Higher Education for Sustainable Development Conference 2017
- 7th European Postgraduate Sustainable Development Symposium (SDS)

The HOCH[N] project team at the Center for a Sustainable University is intensively involved in the HSDS concept and organisation. The German Federal Ministry of Education and Research (BMBF) contributes to the realisation of HSDS via the HOCH[N] Network Day on September 28, 2017.

HOCH[N] Nachhaltigkeit an Hochschulen

ALLIANCE COPERNICUS
EUROPEAN NETWORK ON HIGHER EDUCATION FOR SUSTAINABLE DEVELOPMENT

European Postgraduate Sustainable Development Symposium (SDS)

Photo: UHH/Dingler
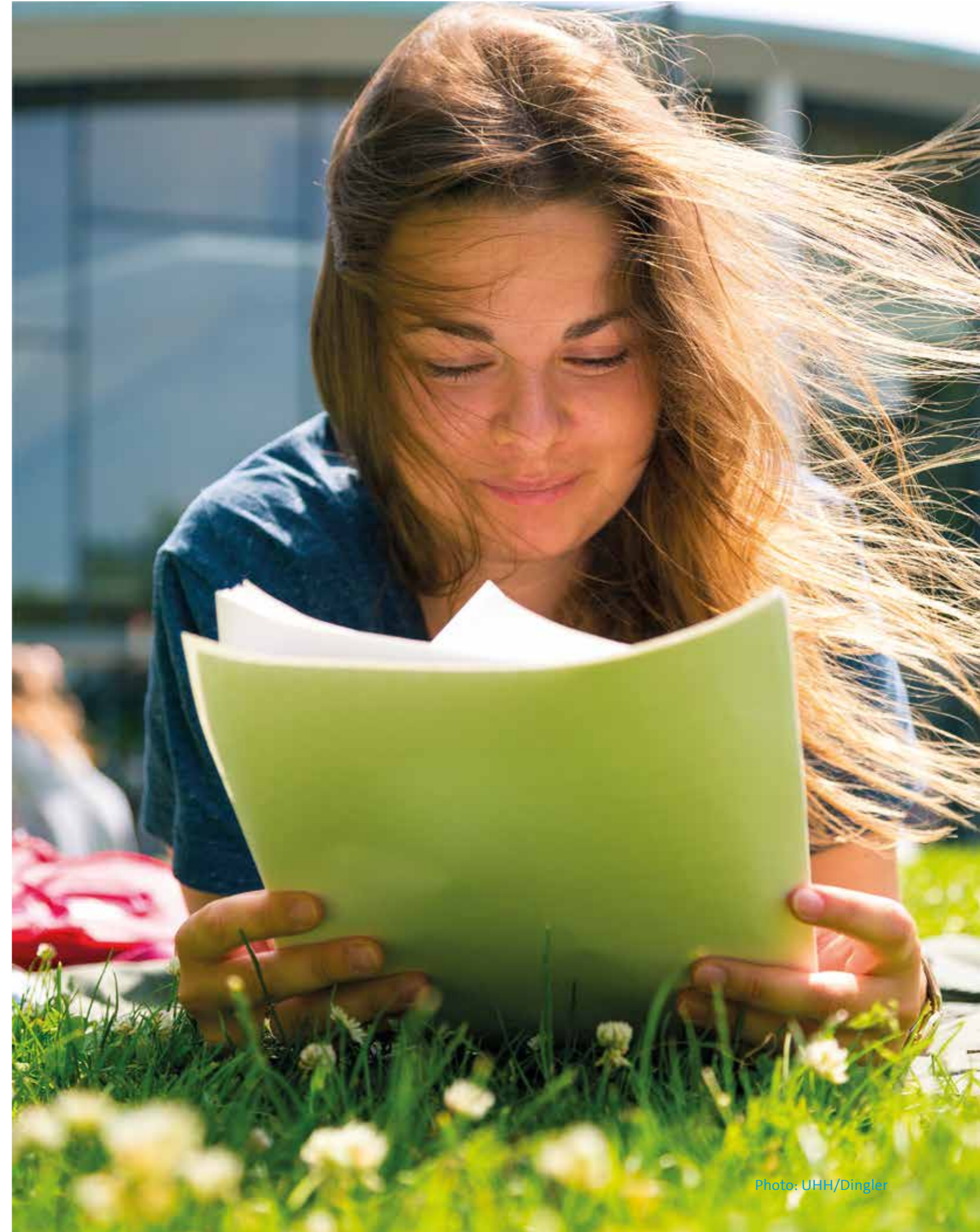
Sustainability at Higher Education Institutions: develop – network – report (HOCH^N)

The HOCH^N project is initiated and coordinated by the Center for a Sustainable University (KNU) at Universität Hamburg.

What is the project about?

Sustainable Higher Education Institutions play a vital part in our society. They educate future generations of leaders, experts and teachers to become change agents, they research on how a sustainable world is possible and have an organizational responsibility to set good practices. To institutionalize sustainable development at Higher Education Institutions is therefore a complex and challenging effort. On the one hand it is necessary to fathom the own institutional and personal involvement and to ensure the important disciplinary orientation, one the other hand one has to keep in mind the scope of action and potential references of sustainability topics. This is the spectrum in which eleven HOCH^N-institutions started collaborative research. They will be presented hereafter in detail with their research topics.

Goals

Despite the main goal to foster sustainable development at Higher Education Institutions four subgoals are defined:

- Establish a program-based network for the exchange of experience
- Establish a shared understanding of sustainability
- Foster means for a sustainable development of Higher Education Institutions
- Develop guidelines for sustainable development at Higher Education Institutions

Project runtime and funding

HOCH^N is funded by the German Federal Ministry of Education and Research (BMBF) from 11/2016 to 10/2018 under the number FKZ13NKE007A. It ties up to existing results from the BMBF-framework FONA (research for sustainable development) and the BMBF-initiative "sustainability in science" (SISI).

Networking within HOCH^N

In connection with the development of a shared understanding of sustainability we also strive to broaden our network to at least 100 Higher Education Institutions in the course of our two-year project runtime. Sustainable development must be conceptualized in a global context. Our efforts are therefore connected with international networks. The management of our network and coordination of the project lies with the Universität Hamburg Center for a Sustainable University and the University of Bremen. Higher Education Institutions that want to orient themselves towards a more sustainable future are welcome to affiliate themselves with the HOCH^N project and become partner universities.

Findings and conclusions from research and applied perspectives are compiled and integrated at joint network meetings (so called "PraFo-sessions").

Contact

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www.hoch-n.org

HOCH^N Project Partner (Photo: Markus Scholz/scholzfoto.com)

HOCH^N FIELDS OF ACTION

The HOCH^N collaboration is structured along the following fields of action:

- Governance (Freie Universität Berlin, Universität Vechta)
- Sustainability Reporting (Universität Hamburg, Freie Universität Berlin, Universität Duisburg-Essen)
- Teaching (Universität Bremen, Eberhard Karls Universität Tübingen)
- Research (Leuphana Universität Lüneburg, Ludwig-Maximilians-Universität München)
- Operations (Technische Universität Dresden, Hochschule Zittau-Görlitz)
- Transfer (Hochschule für Nachhaltige Entwicklung Eberswalde HNE)

The fields of action are explained in more detail on the following pages.

HOCH^N
Nachhaltigkeit an Hochschulen

GEFÖRDERT VOM
Bundesministerium für Bildung und Forschung

FONA
Forschung für Nachhaltige Entwicklung
BMBF

HOCHᴺ Action Field: Governance

In in regards to their importance for the implementation of sustainability in the areas of education, research and management we distinguish between five dimensions of governance:

- Politics
- Profession
- Organization
- Knowledge
- Public

We ask actors from the different Higher Education Institutions in our network in guided interviews about the specifications of these attributes. The results are used to develop profiles of governance for sustainability specific to Higher Education Institutions. The derived experiences for process and implementation help in the exchange and create a stimulus for further development process. Furthermore we aim to identify typical constellations of debilitating and conductive institutional constitutions for sustainability governance at Higher Education Institutions.

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Universität Vechta
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HOCHᴺ Action Field: Sustainability Reporting

The HOCHᴺ network provides effective support for universities by further developing existing sustainability reporting standards and indicator sets. The aim is to report in a detailed and professionalized manner in accordance with international standards. The German Sustainability Code (DNK) of the German Council for Sustainable Development is used as the basic framework. To facilitate application for universities, the DNK is further developed and modified for the specific requirements of universities (HS-DNK).

The area of activities "sustainability reporting" is divided into two working phases. In the first phase the Universität Hamburg and the Freie Universität Berlin will test the newly developed HS-DNK. In the second phase design parameters for a first German university-specific reporting standard will be developed. The Universität Hamburg and the University Duisburg-Essen will take the lead in the second phase.

Find out more information on www.deutscher-nachhaltigkeits-kodex.de/en/home.html

Contact

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HOCHᴺ Action Field: Teaching

In recent years many lecturers as well as students have experimented with integrating sustainability-related content into their teaching at universities. In addition didactic-pedagogical research was conducted to complement these experience-led activities. Education for Sustainable Development (ESD) provides the opportunity to transform the academic process of mediation from the fr ontal teaching into more modern learning-teaching arrangements. ESD is not primarily an additional learning content, but a changed method of knowledge and competence transfer.

In the HOCHᴺ network, research is being conducted on how the existing knowledge about and experiences with ESD within the universities can be better diffused and used in teaching. In doing so different levels must be differentiated:

- Explicit sustainability degree courses
- Subject curricula
- Interdisciplinary area

The resulting guide will link the developments in the modernization of academic teaching with the requirements of ESD, which are not necessarily parallel. Additionally the guide will describe, closely linked to "governance" field of action, how curricula can be modified in order to permanently offer sustainability courses. In addition crosslinking with the field of "research" is relevant in order to elaborate the dimension of research-based learning and to reach the aim of linking teaching and research to ESD.

Contact

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HOCHᴺ Action Field: Research

Through targeted research, universities can generate insights into the global humanitarian development towards sustainability. They thus play an important role in the transformation towards a sustainable society.

In the context of research, HOCHᴺ are partially based on the results of the LeNa project. In this project, concepts and criteria for socially responsible research and for implementation of sustainability into research have been developed for non-university research institutions.

The question is how these approaches and criteria are to be transferred onto universities and whether modifications are necessary. Furthermore implications for the German higher education landscape need to be evaluated. In addition to the findings of the LeNa project and other related projects (e.g. TransImpact or Res-AGorA), the current state of the scientific discussion as well as the practical implementation of sustainability-oriented research at Higher Education Institutions both nationally and internationally shall be integrated in the process. Existing approaches to the structuring of sustainability research shall be considered.

Contact

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HOCHᴺ Action Field: Operations

Universities – as well as schools, government agencies, companies and other institutions – are organizations whose everyday operations have direct and indirect effects on other societal actors in ecological, economic and social terms. However, in the reality of university operations, long and inefficient process chains often occur. Guidelines by directives or ordinances of the federal state, the Länder or the Constitution ("Freedom of Research and Teaching") may be at odds with the sustainable operation of a university, e.g. when new fields of research are very energy-intensive.

The first step is to systematically identify studies that deal with the direct contribution of university operations to its sustainability performance. The synthesis of the research results is divided into the four primary activities of the value chain: procurement, production, sales and disposal, each with their five secondary activities. Particular attention is paid the peculiarities of universities in contrast to other institutions.

Contact

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HOCHᴺ Action Field: Transfer

Higher Education Institutions are public institutions and are therefore faced with a growing demand to serve the public good. Contributions to teaching, research and a "third mission" are defined in their policies. Such activities can be called transfer-activities, which means the mutual exchange of knowledge, ideas, services, technologies and experience between Higher Education Institutions and external actors from the economy, politics, public sector, culture, and civil society on a level playing field. Transfer creates additional benefit between the involved partners inside of a society. When it is about transfer from Higher Education Institutions for sustainable development it is necessary to have a clear position for this statement for the actors. The goal of transfer for sustainable development is the sustainable future of a society.

The concept of transfer for sustainable development is not well researched and seldom practiced explicitly. This is why the research team for transfer in the HOCHᴺ project is exploring it with empirical means. They are investigating actors, formats, conditions and obstacles as well as describing good practice examples. This happens with explicit exchange to the research teams of teaching, research and governance within HOCHᴺ.

The results of the research will be validated by experts to derive an analytical framework for transfer in sustainable development. Building on that it will be possible to conduct systematic empirical research and infer recommended actions for Higher Education Institutions.

Contact

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The transfer-project is funded by the German Ministry for Research, Education and Culture of the Federal State Brandenburg (MWFK)

COPERNICUS Alliance

Vision

The COPERNICUS Alliance is a European network of universities and colleges committed to transformational learning and change for sustainable development. Working closely with its members and in partnership with strategic stakeholders, the COPERNICUS Alliance seeks to inform international and European higher education policy developments as well as support individual institutions in their journeys toward embedding change for sustainability in their institutional policies, teaching and research. COPERNICUS Alliance is committed to conducting these tasks in an open, transparent way, facilitating a growing exchange of ideas, opportunities to cooperate and mutual support with other actors in society.

Objectives

COPERNICUS Alliance aims to achieve the following:

- Networking: Exchanging good practice and enhancing knowledge on sustainability and Education for Sustainable Development in Higher Education.

- Policy and Representation: Informing higher education policy-making in Europe and globally. Engaging and participating in international gatherings, dialogues, committees and expert groups.

- Professional development: Developing tools and materials and providing professional development opportunities.

- Outreach: Working in partnership to promote sustainable development in European Higher Education.

Strategy

COPERNICUS Alliance aims to achieve the above mentioned goals through a network of European higher education institutions and develop a platform to strengthen integration of sustainable development in higher education management, education, research and society.

COPERNICUS Alliance is run by members for members, under the guidance of an elected Leadership Team and Advisory Board. It is self-financed and uses its funds to achieve its mission. The Alliance is a registered NGO under German law and seeks external funding for specific projects and activities.

Membership

There are currently 21 members in the COPERNICUS Alliance across Europe.

Membership benefits include:

- Professional development

- Opportunities to inform and influence policy developments in international dialogues

- Subscription to the CA Newsletter

- Dissemination opportunities

- Participation in conferences and seminars

- Financial support

- Funding and research

- Governance opportunities

- Profiling your work at an international level

For more details please see the COPERNICUS Alliance website: www.copernicus-alliance.org/

Contact the Secretariat at office@copernicus-alliance.org

European Postgraduate Sustainable Development Symposium

The European Postgraduate Sustainable Development Symposium (SDS) is an annual event that aims to bring together young researchers from a broad spectrum of disciplinary backgrounds, interested in the major challenges posed by achieving Sustainable Development.

During the last years, the Symposium has been building a unique platform for the discussion of such an important topic as this of the Sustainable Development.

The SDS tradition so far:

2011 - Trinity College, Dublin, Ireland

2012 - Graz University of Technology, Austria
        http://sds2012.tugraz.at/?show=index

2013 - Parthenope University of Naples, Italy

2014 - Pan-European University in Bratislava, Slovakia
        www.sustainability.sk/impressions/

2015 - University of Lisbon, Portugal
        http://sdsymposium2015lisbon.weebly.com/

2016 - University of Granada, Spain
        http://sdsymposium2016granada.weebly.com/

In 2016 the SDS was held at the School of Architecture of the University of Granada. In Granada, more than 70 scientific and professional contributions to the aims and topics of the SDS 2016 had been submitted, covering presentations on Architecture, Urbanism, Design, Policies and Practices on Land Planning; Transports, Energy, Tourism; Health and Life Quality; Business and Economic Activities, Society, Culture of Sustainability and Education; Metrics for measuring Sustainability and other.

Included in the HSDS is the 7th European SDS Symposium 2017 .

European Postgraduate Sustainable Development Symposium (SDS)

Journal Cooperation

HSDS is collaborating with several sustainability-related academic journals, where full paper versions of HSDS contributions can be submitted after the conference.

Envigogika Journal

Envigogika is a specialist, peer-reviewed, professional, open access periodical. Published by Charles University (Prague) since 2006, Envigogika is registered in the European Reference Index for the Humanities and Social Sciences database (ERIH database), and boasts an experienced international Editorial Board. The editors ensure a quality double blind review process and enable Envigogika to be published in an electronic open access form which doesn't require a fee for authors. Envigogika primarily serves the academic community in order to enhance interdisciplinary dialogue and to share experiences between practitioners. Its scope includes original academic papers, case studies, reviews, multimedia and other interactive material – encompassing the field of education for sustainable development (ESD).

ESD material is presented within the context of SDGs which includes other related areas such as: Environmental psychology, behavioral change, sustainability science, and higher education. All published articles receive a DOI and are published online immediately after the conclusion of the review process (2-4 months). It is also possible to register as an author or reviewer through the web page.

Contact

Editor in Chief: Jana Dlouhá
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Phone: +420 220 199 485
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Languages: English (Titles also in Czech)
Approx. 2 issues per year

Further information: www.envigogika.cuni.cz

International Journal of Innovation and Sustainable Development

The International Journal of Innovation and Sustainable Development focuses on broad aspects of innovation and sustainable development. It fosters discussion not only on technological innovation but on new ways of thinking about the complex and contested issues of sustainable development.
Innovative thinking and practices in areas of economics, policymaking, legislation, health, education and the institutional barriers to sustainable development form the basis of the discourse to be fostered. All articles go through a double-blind review process before being admitted. The International Journal of Innovation and Sustainable Development is collaboration partner of the HSDS.

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Language: English
ISSN online: 1740-8830
ISSN print: 1740-8822
4 issues per year

Call for papers: See special issues on website, no submission deadline for regular issues.

Further Information: www.inderscience.com/ijisd

Sustainable Management Forum (uwf)

The UmweltWirtschaftsForum (uwf) Sustainable Management Forum is collaboration partner of the HSDS. If you have submitted an abstract for the HSDS we encourage you to hand in a paper to the special issue "Sustainable Development Goals". It solicits papers dealing with any relevant topics and solutions to pursue the SDGs and will focus on conceptual and empirical research studies of emerging practice following the publication of SDGs. Also application-oriented topics and discussion papers are welcome.

In particular, theoretical, empirical, practical and review papers are invited, whether qualitative or quantitative, from researchers, practitioners, and policy-makers across disciplines on the following issues:

- How are the SDGs included in management systems, continual improvement procedures, and everyday decision-making?

- How can the development in relation to the SDGs and their impact on the dimensions of sustainability be measured?

- How do the SDGs change the business, legislative, and policy arena?

- What are requirements, limitations, and future research areas of SDGs?

- What are lessons learned on SDGs from corporations, and policy-makers?

Contact

Editors in Chief:
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Language: English
Publisher: Springer Berlin Heidelberg
ISSN online: 1432-2293
ISSN print: 0943-3481
4 issues per year

Further information: www.springer.com/economics/environmental/journal/550

CALL FOR PAPERS – UWF

Submissions for the HSDS might be handed in for the SDG issue of uwf:

- How do Higher Education Institutions contribute to the SDGs?

- What are the roles and responsibilities of higher education institutions in promoting the SDGs?

These themes are only indicative.

Submission deadline: January 15th, 2018

HSDS supports the SDGs

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HSDS Boards Information

Advisory & Scientific Board: Consultancy on Planning and Organizing	
Prof. Dr. Alexander Bassen	Universität Hamburg / Center for a Sustainable University Member of German Sustainability Council (RNE)
Dr. Jana Dlouha	Charles University Prague /Vice President COPERNICUS Alliance
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Prof. Dr. Dr. Ingrid Gogolin	Universität Hamburg / Center for a Sustainable University
Laura Henderson	Charles University Prague / COPERNICUS Alliance
Dr. Rodrigo Lozano	University of Gävle, Sweden
Dr. Clemens Mader	University of Zurich / President COPERNICUS Alliance
Prof. Dr. Juan Luis Rivas Navarro	University of Granada / Executive Coordinator of 6th SDS 2016 Granada
Prof. Dr. Belén Bravo Rodriguez	University of Granada / Executive Coordinator of 6th SDS 2016 Granada
Dr. Claudia T. Schmitt	Universität Hamburg / Center for a Sustainable University (HSDS Initiator)
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PD Dr. Remmer Sassen	Universität Hamburg / Center for a Sustainable University
Dr. Claudia T. Schmitt	Universität Hamburg / Center for a Sustainable University
Dr. Kesheng Shu	Universität Hamburg / Center for a Sustainable University
Christine Stecker	Universität Hamburg / Center for a Sustainable University
Dr. Hilmar Westholm	Universität Hamburg / Center for a Sustainable University

Working on a common understanding of sustainability ("N"= Nachhaltigkeit), Illustration: Charlotte Hintzmann

PROGRAM

HSDS offers a broad program of interactive sessions, workshops, poster talks, presentations and discussions. Please find the detailed program on the HSDS website. A printed program version will be available during the summit.

Tuesday, Sep. 26th 2017

09:00 a.m.	Arrival
10:00 a.m.	Greetings, Keynotes
10:45 a.m.	Introduction to the HSDS
11:00 a.m.	Panel Discussion: "Envisioning Higher Education Institutions in 2030 – What will have been changed?"
12:00 a.m.	Lunch Break
01:00 p.m.	Slot 1: Various sessions in the Topic Rooms and Open Space in the Market of Ideas
03:00 p.m.	Coffee break
03:30 p.m.	Slot 2: Various sessions in the Topic Rooms and Open Space in the Market of Ideas
05:30 p.m.	Wrap Up of the day
06:00 p.m.	Evening activities (informal get-together)

Wednesday, Sep. 27th 2017

08:30 a.m.	Arrival
09:00 a.m.	Keynote
10:00 a.m.	**Slot 3**: Various sessions in the Topic Rooms and Open Space in the Market of Ideas
12:00 a.m.	Lunch Break
01:00 p.m.	**Slot 4**: Various sessions in the Topic Rooms and Open Space in the Market of Ideas
03:00 p.m.	Coffee break
03:30 p.m.	**Slot 5**: Various sessions in the Topic Rooms and Open Space in the Market of Ideas
05:30 p.m.	Wrap Up of the day
07:00 p.m.	Conference Dinner (see next page)

Thursday, Sep. 28th 2017

08:30 a.m.	Arrival
09:00 a.m.	Brain Walk & Discussion
10:00 a.m.	Keynotes: "More than the sum of its parts – how to strengthen network collaboration on SD?"
11:00 a.m.	Panel Discussion: "Challenges for national and international networking on SD"
12:00 a.m.	Lunch break
01:00 p.m.	**Slot 6**: Various sessions in the Topic Rooms and Open Space in the Market of Ideas
03:00 p.m.	Coffee break
03:30 p.m.	HOCH^N Parallel Working Sessions
05:30 p.m.	Wrap Up of workshop results
06:00 p.m.	Joint Closing Session
07:00 p.m.	Internal working Session COPERNICUS Alliance
07:00 p.m.	Evening activities (informal get-together)

Friday, Sep. 29th 2017

Internal Working Session COPERNICUS Alliance
Excursion Program

See next page for more details.

Internal Working Sessions COPERNICUS Alliance

Thursday 28 from 7 - 9 p.m.

Friday 29 from 10 - 12 a.m.

Conference Dinner

Wednesday, Sep. 27th, 2017 (7-9 p.m.)

We offer a conference dinner including a boat trip on a traditional harbour launch through the Hamburg Harbour.

Enjoy the skyline of Hamburg, the old trade houses (Speicherstadt) as well as a glance on the brand new Elbphilharmonie. On board a buffet with hand-made, seasonal and mainly vegetarian food of small local farmers who love to work with groceries will be offered.

Booking via: hsds2017@uni-hamburg.de

Excursions

Friday, Sep. 29th, 2017

We like to encourage you to discover some of the green and sustainable landmarks of the city of Hamburg. All excursions are available in English and accessible with wheelchairs. Please find more details on the excursions on the next page.

There will be a pick-up service on Friday morning from the HSDS venue to reach the excursion places. You might alternatively get directly to the meeting points of the excursion venues as described.

Booking via: hsds2017@uni-hamburg.de

Hamburg harbour
(UHH/Denstorf)

Mistral in the dark/DKRZ

IBA Hamburg GmbH/Martin Kunze

Hafen City Hamburg/Miguel Ferraz

EXCURSION I:

The German Climate Computing Center (DKRZ Deutsches Klimarechenzentrum)

10 - 12 a.m.

Participants will receive information on high performance computing in climate research at the Universität Hamburg. The introduction will illustrate how the supercomputer is used to simulate the complexity of the world's climate, e.g. climate models and weather changes. The excursion includes the visit of the data silos and the supercomputer.

Registration: obligatory
Duration & Costs: approx. 2 hours, free of charge
Group limit: yes, order of registration is binding

Meeting point: Deutsches Klimarechenzentrum (DKRZ), Bundesstraße 45a, Room 034 (approx. 10 minutes from HSDS venue by public transport)
Further information: indoor event
Your guide: Michael Böttinger
More information: www.dkrz.de/dkrz-en?set_language=en&cl=en

EXCURSION II

International Building Exhibition (IBA) and Energy Bunker, Hamburg-Wilhelmsburg

10 a.m. - 1 p.m.

The international building exhibition (IBA) took place from 2006 to 2013 in the southern part of Hamburg. The guided walking tour illustrates innovative urban development concepts focusing on social, technical and cultural aspects as challenges of the 21st century. Three lead topics of IBA were: KOSMOPOLIS – the future of human interconnections in metropolises; METROZONES – urban growth and the concept of short distances between work and living; CITIES FACING CLIMATE CHANGE – growing cities and their self-supply with renewable energies and resources. The tour ends in the energy bunker's 7th floor café allowing a spectacular view over the harbor and the city skyline of Hamburg.

Registration: obligatory
Duration & Costs: approx., 3 hours, EUR 15
Group limit: yes, order of registration is binding

Meeting point: IBA-Dock, Am Zollhafen 12 (yellow-blue swimming pavilion), approx. 30 minutes from HSDS venue by public transport
Further information: indoor/outdoor event
Your guide: Johannes Robert
More information: http://www.iba-hamburg.de/en/story/iba-hamburg.html

EXCURSION III

"Green shore tour", Walking Tour through HafenCity Hamburg

1 - 3 p.m.

This guided walking tour explores the high standards of sustainability in Hamburg's HafenCity – Europe's biggest inner-city development project. You will get insights into projects that show how successfully an efficient and climate-compatible urban structure, trend-setting mobility concept and the "green" quality of buildings are being realized.

Registration: obligatory
Duration & Costs: approx. 2 hours, free of charge
Group limit: yes, order of registration is binding

Meeting point: OSAKA 9 Sustainability Pavilion, Osakaallee 9, HafenCity, entrance on the backside (!), approx. 30 minutes from HSDS venue by public transport
Further information: indoor/outdoor event
Your guide: Thorsten Gödtel
More information: http://www.hafencity.com/en/home.html; Sustainability Pavilion: http://www.hafencity.com/en/infocenter/osaka-9-hafencity-sustainability-pavilion.html
Flyer: https://www.hsds.uni-hamburg.de/en/downloads/hafen-city-osaka-flyer.pdf

MARKET OF IDEAS

We hope the HSDS is an inspiring event for everyone. As a central meeting and networking point, we offer the "Market of Ideas". It serves as a room where discussions and results of Topic Rooms are summarized and wrapped up within a daily HSDS closing session.

the "Klimasparbuch" for students in Hamburg and many other

- Blackboards to write down your questions, ideas, suggestions whenever you want;

Concept

Within the Market of Ideas you will find for example:

- "SDG corner" where the Sustainable Development Goals are displayed and literally provide the background for discussion

- "Media corner" where you can find videos and other digital information on sustainability related activities

- "Sustainability map" showing Higher Education Institutions in Germany (and Europe) that are engaged in sustainable development topics

- "Wall of fame", giving you the opportunity to share your contact and professional profile information with other HSDS participants

- Several information booths, to find further material on networks, projects and initiatives, such as the HOCH[N] project, Fair Trade University,

Brain Walk

A brain walk is taking place on Thursday, Sep. 28th, 9-10 a.m. within the Market of Ideas.

Room No.: 221

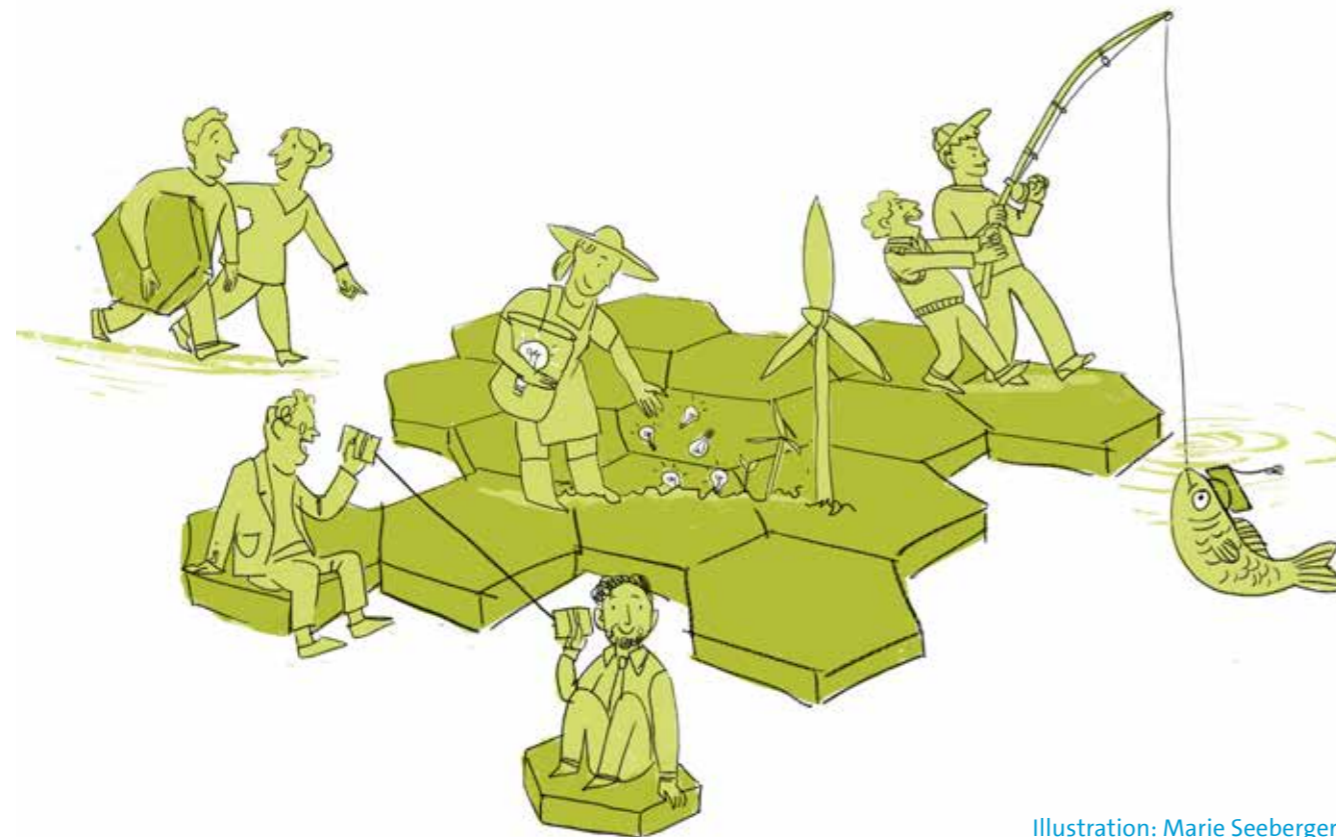Simplifying complexity with LEGO® (Photo:UHH/KNU):

Illustration: Marie Seeberger

ABSTRACTS BY TOPIC ROOM

Topic Room:
"Education for Sustainable Development"

Room No.: 122

The Topic Room "Education for Sustainable Development" (ESD) addresses workshops, presentations and posters dealing with topics such as:

- Sustainability science as a force for innovation in education
- Challenging hierarchies in educational settings
- Envisioning change: policy, tools and training
- Education for Sustainable Development in the curriculum
- Curriculum for new approaches to business development

Abstracts on the workshops, poster and paper presentations assigned to the Topic Room "Education for Sustainable Development" in alphabetical order:

Photo: UHH

The influence of position-practice systems on education for sustainable development transformations in higher education institutions

Presentation

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This paper argues that the influence of position-practice systems is significant for Education for Sustainable Development (ESD) transformations in Higher Education Institutions (HEIs). The influence can either be enabling or constraining. This paper is aimed at directing readers' attention to the efficacy of the theory of position-practice system and its associated sphere of influence in the context of transformation of social structures and scaling up of ESD action in HEIs. This is a potential sustainability strategy that can affirm effective integration of sustainable development in HEIs and contribute to achieving the Sustainable Development Goals.

Drawing on a longitudinal PhD study, the paper presents the nested case studies of university staff faced with the mandate of mainstreaming sustainable development in their institutions. The study emanates for a broad case study of the Sida sponsored 2008-2013 International Training Programme (ITP) on ESD in Higher Education and UNEP's Mainstreaming Education and Sustainability in Africa (MESA) University Partnership. The study is characterised by the tracking and monitoring of ESD learning and change processes of the ITP participants. This included 139 ESD change projects implemented by 280 academics from 106 institutions, in 35 Asian and African countries.

The study provides insight into the efficacy of engaging with position-practice systems and the sphere of influence of human agency in the quest for institutional transformation. Authors argue that the lack of critical engagement with the position-practice systems of individuals in institutions is tantamount to reproduction of social structures that hinder ESD and achieving the SDGs. The value of this paper lies in the empirical evidence that institutional ESD transformations can be enabled by strategically engaging individuals' sphere of influence which is based on their position-practice systems in time and in space.

KEYWORDS: position-practice systems, sustainable development, ESD mainstreaming, transformation in higher education institutions, structure and agency.

International grants and sustainable transformative educational vision in Egyptian higher educational institutions

Presentation

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International initiatives and funds aim at achieving cohesion in areas of mutual interest and at assisting governmental educational institutions in Developing Countries in consolidating their economic and social development. In this regard, the action plan defines the organization's priorities within the established areas of cooperation. Once predominantly oriented towards policy dialogue, the funding institution has progressively added economic growth and human development as pillars of cooperation with a focus on capacity building, sharing experience and know-how transfer.

The paper has taken these initiatives as its point of departure in the subsequent formulation of research objectives and approach of study. It focuses on the evaluation of the international initiatives in sustaining the Educational process, and facilities in the Egyptian Governmental Higher educational institutions. Also it aims to explore the mobility outcomes using evidence from research project partnership grants between Egypt and international partners.

Finally the paper proposed a Scale Evaluation Model to evaluate the Sustainable Impact of the International Grants provided in the developing countries. The paper ends up with a "Sustainable Framework", which has a two deliverables: Financial and Technical Sustainability.

On one hand, the financial Sustainability could be achieved through the provided facilities by the Egyptian governmental universities to be open for use for other academic or non-academic in Egypt and in the region. Members in academic, non-academic, and associate partners promote for the granted program, potential for scholarship programs offered by those entities. On the other hand, the technical and institutional sustainability can be achieved through the upgrading partnership with the international partners seeking for a full joint program and multilateral collaboration; promote student exchange; redefine educational programs as a driving force for development to increase government financial and regulatory support for similar shared learning environments and university community projects.

KEYWORDS: international grants, Egypt, educational institutions, partnership, research project.

Building blocks and tesserae: a no-frills integration of an education for sustainable development in existing (engineering) courses and lectures

Workshop

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The Blue Engineering Course combines socially and ecologically responsible engineering with student-centered teaching methods [1]. The students acquire competences linked to an education for sustainable development [2, 3]. These competences are adapted and designed down as learning outcomes [4] on module and lesson level [5]. The learning outcomes are subsequently aligned with suitable learning activities and assessments [6, 7]. They are also used for the evaluation of the course. Building blocks are the backbone of the course [8]. They contain all necessary content and didactical instructions, so that just about anybody will be able to facilitate a demanding 60-90 minutes workshop on a complex topic, like ethical codes, recycling, pre-implantation diagnostics and cooperatives. This is possible through the extensive use of methods that take the shift from teaching to learning seriously, e.g. role play, station learning, crime scene investigations, educational games and democratic pedagogy [9].

Tessarae complement building blocks and are typically 5 to 15 minutes long. Thus, they are suited for courses but can also easily be integrated into lectures. Tesserae therefore offer not only a valuable, didactical break within each lecture but also the chance to acquire competences in a teacher-centered environment that are necessary for a sustainable development.

The 90 minute interactive workshop will provide a succinct overview of the student-driven course design [8], its implementation at TU Berlin [10], TU Hamburg-Harburg and HS Düsseldorf as well as its evaluation over the past 6 years. Next, the participants will engage most of the workshop time in a series of tesserae and shortened building blocks. This is done to ensure a hands-on session as well as to encourage them to use the over 140 existing teaching/learning units [11] in their own settings. The workshop will conclude with a discussion of a possible transfer to a non-engineering education.

KEYWORDS: engineering ethics, learning outcomes, responsibility, student-driven, engineering education for sustainable development.

References:
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Reorienting curricula towards education for sustainable development – instruments for innovation

Poster

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Education is one major transformation pathway towards more sustainable societies and more equitable global relations. During the UNESCO decade from 2005-2014, many different stakeholders experimented with integrating sustainability into teaching and learning. One clear result is that education for sustainable development needs to go far beyond sustainability as a subject. Developing competencies to participate in the societal learning and transformation process towards sustainable societies, becoming change agents, requires innovative methods and teaching-learning-environments that offer opportunities to apply and build those competencies. Though there are many successful forms of such teaching and learning today, higher education for sustainable development (HESD) has not yet permeated across disciplinary cultures and the about 15.000 courses of study in the German academic system. How can the existing knowledge and experiences with HESD be better distributed within universities and better utilized in teaching?

The BMBF-funded project HOCH[N] aims at better integrating sustainable development in all aspects of the university: research, teaching, governance, campus management, and reporting. The proposed poster will show results from the first year of HOCH[N]-teaching, which focuses on assessing the conditions of possibility for good HESD in universities throughout Germany, and based on that developing guidelines and instruments to support universities in implementing HESD at different levels and in different disciplines. The poster will present a matrix to map out modernizations in the curriculum towards enabling transformation competencies, and an instrument for integrating criteria of HESD into different kinds of curricula. Both instruments can be used on four levels: 1) including sustainability in a single course, 2) complementing and reorienting disciplinary curricula, 3) offering sustainability electives across faculties, 4) designing sustainability programs. The poster will also show a map of current HESD-innovations in the educational landscape of Germany.

KEYWORDS: curriculum reform, change agents, innovative teaching-learning-environments.

Sustainability-driven entrepreneurship – curriculum for new approaches to business development

Workshop and Poster

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(2) University of Vechta (Germany)
(3) University of Gothenburg (Sweden)
(4) Masaryk University (Czech Republic)
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Integrating Education for Sustainable Development (ESD) in higher education curricula requires innovative ideas and approaches how to bring together different types of knowledge and how to create spaces for development of new competencies – in particular competencies that would allow students to be better prepared for shaping a sustainable future in general and starting sustainable socio-economic processes in particular. A new joint Master's program on sustainability-driven entrepreneurship is developed in transdisciplinary collaboration settings. Ten universities and business partners from five European countries form an intercultural knowledge alliance, financed by the European Union's Erasmus+ program. This "Competencies for A sustainable Socio-Economic development (CASE)" project [www.case-ka.eu] aims to develop an innovative concept for a European Master's program. The Master's draft curriculum shall be discussed in this workshop, giving participants the opportunity to deepen their understanding of inter- and transdisciplinary learning formats.

The workshop facilitators will present an outline of the Master's program in which students from different fields can work together with regional partners and participate as entrepreneurs in socio-economic transformations towards sustainable development. This is "work-in-progress" that should be discussed in interactive dialogue formats (World Café or similar) on the basis of some guiding questions:

- What is needed for implementing such a Master's program at different universities and how can it be adapted to specific contexts?

- How can students be attracted to such a program?

- How can regional partners, especially enterprises, profit from this program and how could co-operations look like?

Participants can learn from this workshop:

- How to organise partnerships at the science-society interface reaching out for meaningful cooperation between universities and practice partners.

- How to initiate and apply learning spaces necessary to foster competencies for sustainability-driven entrepreneurship. How to facilitate learning processes at the individual and collective level empowering people to shape and implement transformation practices.

KEYWORDS: transdisciplinary collaboration, knowledge alliance, joint master's program, curriculum development, sustainability-driven entrepreneurship.

Education – Transformation – Sustainability. Education for sustainable development in teacher education

Poster

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Teachers play a key role for the development of competencies required for the transformation towards a sustainable society. They are supposed to act as „problem solver", „change agents" and „transition managers" [1]. It is therefore essential to promote necessary skills already during the studies. There is a lack of sustainability-related competence promotion in current teacher education. The institutional frameworks in higher education do not exist at present [2]. Education for sustainable development in teacher training is still subject oriented and it is not obligatory for each subject. Studies have shown that students as well as teacher students have many misconceptions regarding sustainability issues. They include, for instance, the lack of systemic thinking [3] or focussing on the ecological dimension [4]. Hence teacher education has to focus on didactical and content issues with respect to sustainability issues.

This contribution presents a certificate for teacher students that has been initiated at the University Koblenz-Landau in 2016. The certificate "education – transformation – sustainability" aims at providing knowledge and skills important for future teachers acting as change agents. In a series of five modules, participants (from all subjects and all school types) have the opportunity of acquiring interdisciplinary knowledge and of discussing critically the concepts of Education for sustainable development and inclusion. Furthermore the students develop, implement and evaluate an educational offer in a practical module. The aim of the certificate is the improvement of teacher education for sustainable development in a holistic manner.

KEYWORDS: teacher education, higher educational offer, education for sustainable development.

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The glocal curriculum: internationalization, digitalization and reform in higher education for sustainable development

Presentation

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Sustainability problems, from loss of biodiversity to epidemics and violent conflicts, are global but manifest with negative impacts in different local contexts around the world. Future

generations of citizens will have to be able to find solutions to these problems on local to global scales if they want to contribute to sustainability transformations. Transnational collaborations between universities offer important opportunities for the education of such citizens in our globalized and interconnected world. They create spaces to exchange, critically appraise, and creatively produce knowledge about sustainability problems and solutions on local to global scales as well as across cultural and geographical contexts. Yet, although such collaborations are mushrooming, we still understand little about the effectiveness of the curricula and the teaching-learning environments. In our talk we ask: what kind of curricula and teaching-learning environments can we use in transnational collaborations to facilitate such education?

As an answer to this question, we present the glocal curriculum and teaching-learning environment that were produced, implemented, and assessed in The Global Classroom project, a transnational collaboration between Arizona State University (USA) and Leuphana University of Lüneburg (Germany). We show that ontological (how we conceive of the nature of sustainability problems and solutions), epistemological (how we produce knowledge about sustainability problems and solutions), and ethical dimensions of glocal (how we act in order to support transformations towards sustainability) have implications for the kind of education that can contribute to sustainability transformations in an increasingly globalized and interconnected world. We argue that such implications require integrated approach to internationalization, digitalization, and curriculum reform in higher education for sustainable development (HESD).

In the course of The Global Classroom Project, we assessed both the glocal curriculum and the glocal teaching-learning environment through direct observation, as well as by gathering opinions and perceptions of students, instructors, technicians, and curriculum designers. In our talk, first, we present examples of glocal curriculum and teaching-learning environments that students and instructors co-developed and assessed in the field of urban sustainability during the project. Second, we discuss such examples in the context of internationalization, digitalization, and curriculum reform in HESD.

KEYWORDS: change agents, problem- and project-based learning, intercultural, digital technologies, transnational collaboration.

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Mentoring for sustainable development in higher education

Workshop

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This 90-minute workshop will focus on Mentoring for Sustainable Development in Higher Education. It will be of interest to anyone involved in mentoring relationships that encompass a sustainable development component, whether peer mentoring, lecturer-student, in-service or even informal mentoring. The appreciative inquiry tool SOAR will be used, where SOAR stands for Strengths, Opportunities, Aspirations and Results. SOAR is often referred to as a positively re-framed SWOT analysis tool. There will be a special emphasis on the "A" of SOAR, where participants will discuss who do we want to be and what is our preferred future (as opposed to the possible and probable futures we are facing).

The workshop will start with a brief introduction of participants, followed by a short presentation on: i) mentoring for sustainable development and; ii) the SOAR tool. Participants will then be given "own time" (around 10 minutes) to do a SOAR analysis as applicable to their own context.

The workshop will then focus on possible, probable and preferable futures, with an emphasis on aspirations and the "DREAM stage of appreciative inquiry, that of the envisioning of processes that would work well in the future.

The ultimate goal is to create – DESIGN and DELIVER – for sustainability around what is already working or will work in the specific higher education contexts, rather than trying to fix or oppose what does not work. As Buckminster Fuller once said "You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete." This workshop is part of the author's ongoing research on mentorship – which having the ability to go beyond the cognitive and towards socialization to sustainability

values, attitudes and practices – can be uniquely positioned to support such a process.

KEYWORDS: mentoring, aspirations, SOAR, preferable futures.

A to Z of Sustainability: integrating ESD into formal and informal curriculum in the UK

Presentation

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The National Union of Students' (NUS) Department for Sustainability has been working in education for sustainable development (ESD) for over 10 years. Within that time, we have learnt about, shared and developed many methods of integrating ESD into formal and informal curriculum. We are now helping institutions to do this, as well as incorporating it into their governance, operation and outreach. This paper will outline three recent developments, which demonstrate what UK universities and colleges are already doing.

First it will outline and analyse examples from our new report, 'From Art to Zoo Management: embedding sustainability in UK higher and further education'. It details case studies from UK institutions showcasing how a wide variety of courses are incorporating and embedding ESD into their teaching and, crucially, their methods of teaching. This truly achieves the goals of ESD [1] in teaching skills and knowledge but also attributes and values associated with sustainability.

Next it will discuss Dissertations for Good: an online platform partnering students at universities with organisations to complete important research together. This programme gives students control over incorporating sustainability into their education and specific subject. It allows them to use their passion and knowledge to make a real difference and use their education as a force for social good.

Finally it will consider Responsible Futures: a framework of actions we have developed to help institutions incorporate sustainability. This programme has a wide focus, advising on the curriculum as well as the way that the institution operates and its outreach. This programme spreads the work already happening within universities and colleges, and puts into action a theory of 'subliminal curriculum' – where students learn from their surroundings, as well as curriculum.

KEYWORDS: curriculum, governance, good practice, ESD.

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[1] Education for sustainable development: Guidance for UK higher education providers. Higher Education Academy, Quality Assurance Agency for Higher Education, June 2014.

The education goal progress within the sustainable development goals

Presentation

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A lot has happened since the 17 United Nations (UN) Sustainable Development Goals (SDGs) have been adopted by the UN SD Summit on September 25, 2015. An overview of the role of Education for SD (ESD) within the SDGs, in particular the Goal 4 on Quality Education will be presented including:

- UN SD Knowledge Platform, Transforming our World: the 2030 Agenda for SD
- UN Framework Convention on Climate Change (UNFCCC), SDGs, ESD and Paris Agreement
- UNESCO indicators on ESD will be an important part of the monitoring
- EU implementation of the SDGs
- The Organisation for Economic Co-operation and Development (OECD), OECD Action Plan on the SDGs, and on Measuring Distance to the SDGs Targets
- The World Bank Transitioning from the Millennium Development Goals (MDGs) to the SDGs
- World Economic Forum (WEF), Partnerships for SDGs
- The World Business Council for Sustainable Development (WBCSD), SDG Business Hub tools and guidelines (Compass, Index, Dashboard, Industry Matrix, Report 2016, etc.)
- The International Council for Science (ICSU) and the International Social Science Council (ISSC), Review of Targets for the SDGs: the Science Perspective
- UN SD Solutions Network, Getting started with the SDGs in Cities, etc.

In 2016/2017, GlobeScan/SustainAbility Survey (GSS) asked 511 experienced sustainability professionals to evaluate the progress made on SDGs, rank their relative urgency and also share insights into the priorities. Ranking was performed by a gap between a good progress (4+5 on the 5-point scale) and a poor one

(1+2). The 4th Goals – Quality Education ranked 5th with +8 – 44 = −36; industry, innovation and infrastructure Goal showed the best progress (+13 – 35 = −23), followed by the Partnerships for the Goals (−26) while Reduced Inequalities (+3 – 70 = −67) and Life below Water (−64) were the worst. Quality Education was found as the 2nd most important SDG for society to focus on (26 % of experts), only Climate Change was higher on the impact importance with 39 %. The most attention in organizational units was payed to Climate Action (41 %), and Responsible Consumption and production (23 %) while Quality Education was 5th (19 %).

10 out of 169 SDG targets are attached to Quality Education. They have been analysed together with the above mentioned agendas of global organizations and the questionnaire results. Recommendations for refining 4 out of the 10 targets, and setting an additional one, are:

4.1 – Effective learning outcomes relevant to SD and sustainable living
4.4 – Technical and vocational skills for employment related to sustainability and the green economy
4.7 – ESD programmes which promote sustainable lifestyles, human rights, etc.
4.b – Programmes related to sustainability challenges and the emerging green economy
+ Life-long and social learning in adult, community, non-formal and informal environments.

Education, training and learning is linked with all other SDGs as has been shown by the ICSU & ISSC Review. Education system is providing professionals, researchers and teachers for all the areas of human activities.

KEYWORDS: SDGs additional targets, ESD, quality education, new challenges.

Sustainability Science as a force for innovation in education

Workshop

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The transition to a sustainable society is one of the central challenges of our times. Through research and education, science will contribute to shaping the future and to developing a sustainable society. However, traditional science, subdivided into disciplines, is poorly equipped to deal with complex, multifaceted unsustainability problems, presenting a challenge in research, in terms of integrated situational analyses and with respect to the search for appropriate solutions. The boundaries of academic disciplines need to be crossed and cooperation with other stakeholders needs to take place in transdisciplinary research and development processes.

Sustainability science, which is conceived as a transformative set of innovative methods and principles to achieve short- and long-term impact in society, is orientated towards a vision of the future which is not a simple extrapolation of the present state. This requires a shift in scientific thinking and practice: science thus enters the field of uncertainty and yet is still expected to provide evidence based and reliable expertise. Undertaking research in its framework requires skills that are not currently anticipated in HE: imagination and creativity (to envision the future), reflexivity (the capacity to learn from experience), normative skills (to set alternative goals), leadership skills (to promote innovative approaches and solutions) etc.

Education for sustainable development (ESD) also works with skills and competences necessary for understanding and fostering sustainability. It attends to sustainable development (SD) as it appears in different fields of human activities, and equips students to consider principles embedded in these fields from the viewpoint of sustainability. It stresses the need for research and outlines competences needed to understand and promote SD in social, cultural, economic and educational spheres.

Interweaving educational and scientific methodologies in higher education may encourage more substantial transformation towards sustainability. In the workshop, links between sustainability science and education will be explored in order to 1) ensure a greater impact of HE in society in response to the (uncertain, risky, rapidly changing) future, and 2) equip students with essential employment skills. For sustainability transformation of universities (curricula, research, outreach), internal bottom-up processes are needed besides the supportive (internal and external) policy environment.

A number of factors, some of which can be actively shaped by the workshop participants, play a role here: HE commitments, institutional structures, networking and the ripple/cascade effect thus generated. World café format discussion will focus on experiences with innovative methods in sustainability sciences, implementation of future perspectives etc. We are concerned with the future, as it is being (or should be) tackled in different fields of practice, and transformative approaches in science/education that may support social change. The results of the discussion will provide the point of departure for a collaborative mapping exercise to which participants will contribute throughout the conference.

KEYWORDS: sustainability science, education for sustainable development, higher education, sustainability transformation.

Participation through reframing the lecturer-student-relationship

Workshop

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Participation is one of the key concepts in sustainability education. One approach to foster student engagement that we have applied successfully at Kiel University (CAU) involves students directly into the didactical seminar design in order to reframe the teacher-learner relationship. Two students who experienced the seminar „applied utopias for sustainable development" as participants in the winter semester 2015 changed their roles from students to educators for the new edition of the seminar in the summer semester 2016. With the guidance of experienced PerLe learning consultants, the students developed and conducted the seminar by themselves. This change of roles led to a strong sense of ownership for the learning process of all participants. In terms of training key sustainability competencies the „utopia"-seminar itself was thoroughly related to future thinking (anticipatory competence) and value thinking (normative competence).

In this 90 min interactive session, the participants will experience methods of the „utopia"-seminar themselves, using the headstand brainstorming method on participatory teaching in higher education and the future travel method on scenarios of a successful social-ecological transformation in 2050. Based on a short presentation about the „utopia"-seminar the session ends with the discussion of benefits and challenges of high level student involvement in higher education teaching and learning processes.

KEYWORDS: applied utopias for sustainable development, sustainability education in higher education, participatory teaching, student empowerment.

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University education for sustainable development in Russia: result of the ESD UNESCO Decade and future vision

Presentation

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The Decade of the UNESCO Education for Sustainable Development had ended in 2014. The agenda and problems were several times discussed during the period and after at the International Ministerial Meeting and Conferences. Russia joined the process from the very beginning in 2003 but still the problem of changing the paradigm of the University Education in the reflection of Sustainable Development Concept is question of the hour as in the field of content and curriculum as also in the field of teaching methodology and competences. Russia has several local initiatives on the institutional levels but still has no support for the process on the state level.

The pre-history of the University ESD UNESCO supervised process internationally is vibrant and productive and includes several Declarations as Tallories (1990), Halifax (1991), Swansea (1993), Kyoto (1993), University Charter for SD (1994) and later Copernicus Charter for European Universities.

In 2005 in Vilnius „The Vilnius Framework for the Implementation of the UNECE strategy for the ESD" was signed having Russian Federation as one of the partners. In 2005 the Bergen Communiqué „The European Higher Education Area – Achieving the Goals" was adopted. Both documents stressed attention on the main goals of the EDS – values development, system thinking, and practical orientation of SD along with the discussions on the need of the innovation approach in teaching. Mostly European countries in 2005 have submitted to the National Strategies for the EDS and Universities Declarations for the ESD. Their realization is still coordinated on the government level and assessed by the international indicators and scores.

In Russian Federation in 2005 the special educational programs in the field of Ecology and Sustainable Development

were designed in less than 5% of the Universities and Institutes all over the country. Till now Russia shares the location in the group of the less ESD involved countries outpacing only Armenia, Moldova, Georgia and Kyrgyzstan.

Russia still haven't got normatively adopted documents suggested by the UN Economic Commission for Europe as National Strategy for the ESD and Implementation Plan for the ESD making no steps for launching the Coordination Committee for ESD in Russia and developing the normative documents and standards for the University Education as it was done in most European countries.
The main principles of HEI Declaration initiated before the IO+20 Conference by several institutions include: teaching SD Concept, including it to the curriculum to have professional that share the principles and are competent in the field; support the research in the field of SD; maintain the environmentally friendly university Campuses by energy, water, material flows and waste management efficiency projects; supporting the sustainable lifestyle of the university residents; supporting the activities of the local communities for promoting the SD strategies in cooperation with the local administration and NGOs. Finally only three Universities of Russia signed the HEI declaration in 2012.

The Nagoya World UESCO Conference in 2014 adopted the results of the UNESCO Decade for the ESD and launched the new project „Global Action Plan" with the slogan „Learning for the Future". It made visible (also on the map) the key players on the field of ESD including 360 institutions and communities launching all over the world. All countries except Russia were represented during the conference in Nagoya by the State Educational Institutions for SD and signed the Nagoya Declaration.

On the 24th of December 2016 the Meeting of the State Council discussed the problem named as „An Ecological Development of Russian Federation taking into account the Interests of the Future Generations". The special Presidential order was produced annou8ncing the steps of moving this direction in general and for the regions till 2025-2030. Along with others goals the goal to include SDGs and Agenda 2030 to all educational standards of the Russian Federation was proclaimed. The Order from the prime Minister to work out the model of the Russia transition to Sustainable Development was announce on the 10th of February 2017.

Reflection on the ESD in Russia and suggested new steps for the ESD will be discussed.

KEYWORDS: education for sustainable development, SD initiatives in Russian universities, declarations on SD in HEI, transition of Russia to SD.

ABSTRACTS BY TOPIC ROOM

Topic Room: Reporting and Governance

Room No.: 123

The Topic Room "Reporting and Governance" addresses workshops, presentations and posters dealing with topics such as:

- Governing sustainability at Higher Education Institutions
- Creating a Base Model for Sustainable Development platforms
- Opportunities and risks of sustainability reporting and ranking
- Measuring and assessing sustainability at Higher Education Institutions
- Overcoming informal and formal barriers to the implementation of sustainability
- How to spread and promote sustainability at Higher Education Institutions

Abstracts on the workshops, poster and paper presentations assigned to the Topic Room "Reporting and Governance" in alphabetical order:
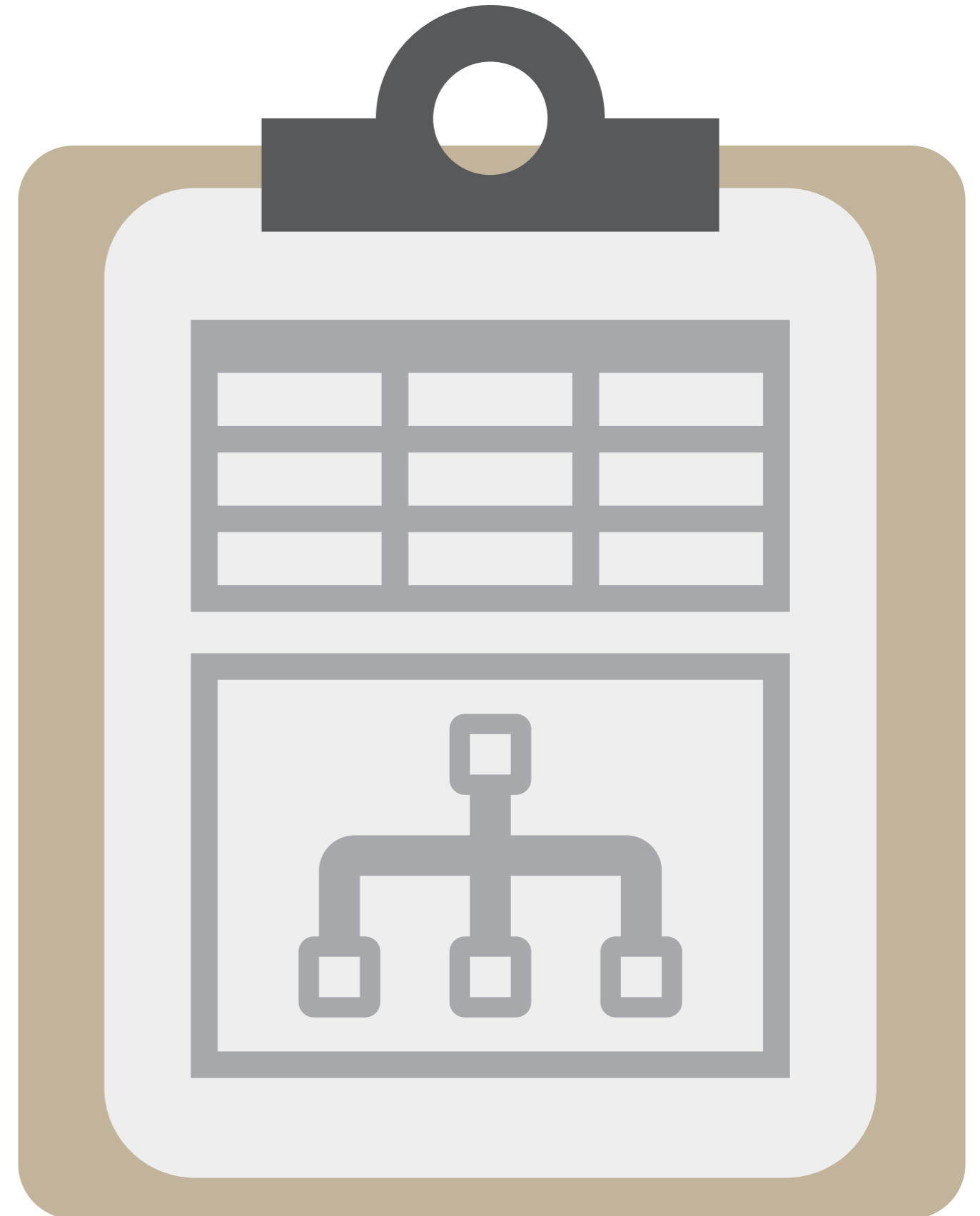
Creating a base model for sustainable development platforms using the clearing house mechanism

Workshop

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The goal of this interactive session (90 min.) is to design a base model for sustainable development platforms consisting of real and virtual elements to be in use on campus and urban realm. Often there is a coordination office or management team that organizes events and projects in order to follow a road map or agenda for sustainable development. Different kinds of websites, blogs, portals, platforms are being used complementarily. Stakeholders contribute in different ways – in most cases using the coordination office as a central hub. We argue that this kind of cooperation can be organized in a better, more effective way if we follow the clearing house mechanism. This means to focus on information processing, networking, exchange, development of ideas and collaboration all at once. Stakeholders share their own information and ideas and moderate those of others. The main idea of a clearing house platform is to create a vibrant community of individuals using all their knowledge and capabilities to reach a common goal, e.g. sustainable campus or urban development, in the best possible way. There are already solutions in the field, which use the clearing house mechanism to a certain extent. Hence the interactive sessions starts with a short introduction showing the advantages and disadvantages of different platforms. The core of the session will be conducted using the Pro Action Café methodology. The session ends with an agreement on the next steps. Subsequent to the session, the base model will be refined and written out in full so it can be used to adapt existing platforms and to create new platforms.

KEYWORDS: clearing house, collaboration platform, idea logistics, open knowledge, web 2.0.

Rankings and sustainability in Portuguese higher education institutions

Presentation

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The issue of rankings in Higher Education Institutions (HEIs) has produced a growing body of literature at international level. However, there is still little discussion on the subject of Higher Education (HE) in Portugal. This paper strives to fill this gap. The research was conducted via the Portuguese public Higher Education Institution (HEI) websites and presents a critical review of HEI rankings in Portugal (the types of ranking and which HEI have the concern of promoting Sustainable Development (SD) rankings). The links between rankings and institutional commitment, advanced sustainability or the promotion of a positive image are discussed. It is suggested the need to create a new ranking for SD in HEIs and contributions are presented accordingly. Simultaneously, in order to be able to integrate the ranking for SD, the inclusion of system and subsystem activities of HEIs were discussed. The results of this preliminary study are used as a starting point for further discussion on the development of a ranking for Sustainability in Higher Education Institutions thus responding to the issue of holistic and integrated sustainability in HEIs.

KEYWORDS: rankings for HEIs, university ranking, holistic rankings, Portuguese higher education institutions, sustainability.

Spanish universities social councils attitudes towards environmental sustainability

Presentation

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Many universities are changing the way they operate to integrate Sustainable Development (SD) in managing their campus. By transforming their missions and restructuring their curricula, research programs, life on campus and interaction with other social actors; universities play a key role in the development of society, and their actions implies relationships with internal and external agents.

In Spain the Social Council is the body, which represent the public interest in universities and act as a bridge between society and the institution. The environmental sustainability is one of the main societal challenges, therefore, the aim of this study is to know the opinion of the members of Social Council about the effort that universities should make in environmental sustainability, and especially in energy efficiency and resource management.

The adopted methodology is based on a qualitative analysis of the data collected, through an exploratory survey applied to all Spanish public universities that belong to the Spanish universities' Social Councils association (CCS).

The results reveal high valuations of the importance of universities getting involved in environmental sustainability, however, the respondents don't consider it as a priority in universities' budget. Thus, they mostly agree in the universities commitment to environmental sustainability, and support actions related to resource management, energy efficiency actions, knowledge and assessment.

The originality of this study is to provide a useful knowledge about university social representative's attitudes towards universities' energy efficiency initiatives that will have an impact on community behavior.

KEYWORDS: sustainability, higher education, social council, energy efficiency.

Sustainable development at the University of Tübingen

Poster

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„The University of Tübingen acknowledges the maxim of sustainable development. It regards sustainability as an integral part of research and teaching". This programmatic statement stems from the Mission Statement of the University of Tübingen. On different levels and in an interconnected way, the University of Tübingen implements specific measures for sustainable development (SD) and education for sustainable development (ESD). Priority action areas are: teaching and learning (Studium Oecologicum, capacity building for university teachers ...); research (Energy Lab Tübingen, Sustainability Award for Thesis ...); operation (EMAS ...); governance (Advisory Board for SD, School for SD ...). On occasion of the Hamburg Sustainable Development Summit 2017 these areas will be presented on a poster. It will be shown, that they are closely linked to the five action areas of the UNESCO roadmap for the Global Action Programme [1]. Special consideration is given to the following questions:
1. How can the different priority areas be interconnected and which guiding principles do they share? These questions are of particular importance with regard to whole institution approaches.
2. Which were (and are) drivers and barriers for the integration of (E)SD and which are the specific challenges for classical full universities like University of Tübingen?

KEYWORDS: sustainable development, education for sustainable development, whole institution approaches, university.

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How can management control systems contribute to implementing institutional sustainability strategies? The case of higher education institutions

Presentation

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Management Control Systems (MCS) provide decision-makers with the means to implement strategy by directing limited management attention. In MCS research different conceptualizations approaching MCS exist. We follow the concepts of the Levers of control of Simons [3] and the object-of-control framework of Merchant and van der Stede [2] and transfer them to the specific setting of Higher Education Institutions.

Our paper focuses on the question how MCS can contribute to implementing institutional sustainability strategies for the case of Higher Education Institutions (HEI). Specifically, we analyze how MCS mediate the relationship between strategic sustainability performance and operational sustainability performance.

Thus our research contributes to the research on the interlinkage between strategic and operational performance as well as on the question how MCS can leverage the implementation of sustainability strategies.

We base our analysis on a survey conducted among the HEI in Germany in 2016. Our final sample comprised all publicly recognized 521 HEI in Germany, Austria and Switzerland, out of which 156 sent back usable questionnaire. In order to retrieve the aspired information we designed a standardized questionnaire based on the total design method of Dillman et al. (2014) [1], in order to allow a structured collection of information on MCS. We collected data on values and norms, codes of conduct, budgeting, performance measurement systems, incentive systems and controls. Moreover we hand-collected information on the strategic sustainability performance, such as sustainability policies and sustainability management systems and the operational sustainability performance such as diversity or energy use from sustainability reports as published on the webpages of the universities.

The benefit of our study for research is that we analyze how MCS and sustainability management is interlinked for the specific context of HEI. HEI practice can draw on our results when establishing both MCS and sustainability strategies in HEI.

KEYWORDS: sustainability strategies, sustainability performance, management control systems, higher education institutions, survey.

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Empowering sustainability initiatives at the university – an evaluation of the project „Wandercoaching" by Network-n

Presentation

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In this session, we will present research on the program "Wandercoaching" by netzwerk n e.V. and its effects on university initiatives. In this BMBF-funded program, sustainability initiatives of universities across Germany participate in a coaching weekend with two expert coaches. The coachings involve team building, constructing visions, learning about project management tools and several other measures. All participants complete a pre and post questionnaire. Additionally, coaches fill out a post survey about methods used during their coaching. The study focusses especially on perceived self-efficacy [1], collective-efficacy [1], participatory efficacy [2], knowledge, group identity [3], and pro-environmental behavior. We seek initial evidence for predictors of perceived efficacy as well as indications of its relationship with identity and pro-environmental behavior in the context of environmental volunteer work. It is hypothesized that the program influences all of the described variables positively. Furthermore, the study contrasts several efficacy goals – environmental protection at the university, general environmental protection, and motivation of others students to protect the environment [4] – as well as differing types of pro-environmental behavior – private-sphere, public-sphere non-activist, and activist pro-environmental behavior [5]. The project contains numerous hypotheses. To name a few, we predict that the goal of motivating others is a better predictor

of pro-environmental behavior than other goals. Furthermore, a change in group identity should lead to a change in efficacy perception, and a change in individual efficacy is closely connected to a change in private-sphere environmentalism while collective and participatory efficacy are connected to public-sphere non-activist and activist behavior. The paper presentation will present and discuss initial findings.

KEYWORDS: sustainable student initiatives, self-efficacy, collective efficacy, pro-environmental behavior, identity.

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Experiences of enhancing the sustainability report of the Environmental Campus Birkenfeld by following the German Sustainability Codex (DNK)

Presentation

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Universities play a major role in implementing sustainable development into our society. On the one hand they educate and shape the leaders of tomorrow. On the other hand, they can be seen as a role model of sustainable operation within the university itself.

Sustainability reporting is not only considered to be an instruments to implement sustainability into the university system but also to communicate sustainability performance, set goals and its impacts to society.

There is only a small percentage of universities in Germany that publish a sustainability report. One of the reasons for that could be the missing standard on sustainability reporting in higher education institutions. Without standardized reporting guidelines, it takes more effort to compose a comprehensive sustainability report.

To simplify, standardize and adjust sustainability reporting to the unique demands of higher education institutions the beta version of the German sustainability codex (DNK) was developed by the German council for sustainable development.

In order to promote sustainability reporting in higher education institutions and to develop a common guideline the Environmental Campus Birkenfeld (ECB) is one of the pilot universities in adapting the beta version of the DNK. On that account the ECB's sustainability report 2017 was structured in alignment to the guidelines of the newly developed code. The experiences that were gained during the process, the identified obstacles and opportunities will serve as a foundation for a further dialogue within the pilot project.

KEYWORDS: Environmental Campus Birkenfeld, sustainability reporting, sustainability code, sustainable development.

Bottom-up transformation of universities: students as change agents for sustainability

Poster

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The netzwerk n e.V. stands for a genuine and new perspective on the discussion about – and the actual transformation process of – sustainability at universities. Under the vision of a bottom-up, whole-institution transformation of universities our mission combines three aims: (1) providing an (online) plattform for the exchange of knowledge and experience, (2) increasing transformative literacy by peer-to-peer coaching, (3) influencing national science politics.

The poster to be presented at the Hamburg Sustainable Development Summit 2017 would concentrate on the so-called „Wandercoaching" program which serve our second mission. We are looking back at a 3-year experience in coaching and training of students and student initiatives all over Germany. So far (March 2017), we have coached over 40 (student) initiatives.
Within the program, we provide a contentwise, strategic and methodological training for (student) initiatives. The „Wandercoaching" is a peer-to-peer program: the coaches are active and experienced

students themselves that – with the support of our training in methods and content – in turn coach student initiatives around the country. The training consists of four phases:

(1) Preparation-phase (around 4 weeks, with our online collaboration tool „platform n"),
(2) Workshop (weekend at the home-university of the initiative),
(3) Coaching (at least one semester, online and offline, additional meeting(s) possible),
(4) Networking (online via „platform n", networking events, conference, additional workshops).

Throughout the coaching:
- The participants gain knowledge about universities in sustainable development
- The participants gain knowledge about universities in sustainable development
- Reflect on and develop a vision for their own university as well as start working on a concept paper for a sustainable transformation process;
- Evaluate their group and communication structures
- Evaluate ongoing projects as well as plan and initiate new projects.

KEYWORDS: students as change agents, bottom-up processes, peer-to-peer-coaching.

What hampers and what fosters sustainable operations in higher education? A systematic review of barriers and success factors

Presentation

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Sustainability gains importance in business as well as in institutions of higher education. Institutions of higher education shape the learning of a society by their teaching and their research as well as role model by involving and educating their members in sustainable operations. Acknowledging the actuality of the topic we systematically review studies on sustainable operations in higher education. Therefore, we apply the External environment Organization Group and Individual (EOGI) barrier model, which takes a multilevel approach by drawing on stakeholder theory and dynamic capabilities barriers.

EOGI is based on barriers identified in 188 empirical studies. We apply it to provide the state of research on barriers and success factors in sustainable operations in higher education by systematically searching and reviewing studies in this field. The manifestations of barriers and success factors are classified according to external environment (external stakeholders: investor, potential employee, supplier, competitor, customer, state, society), organization (strategy, structure, size, resources, organizational learning and culture), group (team structure, climate and processes, composition of members depending on their characteristics, leadership style) and individual (managers' and employees' attitudes and abilities).

Furthermore, we address strategies to reduce the barriers and to use the success factors. Thereby, we provide recommendations for implementing measures for sustainable operations in higher education. In addition, we encourage advanced research in this specific field. The contribution of the paper is threefold: (1) We contributes to barrier and success factor research by introducing EOGI barrier and success factor model for identifying barriers and success factors based on dynamic capabilities and stakeholder research. (2) We contribute to sustainability research by synthesizing the state of research on sustainable operations in universities. (3) We provide strategies how to deal with barriers, success factors and measures to implement sustainable operations in universities.

KEYWORDS: sustainable operations, university, EOGI model, barriers, success factors.

Ways to promote sustainable development through university policy

Workshop

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University policy plays an important role in determining a university's contribution to sustainability. So, how can it be influenced and used to promote sustainable development?

With this workshop the Sustainability Week (Nachhaltigkeitswoche) will share its experience in answering this question. Now in its fifth year, the student run Sustainability Week, held at the five largest universities in Zurich, has considerable experience in collaborating with university administration. Apart from having organised over 160 events with a total of over 15,000 visitors, it has also given substantial focus to promoting a dialogue around university policies relating to sustainability.

In 2016 the students proposed five areas in which university policy could be improved in relation to sustainability and in 2017 continued to discuss, follow up and see progress in these areas.

This workshop will be held by Lorenz Keyßer, a student from ETH Zurich and coordinator of the Sustainability Week university's policy team. In a short input presentation, Lorenz will discuss methods the Sustainability Week has used to promote sustainability institutionally. These methods include the setting of concrete demands to universities, the organizing of roundtables, panel discussions, evaluations of progress and networking. Achievements, challenges, mistakes and unsuccessful approaches will be shared.

In the interactive section that follows, participants will have the opportunity to outline what is already being done at their own institutions. Participants will then brainstorm specific policy areas that could be improved and consider approaches for doing so, including the possible opportunities, outcomes and challenges involved.

KEYWORDS: university, policy, sustainable, development, Nachhaltigkeitswoche.

Higher education institutions pathway towards sustainability reporting

Presentation

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The recent collaborative project HOCH-N of 11 German higher education institutions does not only want to develop and cross-link sustainability, but also to enhance reporting about sustainability. In the course of the sub-project "Sustainability Reporting", there are two main aims: (1) generating in a participatory process an α-version based on the current β-version of a higher education-specific sustainability code that was issued by the German Council for Sustainable Development in May 2016 and (2) providing a guideline for applying the code and its reporting-criteria by using the experience of the partaking institutions. Here, the overall aim is to facilitate and enhance the implementation of sustainability reporting in German higher education institutions by supplying a well-designed toolbox.

Due to the fact that the practice of sustainability reporting among German higher education institutions is very heterogeneous regarding content, knowledge, experiences, processes, and resources [5], it is necessary to obtain an overview of these aspects and the adherent needs.

As a first step into the research field of (internal) sustainability reporting processes among German higher education institutions, we chose expert-interviews [3] focus on the current status of sustainability reporting in the respective higher education institution [2]. Some of these initial interviews were already done in face-to-face interaction or by telephone. They were not recorded, but keywords were taken during and summaries written immediately after the interviews. With the input from these initial interviews, key questions and challenges to sustainability reporting could be condensed. For evaluating solutions and possible support, in a second step, we will develop a questionnaire encompassing the most essential topics. We will use open-coded questions [4] as tool for exploring the creative potential for solutions within the higher education institutions themselves. After identifying the proper addressees, these interviews will be conducted during summer 2017 to evaluate them in fall 2017.

As our research is still ongoing, we will present final results in fall 2017. Ascertained in this stage of the research process, it seems that there are three main factors contributing to a successful implementation of sustainability reporting among German higher education institutions:

(1) the variety of expectations concerning a "good" higher education-specific sustainability code and a "good" set of reporting-criteria is vast. Nevertheless, there is a willingness to compromise and start the process among the pilot institutions as well.

(2) There is a great need for assistance and knowledge transfer among the newcomers in sustainability reporting that meets a great openness to dialogue between the newcomers and the more experienced applicants.

(3) The institution's executive board is the bottle-neck for the whole implementation of sustainability reporting which in the end boils down to a strategic positioning that ties up resources.

Certainly our research is rather case-based and application-orientated, but aiming at theorising profoundly about organisational learning and diffusion processes within this context. Since there is a lack of research on sustainability reporting and its processes [1], we will be able to provide insights in reporting processes of higher education institutions that can be used for a theory-based discussion.

KEYWORDS: higher education institutions, sustainability

reporting, sustainability governance, sustainability reporting implementation.

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Sustainability curriculum in UK university sustainability reports

Presentation

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One of the major barriers to incorporating sustainability in the HE curriculum is its absence from the university's sustainability strategy, the annual reflection of which is the institution's sustainability report. While strategies stipulate future aims and projected targets, reports record what has already been achieved in the previous academic year. In that respect, sustainability reports function as internally created reviews of an institution's sustainability activity.

Based on the assumption that sustainability reports should cover areas material to institutions, the current study explores the reports' coverage of sustainability curriculum provision. Various reviews of sustainability curriculum have taken place in the UK HE sector. This is the first effort to explore sustainability curriculum provision exclusively through HEIs' sustainability reports.

The sample consists of the most recent, whole-institution sustainability reports issued by UK HEIs in the past five years. An exploratory content analysis identified the reports' sustainability curriculum coverage patterns. The findings suggest that UK universities are widely heterogeneous in their sustainability curriculum reporting practices. Of the HEIs that do issue an annual sustainability report, approximately one third appear to provide comprehensive coverage of sustainability curriculum provision.

These findings might be of interest to sustainability professionals in the reporting or the curriculum provision end. The study hopes to encourage wider coverage of the sustainability curriculum provision in universities' whole-institution sustainability reports.

KEYWORDS: sustainability reporting, sustainability curriculum, sustainability in higher education (SHE), education for sustainable development (ESD).

Determinants in the adoption of sustainability assessment tools in higher educational institutions

Presentation

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Our society has always struggled to intensify development, focusing on diverse aspects. Over the years, the importance of higher education institutions (HEIs) has been recognized as drivers of such development, but in more recent years the contemporary society is facing challenges towards a more sustainable world. In this way, HEIs need to rethink their role in society as important diffusers of education for sustainable development.

Many HEIs have signed declarations and initiatives as an indicator of such advancement for sustainability. However, few HEIs have defined a pathway to implement, or in some cases enhance, the sustainable development within these institutions. Therefore, sustainability assessment tools (SAT) have been developed to provide guidance towards sustainable development at HEIs. Some scholars have investigated the determinants for sustainable development initiatives at HEIs, but few have identified which might be the main characteristics of SAT adoption.

In this sense, this study aims to explore the determinants for implementation sustainability assessment tools in higher educational institutions, identifying factors that might improve or obstruct the application of sustainability initiatives. To achieve this purpose, a quantitative analysis with longitudinal panel data with 810 HEIs worldwide is developed in at STATA 13®. Sample for this study is determined from universities that spread sustainability reports through the International Sustainable Campus Network (ISCN) or the Sustainability Tracking, Assessment & Rating System (STARS), considering the past 7 years (2010-2016). Panel data analysis explores the followings characteristics: age, HEI type (public or private) and the sustainability reporting type itself (ISCN or STARS).

Results show that the determinants investigated affect the SAT adoption in different forms for each type of HEIs. Future researches are supported to clarify which factors promote the use of SAT and understand the relationship between of the examined determinants that influence the SAT adoption by HEIs.

KEYWORDS: education for sustainable development (ESD), sustainability assessment tools (SAT), sustainable university, campus sustainability.

Sustainability reporting as project learning: example for cooperative Education for Sustainable Development-processes at Universität Hamburg

Poster

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Along with the growing international importance of sustainable development, the significance of sustainability reporting at higher education institutions is increasing. In order to prepare the second sustainability report for the University of Hamburg (UHH) a collaborative format was examined: Students as well as administration and scientific staff of the UHH iteratively elaborated an indicator framework. This framework includes qualitative as well as quantitative sustainability criteria to be used in the report.

The reporting process (gathering and interpreting data; writing of the report) was mainly conducted by the students' initiative oikos Hamburg. Students were supported by the Center for a Sustainable University to enable project based learning for all participants.

The poster gives an overview of the process of sustainability reporting at the University of Hamburg and outlines which opportunities and challenges come along with linking reporting on sustainability with the requirements of project based learning. It aims at the reflection of cooperation possibilities in the context of sustainability reporting in higher education institutions and at the identification of relevant process parameters on the basis of the UHH use case. Thus, the poster illustrates an innovative example for education for sustainable development and contributes to the reflection of the format "project learning" in the context of ESD.

KEYWORDS: cross organizational participation, Education for Sustainable Development, project learning, student involvement, sustainability reporting.

Working with sustainability: institutionalisation perceptions at the University of Gävle

Presentation

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Higher education institutions have been working to better incorporate and institutionalise sustainability into their system and with their stakeholders [3, 5]. An increasing number of university faculty and staff have been integrating sustainability into their daily activities [1, 2, 4], which can serve as a proxy of how sustainability is institutionalised at the university; however, there has been little research on this.

This paper is aimed at addressing this by using the case study of the University of Gävle, Sweden, which has been working with sustainability issues for the last 25 years. A survey was sent to 687 faculty and staff, of which 340 replied (a response rate 49.5%). The survey was a follow up from a previous one in 2010. The survey focussed on how faculty and staff (with main tasks in education, research, PhD studies, and technical/administrative or managerial duties) work with sustainability in their functions. The responses highlighted an increased understanding and acceptance of the sustainability work of the university and give an input from personnel for continued operational sustainability activities at the university. The results of the latter survey show that the social dimension is more prominent when compared to the survey in 2010, where the environmental focus was dominating. This indicates that

the perception of sustainability is more balanced throughout the university. The findings also show that faculty and staff understand the principles of sustainability; discuss spontaneously sustainability and its implications to their work; and have, to a great extent, integrated it into their daily activities, such as management, education, and research.

Sustainability at the University of Gävle has gone beyond the stage of incorporation and is moving towards a better and deeper institutionalisation. It is important to engage with the university stakeholders, where faculty and staff play a key role in this process, to better institutionalise sustainability at universities.

KEYWORDS: education, research, staff, survey, daily work, stakeholders.

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Intrapreneurship in universities: „the dreamers who do [sustainability]"

Poster

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The roles of universities are being shifted from maintaining their core businesses of education, research and public services to incorporating sustainability and innovation for the long-term. This research synthesised theories of organisational transformation, intrapreneurship, and innovation for sustainability at universities to answer the research question: how universities can effectively navigate their organisational transformation towards sustainability. Student-researchers in a participatory PhD research project were embedded in Maastricht University (UM) and its student-run sustainability department, the Green Office (UMGO). The research project aimed at evaluating how sustainability is practiced to develop new experiential knowledge of how to navigate transformation pathways towards sustainability in UM's organisational structures. A qualitative methodology of embedded, insider academic research was taken through analysing interviews and documents from three case studies of pioneering universities and direct observations at UMGO.

The student-led UMGO has the mandate to be an innovation hub for sustainability trying to induce organisational transformation of UM towards the vision of a sustainable university. However, suffering under a lack of visibility and outreach, UMGO has been stagnating in generating innovation. This research investigated how UMGO can use the lean start-up methodology to optimise its project development to induce an organisational transformation towards sustainability at UM. The lean start-up methodology has lately gained momentum as a tool for mitigating risks in fast-paced, effective product development, and thereby opens opportunities for intrapreneurs in the higher education landscape.

The findings from the case research suggest that organisational transformation towards sustainability is driven by organisational disruption and individual change agents that create interdependency between key stakeholders. Also, demonstration of sustainability efforts and shared ownership between students and staff are fundamental to bring sustainability onto all organisational levels. As a means of fulfilling this, the lean start-up methodology might indeed be useful for stimulating innovation by accelerating project development processes and mitigating the impact of potential risks for the GO. Yet it still bears substantial limitations due to risk aversion, a lack of investment, administrative support, and a language of deficit used on the GO, rather than a language of possibility. It is recommended to further demarcate UMGO's role as intrapreneurial unit for UM to overcome institutional barriers, allowing room for experimentation in the campus community. In order to fully perform as internal innovation hub for sustainability, UMGO requires the support from university leadership that allows it the 'mandate to innovate'.

KEYWORDS: sustainability in higher education, action research, organisational transformation, CSR.

Discussing criteria for assessing integration of sustainable development into teaching at tertiary education institutions

Workshop

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Assessment and self-assessment of how – and how well – sustainable development (SD) has been integrated into teaching is essential to support monitoring, visibility, and in particular progress of such integration, provided it is offered as an empowering and participatory process [1, 2]. There are numerous ways of conducting such assessments and a number of reference frameworks exist that justify the criteria and processes used [3]. It is important for each higher education institution to find the most appropriate set of criteria and processes for the ESD (education for sustainable development) goals it has set itself. Indeed, success of integration depends a great deal both on coherence of policy and on adaptation to the specific context that characterizes the institution [4]. In the proposed 90-minute interactive session, we will share experience and good practices with a view to learning from one another, detecting similarities and differences, and discussing useful commonalities that can be taken to the level of tertiary education policy.

The interactive method we suggest using will be the Group InVEntion Method (GIVE©) by SPES. After briefly presenting the case of the University of Bern's ESD mainstreaming efforts and its newly devised set of criteria, we will invite participants to offer examples of assessment frameworks and processes at their own higher education institutions. During the session, we will jointly select a few criteria from the list offered by participants (the ones deemed most important) and test their monitoring power for concrete examples, then discuss the advantages and disadvantages of each criterion selected. The outputs of the workshop will be (1) the examples from the different tertiary education institutions on the one hand, and (2) a joint list of criteria whose monitoring efficiency will have been discussed.

KEYWORDS: tertiary education, mainstreaming SD, criteria, monitoring.

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ABSTRACTS BY TOPIC ROOM

Topic Room: Steering our cities towards sustainability

Room No.: 120

The Topic Room "Steering our cities towards sustainability" addresses workshops, presentations and posters dealing with topics such as:

- Students driven change on campus
- Interactive campus walk – learning by climate-friendly appropriation of space
- Different spatial planning approaches for a transformation towards sustainability
- Sustainable energy supply: trade-offs in energy transition process

Abstracts on the workshops, poster and paper presentations assigned to the Topic Room "Steering our cities towards sustainability" in alphabetical order:

Sustainable university cafeterias

Workshop

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Do you want to make the cafeterias and food outlets at your campus more sustainable and ethical?

We hope so! Food is central to our lives and the way we eat and produce it currently has a major, and in many cases negative, impact on people, the planet and animals. The global importance of food and of changing our approach to it is clear when we note that 8 (2, 3, 6, 8, 12, 13, 14, 15) of the 17 UN Sustainable Development Goals have a direct relation to it, and many more an indirect relation.

In this interactive workshop learn about what is happening at fellow participants' universities in regards to food; consider why people make the food choices they do and consequently potential ways to influence behaviour change; and finally brainstorm your own ideal situation for your campus and develop concrete steps to start, or continue, the journey to reaching it.

The workshop will be run by two students from the ETH Zurich and University of Zurich. They lead the 'Cafeteria Team' of the Sustainability Week at the five largest universities in Zurich, a student project that has held over 160 events and attracted over 15,000 visitors during the past 5 years. In short input presentations throughout the workshop they will share their experience of liaising with university administration and coordinating three different catering companies over 9 campuses and 14 cafeterias to offer sustainability focused meals during the Sustainability Week, measure the CO2eq. emissions of meals, run an information campaign for the university communities on a range of topics around sustainability and food, as well as surveying students about their attitudes to eating sustainably.

KEYWORDS: cafeteria, sustainable food, sustainable university, ethical food, social change.

Defining a strategy for urban sustainability using the 'vision zero'

Presentation

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Recently, a promising challenge has emerged within the smart cities literature, that is, the 'zero vision'. It refers to the use of smart technologies within the urban environment in order to keep them sustainable, offering their citizens a high level of quality of life (Komninos, 2016). Zero vision strategies can be implemented in various sectors of a city, covering a wide spectrum of urban problems, i.e. zero traffic accidents, zero waste, zero CO_2 emissions, zero criminality etc.

Such strategies are expected to play a significant role for the future of cities, however, their study is rather limited focusing mainly on the sectors of energy and transport. The paper reviews a wide number of published 'vision zero' strategies, in various sectors, ranging from transport to energy, environment, safety etc. and tries to identify common elements that could be used in a wider 'zero vision strategy for urban sustainability'. Building on the structural elements of such strategies, such as regulation, education and certification, engagement and digital technologies, we identify a generic zero vision roadmap that can be used for urban planning.

KEYWORDS: urban planning, zero vision, smart cities, sustainable development strategies.

Learning by climate-friendly appropriation of space

Workshop

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The workshop is on the critical reflexive interaction with the built University campus environment and the climate-friendly appropriation of space as learning instrument for a sustainable education. It draws on an ongoing collaborative student and teaching staff project on the climate-friendly appropriation of places on the Hamburg University campus.
Appropriation of space is a well examined subject in urban development literature as well as in youth and child social psychology research. Although there is no consensus on a single definition, this project understands appropriation of space as active and self-determined reclaiming of place, through social-spatial interaction, e.g. the change of meanings, functions and identities of places [1, 2].

From an educational perspective, studies with teenagers and children show that the social-spatial interaction in form of space appropriation strongly fosters informal learning which is important for an education for sustainable development [3, 4]. Nonetheless, this kind of spatial reclaiming is seldom based on a broad civil-societal consensus but on a subjective and cultural-determined perception of space [5, 6]. Therefore a climate-friendly appropriation needs a critical reflexive interaction with place. Project participants need to adopt an ability to understand spatial information and create a capacity to act climate-friendly.

Social geocommunication can be an auxiliary tool to support the reflexive interaction with place [8]. In this workshop Scrible Maps will be used, which allows the contributors to share and to communicate spatial knowledge. Furthermore the tool facilitates the collaboration between the running project and the workshop contributors [8]. Hence the workshop split in two parts. First, participants will walk on the University campus and focus on the spatial perception and secondly exchange ideas of climate-friendly space appropriation by the means of Scible Maps in small groups and the plenum.

KEYWORDS: appropriation of space, spatial perception, climate-friendly behavior, social geocommunication.

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Landscape devastation as a result of poor sustainable urban development practice in Montenegro

Presentation

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Montenegro is a country well known for its natural beauties including diverse sandy and rocky coast, steep, high mountains, clear lakes and rivers, green forests. The necessity of environment protection has been recognized when Montenegro pronounced itself Ecological state in 1991. This declaration implied environmental protection as the highest priority that has since then become an integral part of the Sustainable Development agendas in Montenegro, present in the Government policies and Urban Planning as one of the most important SD Objectives. However, when it comes to the implementation of these agendas, the final result is frequently disappointing: devastation of space and nature caused by inappropriate building practices. This fact arises question what is the cause of the failure in accomplishing the SD objective?

In seeking for an answer, the new research method is proposed. Starting from the final result- some cases of devastated landscape transformed by insufficiently controlled urban development, the exploration methodology goes backwards, from building process, architectural design, urban planning practices to the overall operation, education and governance methods and strategies. The landscape examples- case studies, reflect contemporary tendencies of destroying nature for Investor's urban planning and profit-driven architecture. Image of the landscape becomes unrecognizable after the intervention. Urban plots are left treeless or even green less, landscapes ruined, spaces devastated.

The research provides a valuable insight into the current inefficient Sustainable and Urban Development system, enabling distinction of the weakest and strongest aspects. Furthermore, it will result in the Identification of important guidelines and potentials for the appropriate implementation of SD strategies and Environmental protection. Finally, the research will help overcoming current harmful tendencies of landscape and spatial devastation and developing more efficient institutional system leading to more advanced Sustainable Development.

KEYWORDS: environmental protection, sustainable urban development, contemporary building practice, investor's urban planning, landscape devastation.

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Port Centers: a new tool for sustainable port-city relationships

Presentation

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The sustainable development goals defined by the United Nations (UN) include the development of sustainable cities and communities, industry and transport, and decent work and economic growth [1]. The same organization defines the interaction between government, private companies and people as condition sine qua non to achieve these ambitious goals.

Port-cities are one of the most relevant test fields in which the aforementioned goals and interaction between the different stakeholders takes place. As said by Hall and Jacobs (2012) [2], ports remain in contact with the urban tissue of many cities, hence with the urban communities that form them. This interaction has historically been conflictive, particularly since the positive externalities caused by port activities tend to spread out the region or country, and the negative effects remains within the port-city territory [3].

Previously top-down decision making processes were usual in port planning initiatives. Today ports are gradually forced to change their approach towards cities and citizens to develop a sustainable relationship. In this context port-centers have emerged as a new tool, allowing participative planning for port related issues and infrastructure [4]. An educated society is crucial to demand more from governments, public bodies and private companies. Port-centers bring information to implement productive debate and discussion about port related issues. In this paper we would like to explore the use of port-centers to establish sustainable relationships between ports, cities and citizens, their origin and current use, their possible role in future active citizenship to achieve the UN Goals and how they can become a forum for sustainable port-cities.

KEYWORDS: Port-cities, active citizenship, participative planning, port development, port-centers.

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Active involvement of students in climate friendly behavior – „Klimasparbuch" as good practice example for community based change

Poster

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In 2014, the UNESCO Roadmap for implementing the Global Action Program on Education for Sustainable Development (ESD) highlighted the importance of learning and training for transforming our world in a sustainable way. In 2015, the United Nations agreed on global Sustainable Development Goals (SDG). Along with this growing international importance, the significance of sustainable transformation at higher education institutions is increasing. Indeed, higher education institutions can act as pacesetters for sustainable development of societies.

In order to advance sustainability-processes at the University of Hamburg, the Center for a Sustainable University (KNU) was founded in 2011 as an interdisciplinary academic workforce. The KNU acts as a research network, a think-tank for innovation and as an incubator for new approaches, concepts, procedures and methods in the context of sustainable development.

The currently issued pocketbook „Klimasparbuch for Hamburg Students 2017/18" („climate protection booklet") serves as green city guide and coupon book all in one. The booklet was developed in a participation process, which illustrates the Center's stakeholder engagement. The booklet encloses information about climate change and suggestions for making everyday life in the field of healthy eating, conscious consumerism, sustainable mobility and green home more sustainable. Thus, it focuses on the important task of universities to sensitize students for transforming our world towards sustainability.

In 2016, the University of Hamburg initiated the first „Klimasparbuch" for students in cooperation with the Hamburg University of Technology, the Hamburg University of Applied Sciences and a group of students who helped to develop and edit the booklet.

We'd like to introduce the „Klimasparbuch" and the process of its creation as a good practice example for student engagement within sustainable development issues. Considering the three different levels of participation (1. access to information, 2. consultation and 3. active involvement), the booklet especially focuses level 3: The book actively involves students creating instruments for community based change. Additionally, it involves them through making life on campus more sustainable and by giving advice how to change individual everyday decisions into sustainable alternatives.

KEYWORDS: active student involvement, climate change, community based change, education for sustainable development.

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The university mobility management role in promoting accessibility, right to education and sustainability in Italy

Presentation

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The Network of the Mobility Managers in Italian universities, which belong to the RUS (Network of sustainable universities in Italy), has carried out, for the first time in October 2016, an online survey about university commuting. 36 Universities joined the survey and almost 70.000 questionnaires have been collected

The main aims of the survey are to collect Italian updated and comparable data on home – university trips and make available those data, which are able to orient the mobility management policies in order to promote accessibility and sustainability in Italian universities. Particular attention is given to the sharing mobility as an innovative and alternative solution, in some context, able to reduce the negative impact on the environment and the gap between private mobility and public transit. In this scenario the University is not anymore only a mobility attractor itself (with over 1,6 million of students) but it is likely a stakeholder who contributes in the urban planning of mobility and accessibility policies.

Although the survey shows that the commuting trips to universities are largely covered by public transit, there are cases where the accessibility is guaranteed only by private vehicles, which are the most carbon-intensive transport modes. The trip purpose and the inequalities among Italian cities, mainly in terms of accessibility, suggest investigating the relationship between modal choice and CO2 emission. Researchers have proposed to 'tame the few', targeting the minority of the population responsible for the large amount of carbon emission. The study investigates and maps the mobility flows, by focusing on spatial analysis, mainly of those who contribute more to climate change. While built environment policies are effective to face climate change, a broader approach is required in order to do not tackle the right to education but by focusing on car and carbon intensive students living in a context with at least a good accessibility to car alternatives.

KEYWORDS: mobility, sustainability, accessibility, right to education, carbon emission.

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The application of sustainability thoughts in bioenergy development

Workshop

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Over the last decade, the potential of bioenergy production and promotion in a sustainable development context has been scrutinized extensively. The studies have showed their results widely differently, largely because of different considerations regarding biomass feedstock and food crop competitions, technologies of producing bioenergy, the definition of an accurate life cycle assessment of bioenergy as well as the impacts of land use changes of bioenergy production. Therefore, it is a scientific and effective way to collect different opinions from all bioenergy-related stakeholders across social, environmental and economic (SEE) dimensions.

Objectives:

- To enrich our conceptual framework of the bioenergy supply chain more comprehensively.

- To facilitate forming a basic knowledge of taking bioenergy utilization as a means of sustainable development and help shape the pictures of a sustainable bioenergy industry for all participants.

- To provide a methodology that actively and thoroughly involves participants to discuss our topic with the consideration of sustainable development.

KEYWORDS: bioenergy, development, sustainability, stakeholders, application.

EDUCATORS AS BEACONS: LIGHTING THE WAY FOR ESD PROFESSIONAL DEVELOPMENT

Presentation

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Higher education is ideally positioned to address sustainable development, by preparing future generations of professionals, challenging dominant paradigms and producing ground-breaking research. International movements, networks and university initiatives have triggered a wave of activity over the past 10 years to advance learning for sustainability in higher education. However, there is evidence of the need for stronger focus on professional development to achieve lasting curriculum change and to engage more widely with the academic community on sustainability. Despite interest in Education for Sustainable Development (ESD), its approaches to learning and education are not yet in common practice in HE. There are large 'translation gaps' in applying ESD ideas in different subjects and courses, so that learning processes contribute to more sustainable futures.

The University Educators for Sustainable Development (UE4SD) project tackled this need by focusing on the professional development of academic staff to advance ESD. UE4SD was led from the University of Gloucestershire with regional Steering Group partners across North, West, East and South Europe. It was funded by the European Commission LifeLong Learning Programme from 2013-2016 and built a network of 53 active partners (mostly universities) in 33 countries.

The presentation will share insights and practices from the UE4SD project outputs:

- a state of the art report that mapped national policy and new practices across Europe
- a leading practice publication of different approaches to ESD professional development
- a training academy residential for university teams using action learning principles
- an online toolkit of resources, including practical experiences and new examples

The session will explain the project and offer dialogue with participants about challenges, tips, experiences, as well as ways to adapt and use the professional development approaches in different institutions and contexts.

Keywords: competences, Education for Sustainable Development (ESD), higher education, professional development, educator competences, curriculum change

ABSTRACTS BY TOPIC ROOM

Topic Room: Higher Education Institutions –
Aims, Agendas, Actors

Room No.: 121

The Topic Room "Higher Education Institutions – Aims, Agendas, Actors" addresses workshops, presentations and posters dealing with topics such as:

- The green office model
- Challenges of diversity management
- Living sustainability through Higher Education Institutions
- Innovation potential of international networks
- How to empower universities to deal with Sustainable Development Goals?
- Higher Education Institutions and the Sustainable Development Goals
- Sustainability in Higher Education Institutions – research agenda and stakeholder expectations

Abstracts on the workshops, poster and paper presentations assigned to the Topic Room "Higher Education Institutions – Aims, Agendas, Actors" in alphabetical order:

Illustration: Charlotte Hintzmann

Living sustainability through higher educational institution: case study of TUB, El Gouna, Egypt

Presentation

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Sustainable Development (SD) Internationally is being considered as an important part of the future well-being of the world (Saadatian et al, 2009). In order to preserve the natural world, economic, social and environmental factors must be jointly considered and harmonized. Through raising awareness and influencing behaviour, has a pivotal function if sustainable development is to be achieved. The Sustainable Higher Education (SHE) is regarded as one of the most influential medium of facilitating sustainable development movement in the world. It have been incorporating sustainable development values and practices into their core activities of teaching and research, institutional management and operational systems.

Through examining a case study of the Campus El Gouna for Sustainable Development as the first non-profit university in the Middle East declaring sustainable development as its overall guiding principle, as a model of embedding Sustainable Development into Higher Education in Egypt. The objective of the Campus El Gouna is to focus TU Berlin's strongly growing number of academic activities and its increasing scientific competence in all fields of sustainable development in the MENA region that have been gained especially during the last ten years.

El Gouna is generally recognized as the most environmentally-friendly tourism destination in Egypt, it has received several awards, including the Green Globe and Travelife. In a joint "Planning Laboratory for a Sustainable El Gouna", the TU Campus of El Gouna and the city's administration is developing projects which make El Gouna into an energy-efficient and CO2-free city.

This paper aims to disentangle the performance of higher education institutions by examining the practice of Campus El Gouna. A case study is presented to demonstrate how organisation are approaching sustainable development through natural resource reduction, innovative teaching practices and curriculums, research and consultancy, building maintenance, alternative transport and financial management.

KEYWORDS: environmental education, sustainability in higher education, El Gouna, Egypt.

Universität Hamburg Center for a Sustainable University: a whole-institution approach towards managing transformational processes

Poster

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The Center for a Sustainable University (KNU) at the Universität Hamburg, Germany (UHH), is an interdisciplinary institution wherein various university stakeholders work together on topics of sustainable development. To support the advancement of sustainability at the UHH, the Center for a Sustainable University is promoting sustainability in the areas of research, education and governance. Thus, the KNU operates following a whole-institution approach at the UHH. It seeks to include all parts of the university (i.e. students, faculties, administration and operations) and to implement transformational processes at an organizational level.

Within this transformation process towards a sustainable university the KNU acts as research network and think-tank for innovations, new approaches, concepts, and methods within the context of sustainability.

The poster briefly introduces the Center for a Sustainable University. It highlights KNU's goals, its structure and modes of operation and particular its four dimensions

- *Reflection on Science*: What does sustainability in science actually mean? And how can we cultivate it?
- *Research*: How can we define and develop sustainable research?
- *Didactic*: What are the characteristics of sustainable education and how do we facilitate it?
- *Institutional (Governance)*: What is sustainable governance? And how can we achieve it?

By presenting the Center and especially a four-dimensional term of sustainability in a research and university context, we illustrate applied change management processes.

KEYWORDS: innovation, sustainable transformation, whole-institution approach.

Stakeholder expectations on trade-off modelling: the case of the University of Hamburg – a "university for a sustainable future"

Workshop

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Higher education institutions (HEIs) are deeply interwoven with today's societies [2] and affected by expectations of different internal and external stakeholders considering their specific role and contributions. Many HEI have started to adjust their academic contributions to sustainability and align their whole institution toward this goal. This provokes tensions between internal stakeholders due to competing ideas about basic assumption of how a HEI is modelled, e.g. the degree of autonomy, how sustainability research is carried out (disciplinary or transdisciplinary) or if the major objective should be excellence or relevance.

Theoretical approaches that frame the relationship between a HEI, society and sustainability are surprisingly rare. Stakeholder theory can fill this gap offering bridges to concepts like sustainability management or social responsibility. A stakeholder theory-based discussion can be helpful:

a) to picture sustainability-relevant stakeholders of the University of Hamburg,
b) to gain insights about their basic assumptions and suggested trade-off scenarios for a "University for a Sustainable Future" and
c) to prioritise those scenarios.

The proposed research is inspired by previous work of the authors on the interaction of HEIs and society [1]. Findings will be employed a) on theoretical based research and b) reviewed against the empirical data. The verification of theoretical components serves the overall goal to develop a theory-based role-model for a sustainable university.

Therefore, the proposed research attempts to examine three key research questions with respect to the University of Hamburg:
1. Who are the sustainability-relevant stakeholders of the University of Hamburg?
2. What are their expectations concerning the concept of a "University for a Sustainable Future" with respect to different trade-offs?
3. What is the relevance of each group and which stakeholders are of the greatest priority to the university?
Empirical data will be collected using semi-structured interviews. In advance, a double stakeholder identification process that combines results from a comprehensive literature analysis as well as short interviews with key actors within the university will be done to select the most relevant stakeholders of the University of Hamburg.

KEYWORDS: stakeholder theory, trade-offs, sustainable university, internal stakeholder.

References:
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Management Review, 20(1), 65-91.

How to empower universities to deal with SDGs? An interactive exchange workshop starting from an Austrian example

Workshop

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In spring 2017, the BOKU University of Natural Resources and Life Sciences Vienna and the Alliance of Sustainable Universities in Austria initiated a process to encourage Austrian universities to deal with the SDGs. A workshop with representatives of Austrian Universities aims at identifying the topics where each university can contribute best to the SDGs and establishing appropriate SDG-working groups. The results are then presented, discussed and extended in a larger workshop that aims at also integrating universities of applied sciences, university councils and university senates in order to create awareness in a wider circle of stakeholders and encouraging them to get active within the SDG-working groups.

The interactive workshop at the HSDS will directly tackle the conference topic "Contribution of Higher Education Institutions to global SDGs: How do the SDGs impact HEI and vice versa?" It will start with a short (max. 10 min) introduction on the Austrian process. We will then collect experiences and ideas from the participants and discuss opportunities for other universities and/or countries by addressing questions on content-related contributions of HEI to SDGs and possible process designs.

Used method: Group InVEntion Method (GIVE©) by SPES1, a democratic tool to collect ideas in a very efficient way also in big groups. It starts from a certain number of questions. Each question is put on a flipchart sheet, which are attached to the walls and can be accessed freely. Every participant will write down his or her ideas and complement others. In a second step, all participants have time to read all answers and ideas and prioritise them. The highest rated results are then presented and discussed in plenary. Group size: 8-30 persons

KEYWORDS: higher education institution, SDG, implementation process, empowerment.

References:
[1] Jungmeier, P. & Stöglehner, G. (n.y.) Group InVEntion Method (GIVEN©) by SPES. RURALpro BOOK

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How can we deal with a shrinking work force in times of demographic change? Workshop on the forthcoming challenges of diversity management

Workshop

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What is diversity management and why is it important in the context of social sustainability? Since the 1960s there have been various attempts to diversify work forces in the west. In this workshop, I will make the case for a rising importance of diversity management, especially with regards to the role of women. Solutions will be discussed from a systemic point of view, based on key insights from group discussions.

Demographic change will impact Germany's labor market in unprecedented ways. Germany's population will shrink from about 81 million to less than 74 million within the next 40 years (Statistisches Bundesamt, 2015) if demographic trends remain constant. When the baby boomer generation will retire from work within the next 10 years the labor market will not be able to compensate the shrinking work force (BCG, 2015).
This change has several implications, especially for the situation of women. On the one hand women are needed as skilled personnel and on the other hand, they are needed as mothers to prevent an even more dramatic decline in population. To cope with this tension society and employers are to develop novel solutions to facilitate the compatibility of work and family life.

These solutions need to go beyond the prevailing solutions rooted in the world view of neoliberalism and success orientation or else they will only mask the symptoms. They need to integrate tension and contradictions to ensure social sustainability.

In this workshop we will discuss the impact of demographic change on academia and society in general. Furthermore, we will focus on viable solutions and use structured group settings to come up with systemic approaches to mitigate the escalating conflict of work and family life.

KEYWORDS: social sustainability, diversity management, demographic change, spiral dynamics, work family balance.

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Reinvigorating the sustainable development research agenda: the role of the sustainable development goals

Presentation

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The United Nations Sustainable Development Goals (UN SDGs) contain a set of 17 measures to foster sustainable development across many areas. It offers a good opportunity for the reinvigoration of sustainable development research, for two main reasons: firstly, it contains many areas of SD research which have become mainstream thanks to the UN SDGs. Secondly, the fact that the UN and its member countries have committed to reach the SDGs by 2030, has added a sense of urgency to the need to perform quality research on SD on the one hand, and reiterates the need to use the results of this research on the other.

Even though the basic concept of sustainability goes back many centuries ago, it has only recently appeared on the international political agenda. This partly so due to a awakening of the fact that human ecological pressure on the planet is still much larger than what nature can renew or compensate. Based on this state of affairs, this paper presents an outline of the process leading to the agreement on the UN SDGs, and looks at some of the ecological aspects due to the continued pressure of human activities on natural resources. Furthermore, a set of research needs is proposed in a holistic way, also based on the current research trends, discussing the degree of urgency of some measures and explaining why the UN SDGs need to be awarded a greater priority in international sustainable development research efforts. Finally, the Inter-University Sustainable Development Research Programme (IUSDRP), a new initiative to coordinate international sustainability research, will be presented.

KEYWORDS: Sustainable Development Goals, implementation, UN 2030 Agenda, research.

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The innovation potential of international networks: fostering sustainability in HEIs via international cooperation

Workshop

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This contribution presents a case study of the innovation potential that a network committed to sustainable development can unfold. The "University Alliance for Sustainability" comprises the strategic partners of Freie Universität Berlin, namely the Hebrew University of Jerusalem, the Peking University, the State University of St. Petersburg and the University of British Columbia. Having built strong relationships in various disciplines, the partners see it as their responsibility to actively shape the global discourse and to address challenges by developing and implementing a whole institution approach towards sustainability.

Since 2015 the Alliance develops joint projects in research and teaching, offers an extensive mobility program for faculty, staff, and students, and fosters inter-institutional learning with regard to management issues. The partner universities of the Alliance embrace a Whole Institution Approach for all activities planned in the framework of the project.

To reach the objectives the partners developed different networking mechanisms: A "Teaching Incubator" focusses on conceptualizing (joint) sustainability curricula as well as best practice exchange in sustainability teaching. The "Management Incubator" fosters the exchange on successful instruments for sustainable campus management. Additionally, the annual "Spring Campus" unites the initiatives and brings together all stakeholders in workshops on research, teaching and management issues.

The paper will focus on lessons learnt in the first two years as well as evaluate the effects that the cooperation projects' unfolded at partner universities. This contribution will be of interest for participants exploring options for collaborations with holistic approaches, as the potential of exchange in research, teaching and campus management within a strategic network will be assessed.

Interactive session:

The talk will be supplemented by an interactive session. Participants will be encouraged to (re-)think the roles, responsibilities and opportunities international sustainability networks and conferences focusing on sustainability in HEIs have or should unfold. We will be exploring the question "What should sustainability networking events in HEIs look like to contribute meaningfully to the sustainability discourse?"

Participants will work together in small teams on a "Transition Framing". The ideas and recommendations resulting from the process will be discussed and mapped for all conference participants to review and comment on. This "Idea Map" will be shared with the partners of the "University Alliance for Sustainability" and partnering networks as food for thought for planning future international conferences.

KEYWORDS: whole institution approach, campus management, role model, good –practice, international university network.

The Green Office model: a platform to invite students, staff and academics to contribute to the institution's sustainability efforts

Workshop

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How can you establish a sustainability platform that invites every stakeholder group to contribute to the sustainability agenda?

If your university is like most institutions, then people are already working on sustainability or are interested in the topic: Academics advance sustainability in education and research, facility service improves the institution's operational performance and student groups raise awareness within the student community. But most people don't have an overview of what is going on, how they can become engaged or work together. This is problematic, since sustainability efforts remain distributed across islands of action and never engage a critical mass of people.

In this workshop, you get inspired by the Green Office Model on how to establish a sustainability platform that invites students and other stakeholder groups to contribute to the university's sustainability efforts. You learn about and discuss results of an applied research project – financed by the Deutsche Bundesstiftung Umwelt – to analyse the governance structure of 23 Green Offices in six European countries.

A Green Office is different to existing sustainability platforms, like working groups, sustainability committees or dedicated sustainability departments, since it explicitly focuses on providing leadership opportunities for students. Students represent the largest stakeholder group at a university, but their contributions to organizational sustainability efforts are often limited.

If you are just starting out on the sustainability journey, you can develop your Green Office as the dedicated sustainability platform for the whole university. Alternatively, you might already have a sustainability team, committee or working groups in place, but might want to improve student engagement. Then, you can use the model to develop a student-led sustainability hub that informs, connects and supports students to act on sustainability. Such a student-led hub can work alongside existing staff-led sustainability initiatives.

ABSTRACTS BY TOPIC ROOM

Topic Room: Methods and Perspectives for Transformation Processes

Room No.: 222

The Topic Room "Methods and Perspectives for Transformation Processes" addresses workshops, presentations and posters dealing with topics such as:

- Using LEGO® Serious Play™ for envisioning a sustainable future

- Social entrepreneurship examples for addressing the Sustainable Development Goals

- Sustainabile Universities – a systematic living lab approach to combine research, education and campus operations

- Communication matters! Sustainability and multilingualism

- Blessing or curse? Different views on Sustainable Development travel programs

- Serious play and creativity methods for transformation processes

Abstracts on the workshops, poster and paper presentations assigned to the Topic Room "Methods and Perspectives for Transformation Processes" in alphabetical order:

Photo: Pixabay
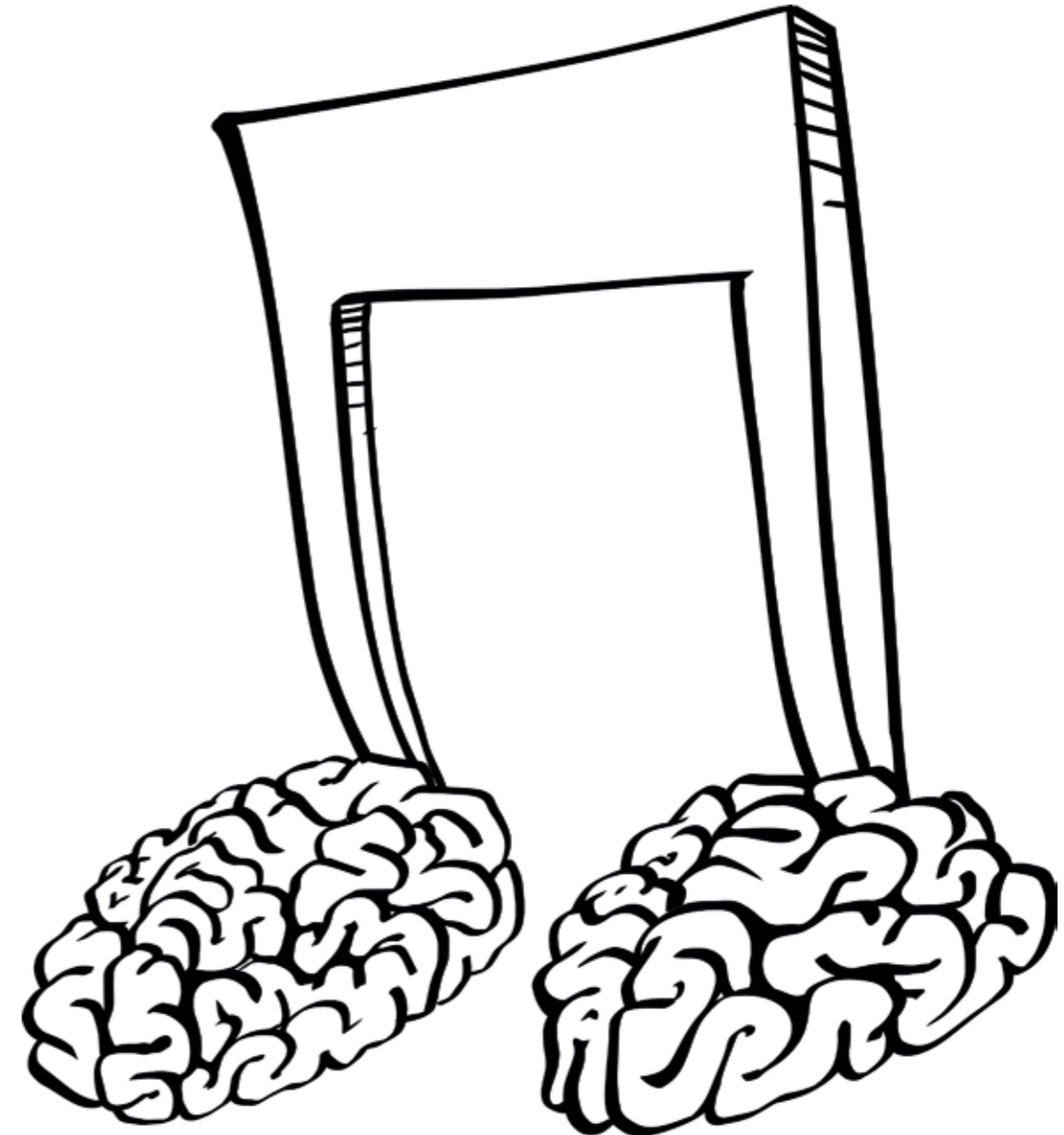
Swiss student sustainability challenge

Poster

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Latest research on social innovation has called for a stronger involvement of academic institutions in the support of social initiatives, referring to the Triple Helix thesis and the role it holds for universities regarding innovation capacity [1]. A growing number of higher education institutions have already established boost programs for social entrepreneurs based on their vast experience with business plan competitions for start-ups [2]. Both, these classical business incubators as well as the social entrepreneurship competitions focus on bottom line results and rely on business plans as their main development instrument. The Swiss Student Sustainability Challenge (SSSC) is an initiative by the University of Applied Sciences and Arts North-western Switzerland and the Mercator Suisse Foundation. It aims to encourage students' ideas and initiatives contributing to the fulfillment of the sustainable development goals and foster their long-term success. Similar to the before mentioned programs, the SSSC adopts key success factors of business incubators like networking and mentoring through coaches as wells as the design of a yearly competition to reach this goal. Above that, the SSSC goes beyond the profit-orientation of other programs by additionally supporting initiatives evolving from other motivation than creating profitable business. For this purpose a sustainable investment plan has been developed, focusing on the measuring of impact. Targeted workshops for non-profit initiatives complete the support measures. Seeking solutions for environmental causes as well, the SSSC also takes a broader perspective on sustainable initiatives than most other programs focusing on social projects only. The SSSC is targeted towards students of all fields of study and is therefore promoted through all disciplines and institutes. The program was launched in February 2017 and will award the first projects in November. The goal is, to anchor the challenge in existing structures across the whole university within the three-year-long initiating phase of to ensure its continuity.

KEYWORDS: sustainable entrepreneurship, social innovation, business incubators, sustainable investment plan, social entrepreneurship competitions.

References:
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Learning how to cultivate sustainability motivation: the renaturalization of human values

Poster

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The awareness of the importance of sustainability is globally on the rise. In 2015, the UN published a set of 17 sustainable development goals including specific targets for each. Research and education on how to behave sustainably is continually developing. However, collective human behaviour still seems to be largely in contrast with the knowledge we undoubtedly have regarding pollution, resource scarcity, health and well-being, peace, etc. The motivation to behave sustainably is not merely dependent upon instinct but on inner human value systems, which we have the ability to be more or less conscious of [1]. We need to educate students on how they can look into their own motivations and values to the fact that actions inherently have an effect on society. We need to cultivate the desire to examine motivations and values in more people and we need individuals who understand sustainability motivation and have the ability to bring it into different social contexts. In the history of sustainability, direct contact with nature has always played an essential role for this purpose [2, 3, 4, 5]. Thus, an interdisciplinary seminar was conducted in 2016 based on the Norwegian concept of friluftsliv ("free air life"): 18 students with 10 different majors spent 8 days in Norway's wilderness. Self-reflective and mindfulness tasks in nature were used to enable students to take a deeper look into their personal values and sustainability motivation. Results show a change in participants' human values (measured by the Schwartz Value Survey) directly after as well as 3 months later. Changes in nature connectedness, mindfulness and stress level could also be observed. The students created a video, which can be found online: https://www.youtube.com/watch?v=l5XMh5rGKsE.

KEYWORDS: human values, sustainability motivation, friluftsliv ("free air life"), self-reflection.

References:
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Environmental impacts of educational travel programs: a case study in the Westfjords, Iceland

Poster

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In higher education, two trends have stood out in the past few decades: institutions have attempted to become more international and they have tried to improve the sustainability of their campuses and curricula. However, these trends have not always informed each other, perhaps most notably in the area of educational travel programs. These programs have been important instruments for institutions to internationalize their curricula, yet the sustainability of these programs has rarely been examined, particularly with respect to the impacts on the destinations themselves. Institutions of higher education have the potential and perhaps an obligation to model good behavior. Further, as student participants in these programs are important and perhaps influential future travelers, there is an important opportunity to educate students about their role in sustainable travel. This poster presents the results of an ongoing study that analyzes the potential environmental impacts of educational travel programs in the Westfjords of Iceland. Building upon research methodologies that have been used previously to examine the environmental impacts of mass tourism in Iceland, this study identifies the landscapes that educational travel programs have visited during the past several years and assesses these areas within the context of the sensitivity to environmental disturbances and their remoteness from developed areas.

These findings will be placed within the context of general tourism to further examine if the programs frequent areas more sensitive or more remote than regular tourists. The goals of this project are to help connect the discourses of internationalization and institutional sustainability by raising awareness of the potential for damage to the environment from university travel programs and to develop guidelines for future educational travel.

KEYWORDS: environmental impacts, educational travel, GIS, Iceland, sustainability.

Fostering student engagement for business contribution towards achieving the sustainable development goals

Workshop

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The United Nations SDGs offer an inspiring and inclusive vision of the future: A world without poverty, free from injustice and a healthy planet for present and future generations. This vision requires global and cross-sectoral partnerships between nations, all sectors of society and people. Further, substantial contributions from business will be necessary for achieving these goals In order to move SDGs from pledge to practice, a wider and better-informed debate is needed around how business can create the most value. Additionally (future) business leaders are involved in advancing the Agenda 2030 for Sustainable Development. Today's youth will be the leaders of tomorrow and their role will be pivotal in tackling the development challenges of the 21st century. Business students in particular will be key to addressing these challenges through their involvement in the private sector.

Currently (January 2017 to June 2017) the Bertelsmann Stiftung is experimenting with three different formats to engage students with the idea of corporate social responsibility and the contribution companies can make towards achieving the SDGs.

a) Webinar Series: Students are offered a presentation and round of Q&A with sustainability experts from different companies discussing the companies impact on achieving a selected SDG Partners: Sneep e.V., Deutsches Netzwerk Wirtschaftsethik with Bottom-up approach with little commitment and involvement

b) Business Game: Students work on the question – How may the CSR Performance of SMEs in Germany help to achieve the national sustainable development strategy? Partner: HHL Leipzig, Prof. Andreas Suchanek, Student Field Project with credit

point relevance, medium involvement

c) Global Platform: Students from 14 Business Schools world-wide analyse CSR-Reports towards their comparability of SDGs and targets and publish these reports at the open content platform WikiRate.org.

Partners: PRME, UN GC, WikiRate, variety of involvement, low to no credit point relevance.

Hosting an Interactive Session/ Workshop at the HSDS 2017 will help the Bertelsmann Stiftung to gain a deeper understanding of how to proactively engage students in taking over responsibility in CSR and SDG activities. And of how good cooperation (in terms of scale) with the higher education sector can look like. Preferred methodology: Along the IOOI-method structured discussion with gap-analysis

KEYWORDS: SDGs, CSR, student engagement, global agenda.

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"Five Minds for the Future": a psychological view on capacity building for sustainable development

Presentation

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In 1983, Howard Gardner proposed his theory of multiple intelligences [1, 2]. Although it has been widely discussed and criticized by several scholars, Gardner preserved a multiform view and in later work developed his model "Five Minds for the Future" (2007) on this basis. This model outlines five key virtues (mindsets and skills, "minds") for students, teachers and future leaders:

1) Disciplined Mind
2) Synthesizing Mind
3) Creating Mind
4) Respectful Mind
5) Ethical Mind

All of these virtues as well as their interrelations are seen to be important for societal and global problem solving.

In this presentation, Gardner's work is introduced as a psychological perspective on capacity building for sustainable development. A workshop concept addressing Gardner's Five Minds for the Future is outlined [3, 4]. Practical implications for educational and HR processes are considered and further interdisciplinary research questions that arise out of Gardner's concepts will be discussed.

KEYWORDS: psychology, personality, mindsets, virtues, human resource development.

References:
[1] Gardner, H. (1983). Frames of Mind. The Theory of Multiple Intelligences. New York: Basic Books.
[2] Gardner, H. (2007). 5 Minds for the Future. New York: McGraw-Hill.
[3] Schmitt, C.T. (2014). Was ist Klugheit? Wertebasiertes Handeln im Führungskontext. Theorie und Praxis Wertebasierter Flexibilität. [What is prudence? Value-based leadership behavior. Theory and application.]. Lengerich: Pabst.
[4] Schmitt, C.T. (2016). Leitthema Nachhaltigkeit: Aufgabe für die Personalentwicklung? [Key issue sustainability: A challenge for HR development?] Wirtschaftspsychologie aktuell, 23(2), pp. 17-20.

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Squaring the circle? Conceptual parallels between innovation and sustainable development processes

Poster

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Are innovation and sustainability antagonistic values and principles? What kind of dilemma arises when we see sustainable development and innovation as either connected to or independent from one another? Which conceptual parallels can be drawn between innovation and sustainable development processes from the perspective of work and organizational psychology [1, 2]?

In this poster, these questions are discussed and highlighted, trying to figure out if considering innovation and sustainable development processes as fundamental similar change patterns [3] is "squaring the circle". Identified conceptual parallels between innovation and sustainability processes are:

1) diffusion of responsibility

2) the "not invented here-syndrome"
3) opacity of benefits
4) fuzziness of terms and notions.

These are becoming challenges for applied organizational development when it comes to fostering innovation and sustainability.

KEYWORDS: change processes, innovation, sustainable development, work and organizational psychology.

References:
[1] Laux, L., & Schmitt, C. T. (2008). Innovation und Persönlichkeit (2. Aufl.) – [Innovation and Personality]. Persönlichkeitspsychologie – [Personality Psychology.], Stuttgart: Kohlhammer, pp. 312–321.
[2] Schmitt, C. T. (2014). Mit kreativer Balance zu nachhaltiger Innovationsfähigkeit: Ein Coaching-Workshop zur Förderung Wertebasierter Flexibilität – [Creative balance as basis for sustainable innovation capability – A coaching workshop to promote value-based flexibility]. Innovationsorientierte Personalentwicklung: Konzepte, Methoden und Fallbeispiele für die Praxis [Innovation-oriented Human Resource Development: concepts, methods, and fields of application], pp. 189–203. Wiesbaden: Springer-Gabler.
[3] Schmitt, C.T., Palm, S. (2017, in press). Sustainability at German Universities: The Universität Hamburg as a Case Study for Sustainability-oriented Organizational Development. In Leal Filho, W. (Hrsg.). Handbook of Sustainability Science and Research. Berlin: Springer.

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Sustainability seen from a multilingual perspective

Workshop

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UNESCO's Global Goals for Sustainable Development (SDGs) refer to the world society as a whole. They concern all nations and their collaboration on fostering sustainability world-wide. Thus, relations between internationalization and sustainable development have to be further specified and investigated from a scientific as well as a practical viewpoint.

Highlighting an interdisciplinary research project that is dedicated to consider internationalization as a valuable resource within Higher Education Institutions, linkages between

sustainability and multilingualism are outlined. This project was conducted at the Universität Hamburg Center for a Sustainable University (KNU).

After a short introduction, this workshop offers an open talking circle for participants and the following questions are posed:

- Do we share a similar understanding of sustainability, Nachhaltigkeit, βιωσιμότητα, etc. when talking about global goals?

- Which different interpretations and associations can be found in analyzing the notion of sustainability from a multilingual perspective?

- How might interdisciplinary research on the conjunction between multilingualism and sustainability contribute to social innovation processes towards achieving the SDGs in general?

Introducing a work in progress "language map of sustainability" and interactively discussing the questions mentioned above, the workshop aims at a) reflecting the notion of sustainability and its connotations seen from different languages and cultures and b) generating new ideas for innovative interdisciplinary research topics within the field of sustainable development. The participants can share their personal position and their specialist expertise to approach a joint perspective on global sustainability.

KEYWORDS: multilingualism, communication, psycholinguistics, shared mental models on SD, internationalization, SDGs.

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Multilingualism as a resource of a sustainable university

Poster

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Introducing an interdisciplinary research project that is dedicated to consider internationalization as a valuable resource within Higher Education Institutions, linkages between sustainability and multilingualism are outlined. The overall framework for the project as well as its four sub-projects and their results will be presented.

The research project "Multilingualism as a Resource of the Sustainable University" has examined the topic multilingualism at

the Universität Hamburg (UHH) since summer 2015. The core issues of the project include the following questions:

- Which relevance does multilingualism have for the act of raising awareness and the requirement of reflective communication in the context of research, teaching and education at universities?

- To what extent will the university itself be influenced negatively or positively by multilingualism in its tasks of sustainable research, teaching and education?

- How can the university contribute to the development of multilingualism as a public asset (internal as well as external impact)?

This project was conducted at the Universität Hamburg Center for a Sustainable University (KNU), which serves as a framework for joint activities to foster sustainable development at Higher Educations Institutions in general.

KEYWORDS: multilingualism; internationalization; interdisciplinary research; university governance.

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Shared mental models, design thinking and serious play: using LEGO® Serious Play™ for envisioning a sustainable future (I & II)

Workshops

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Research on team processes and performance shows that shared mental models play an important role for effectiveness and achievement [4]. Design Thinking [3, 1] as well as Serious Play [6] are recent trends not only in business organizations but also in educational settings to generate new insights and perspectives.

What if we use these findings, methods and tools for purposes such as envisioning a sustainable future? What if we (re)activate playful mindsets and collaboration techniques for creating shared models of how organizations dedicated to sustainable development would look and feel like? What if we can facilitate sustainability-oriented organizational development by applying innovation modes [5]?

In this workshop, first a short introduction into the above mentioned theoretical frameworks is given; moreover, Lego Serious Play® (LSP) is proposed as one example tool for generating experiential knowledge, to develop new shared views and to discover hidden opportunities within transformational processes [2]: The practical section of this workshop offers the occasion to get familiar with basic LSP related to sustainable development challenges and visions. It shows one way of how inter- and transdisciplinary topics are approached within the HOCH^N project, a research collaboration on fostering sustainable development at Higher Education Institutions, funded by the German Federal Ministry of Education and Research (BMBF; www.hoch-n.org). A joint discussion on the models, team processes and method per se will be the closing section of this workshop.

Workshops I and II will be structured alike and will take into consideration for participants' interests and expectations; procedures and example topics are flexible and will depend on the needs of the participants.

KEYWORDS: shared mental models, serious play, design thinking, constructionism, innovation tools.

References:
[1] Brenner, W. & Ubernickel, F. (Eds.) (2016). Design Thinking for Innovation: Research and Practice. Heidelberg: Springer.
[2] Dornaus, C., Staples, R., Wendelken, A., Wolf, D., et al. (2015). Innovationspotenziale: entdecken, wertschätzen, nutzen! [Innovation potential: discover it, appreciate it, use it!]. Erlangen: FAU University Press.
[3] Kelley, T. (2006). The Ten Faces of Innovation. Strategies for Heightening Creativity. London: Profile Books.
[4] Mathieu, J.E., Heffner, T.S., Goodwin, G.F., Salas, E. & Cannon-Bowers, J.A. (2000). The Influence of Shared Mental Models on Team Process and Performance. Journal of Applied Psychology, 85 (2), 273-283.
[5] Schmitt, C.T., Palm, S. (2017, in press). Sustainability at German Universities: The Universität Hamburg as a Case Study for Sustainability-oriented Organizational Development. In Leal Filho, W. (Hrsg.). Handbook of Sustainability Science and Research. Berlin: Springer.
[6] Schrage, M. (2000). Serious Play: How the world's best companies simulate innovation. Boston: Harvard Business School Press.

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Set up your Campus as Living Lab: combine research, education and campus operations

Workshop

Dr. Verhoef, Leendert A.[1]; Newman, Julie[2]
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(2) MIT – Office of Sustainability (USA)
Email for correspondence: l.a.verhoef@tudelft.nl

The urgency of the UN global sustainability challenges to secure a clean, healthy, safe, and prosperous world for everyone and the necessity to improve material, water, land, and energy efficiency by several factors is widely acknowledged. The complexity of these challenges calls for integral, innovative, and systematic approaches. University communities are excellent venues for testing, accelerating and scaling solutions.

There is strong belief that 'Living Lab' approaches are effective and will lead to facilities, students, and research with better / greater impact on our common future. However, being academic institutions, we should define the desired impacts on the whole, monitor the successes (and failures) of all approaches, and analyze, understand and falsify the factors behind these successes. Only in that way, recommendations for continuation have value beyond our own experiences.

We propose to investigate and to discuss a more intense knowledge collaboration between Universities to rigorously investigate and analyze university Living Labs for Sustainability by structuring, comparing, and monitoring university campus transformational processes, and using the lessons learned actively to help modify and strengthen operations in our own and other campuses.
We are looking into two kinds of Living Labs:

- Within your own university community

- All universities combined are one sustainability living lab / community

Please join us in a workshop to discuss emergent and active living lab models and bring on experiences on your campus and seek opportunities for collaboration, advancement and exchange.
We will present experiences from the International Sustainable Campus Network and characterize, systemize, and exchange success and failure factors on both levels. At the end of the workshop, you will have described your own Living Lab in a well-structured, communicable way.

KEYWORDS: Living Labs, Holistic Approach, Sustainability Leadership, University Campus.

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StrategyGameFuture@MUAS – designing the future of Munich through real strategy games

Presentation

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Sustainability – as a short form of sustainable development – requires a new methodology, probably a rethinking of the role of higher education as a whole. A main aspect of this new approach is to leave the academic ivory tower and take part in the process of transformation for sustainable development. The demand for more "Outreach" is imbedded in the discussion of the "Third Mission" (Roessler et al. 2015) of higher education institutions. Munich University of Applied Science (MUAS) is meeting this challenge through a number of new course formats such as DesigningFuture@MUAS (Zinn 2016) and StrategyGameFuture@MUAS (SGF). This contribution describes the course format "SGF@MUAS" including its unique features from a higher educational perspective for sustainable development (ESD). The features that make this innovative course format challenging and unique compared to other formats are that it provides an excellent example of a transdisciplinary approach in ESD, combining ESD on the one hand and designing the future of the city of Munich on the other by opening the public debate.

KEYWORDS: sustainable development, higher education, strategy game future, educational perspective for sustainable development.

LIST OF PRESENTERS

LIST OF PRESENTERS

FURTHER INFORMATION

It is your first stay in Hamburg? We like to give you some more information about the venue of HSDS, some facts and figures about Universität Hamburg, how to travel around in Hamburg and what sights we like to recommend for your spare time. Enjoy!

Main Building (UHH/Denstorf)

Universität Hamburg

As one of Germany's largest universities Universität Hamburg offers a diverse curriculum and is known for outstanding research.

Degree programs are offered in a wide range of disciplines, and the University has an extensive network of partnerships with leading organisations on regional, national and international levels. The university also owns and operates several museums and historic collections, such as the Zoological Museum, the Herbarium Hamburgense, the Geological-Paleontological Museum, the Botanical Gardens and Hamburg Observatory.

Since 2010, the Universität Hamburg has been one of the first universities in Germany to consider sustainability in all its aspects and to combine efforts to achieve the aim of professional excellence with the concern to contribute to the achievement of the 2015 UN Sustainable Development Goals. Sustainability is closely related to the systematic further development and implementation of Humboldt's idea of education through science. The Universität Hamburg sees itself as a mediator between science and practice. It focuses on key questions of the future and also wants to contribute to a responsible social organisation in its structures.

With the establishment of the cross-faculty and cross-administrative Center for a Sustainable University (KNU) the Universität Hamburg has been pursuing a "Whole Institution Approach" to support efforts in making the Universität Hamburg a "University for a Sustainable Future". The KNU helps to ensure viability on both strategic and operational levels in the areas of research, teaching, education and university governance.

The University Main Building

Tradition meets modernity in Universität Hamburg's Main Building, with a prestigiously grand exterior and interior equipped with modern technology. The main building embraces seven auditoriums of different sizes along with impressive foyer spaces and four interior courtyards.

The main building is flanked by two wings – east and west. Architectural highlight: spacious courtyards with 18-meter high support-free glass roofs with piazza-character, affording the illusion of being out in the open.

If you are searching for a department, research group, the university administration, etc. the Campus Navigator indicates all locations and university institutions, including contacts and links.

Campus Navigator: www.uni-hamburg.de/onTEAM/campus/

Students on campus (UHH/Dingler)

Campus Map with HSDS venue
(main building, east wing)
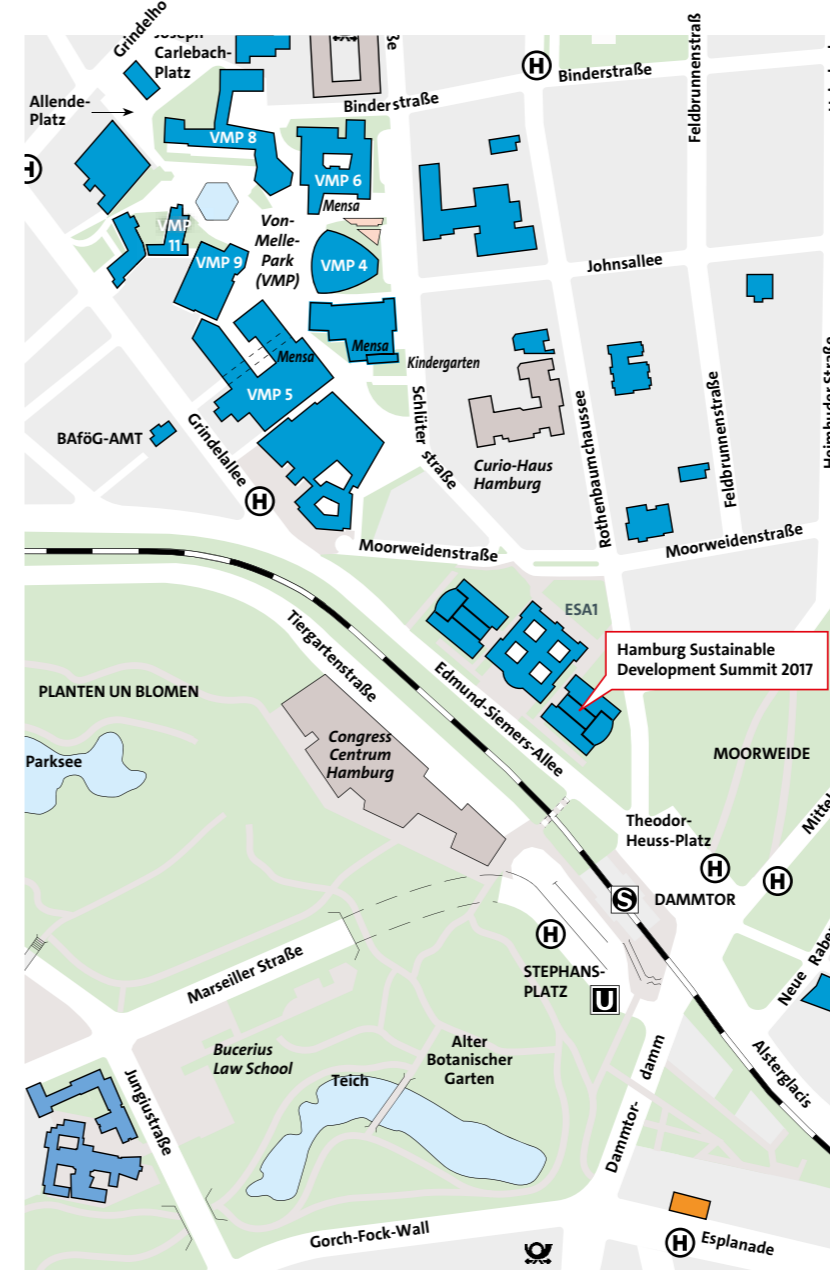
UNIVERSITY FOR A SUSTAINABLE FUTURE

Milestones of Universität Hamburg on its way to a "University for a Sustainable Future" – some key examples:

- **2016-2018** Initiation and coordination of HOCH[N]: "Sustainability at Higher Education Institutions" with the goal to establish a broad sustainability network within Germany.

- **2016** Declaration of compliance with the German Sustainability Code (DNK) of the German Council for Sustainable Development (RNE)

- **2011-2014** Second sustainability report

- **2010-2011** First sustainability report by student initiative Oikos

Universität Hamburg Facts & Figures 2016

BASIC DATA	
Faculties	8
Departments	27
Buildings	190
Main usable area	300.000 m²

RESEARCH	
Clusters of excellence	2
Collaborative Research Centers	9
DFG research training groups (inclusive participation)	9
German Research Foundation (DFG) research units (inclusive participation)	33

TEACHING	
Enrolled students in winter semester 2016/2017	42.890
Number of first-year students	10.601
Thereof in Master's programmes	3.369
Completed degrees	6.674
Doctorates	926

STAFF	
Total number of staff	12.458
Professors	666
Research associates (except professors)	3.784

DIVERSITY	
Female Students	56 %
Female Research associates (incl. professors)	42 %
International students	12 %
International Research associates (incl. professors)	14 %

Photo: UHH/Denstorf

Arriving in Hamburg

The HSDS venue is located within a short walking distance from the train station "Hamburg Dammtor".

Hamburg offers all common ways of travelling:

Train

If you want to travel by train, you either go directly to Hamburg Dammtor or arrive at Hamburg Central Station and use the public transport to Hamburg Dammtor. You will find further information on public transport on www.hvv.de/en/index.php.

Air plane

If you plan to travel by plane, you search for connections to Hamburg Airport. Close airport alternatives to Hamburg Airport are Bremen Airport and Lübeck Air-port. Both destinations have direct train connections to Hamburg in less than 1 hour.
The airport has direct access to the public transport system. Your destination with public transport is Hamburg Dammtor.

Many ways to get there (pixabay)

Car

When you decide to travel by car, you have several options to approach the city. Coming from the north or south, take highway A1 or A7. If you are coming from the east, you use highway A1 or A24. Destinations details for your navigation system:

Universität Hamburg, Edmund Siemers Allee 1, 20146 Hamburg, Germany

Please notice that there are very limited parking possibilities within the area of the university. Furthermore, the Hamburg traffic can get very dense, especially during rush hours, and getting around with a car is very time-consuming and inconvenient.

Getting around in Hamburg

Public Transport – Hamburger Verkehrsbund (HVV)

The HVV is the public transport operator in Hamburg. It includes subways and busses. You can purchase tickets at a ticket machine at the entrance of every station. Online-ticket purchases are slightly cheaper. The current fee for using the public transportation without a valid ticket is 60€. Here you can find the most frequent used ticket options for the HVV:

- One way ticket (Einzelfahrkarte Groß-bereich AB): 3,10 €

- Unrestricted day ticket (Tageskarte): 7,60 €

- Restricted day ticket* (9 Uhr Tageskarte): 6,20 €

The operation time of the HVV usually is weekdays from approx. 4 am to 0.30 am and fridays and saturdays the operation continues all day and night.

Check out the homepage of HVV www.hvv.de/en/index.php.

 * valid Mon – Fri from 0.00 am to 6 am and from 9 am until 6 am the following morning, all day on Sat, Sun and public holidays

StadtRAD Hamburg - on your bike and off you go!

The StadtRAD (call a bike) gives you spontaneous, individual mobility. Experience all Hamburg has to offer, whether work, leisure or tourist attractions, in a very special way, right in tune with the pulse of the city. Many hire stations through-out the entire city offer facilities round the clock for hiring and returning a Stad-tRAD - as simply as cycling itself.

"StadtRAD Hamburg" is a provider of bicycles in the wider area of Hamburg. The network of stations and the number of bicycles is extensive and provides a quick get around in Hamburg. The easy process of registration can be conducted online or at every station via a terminal. Registration works with a credit or debit card. There is a 5 Euro registration fee which is applied as credit to your account. Every starting 30 minutes of each renting period are free, but starting from the 31st minute, it costs 8 ct/minute. One can return the bike at every

Underground train in Hamburg (pixabay)

station which can be found online or via the terminal at each station.

More information: https://stadtrad.hamburg.de/kundenbuchung/ (only available in German)

CarSharing

There are two main providers of carsharing visible on the roads:

- Drive now

- Car2go

The registration process consists of an online registration and a personal identifi-cation at one of the operator's offices. There you pay the registration fee and receive your membership card. This is mandatory to use their fleet which is distributed all over the city.

Taxi/Cab

Taxis are widely available in every area in the city center and around the venue. Opposite of the venue, there is the public transport station Hamburg Dammtor and behind the station you can find a big cabstand. Cab drivers usually accept card payments, but it is recommended to have cash available.
The following table states the current prices for cab rides.

Current prices for cab rides (circa):
Basic charge: EUR 3.20
Price per km 1. - 4. km: EUR 2.35
Price per km 5. - 9. km: EUR 2.10
Price per km from the 10th km: EUR 1.45

Hamburg & Tourism

The Free and Hanseatic City of Hamburg is a state of the Federal Republic of Germany. With more than 1.8 million inhabitants, Hamburg is the second largest city in Germany, the sixth largest in the European Union and the largest city that is not the capital of one of its member states.

The city of Hamburg has many faces: it is Hansestadt, scientific location, cultural metropolis. Its "gateway to the world" is the famous port of Hamburg, the largest seaport in Germany.

Here on the Elbe, on which gigantic container ships and cruise ships maneuver, one also best understands why this city is one of the most beautiful in Germany.

Sights

- Must Sees: City Hall, the Speicherstadt, Fischmarkt, Landungsbrücken, the Elbphilharmonie and the St. Michaelis Church ("Michel").

- Maritime: Think Hamburg, think harbour! Walk the tunnel, climb the masts, tour the docks and enjoy a concert.

- Architecture: From Romanic churches & Jugendstil mansions to sleek modern office buildings, Hamburg is full of stunning architecture.

- History and Heritage: Hamburg was built on trade, survived Danish, Prussian, French and Nazi rule, and endured fires, floods and diseases.

- Alternative: Hamburg offers more than the harbour, shopping arcades and musical theatres.

- Memorials: 25,000 heritage listed objects pay tribute to a millenium of history. Spot notorious pirates, famous composers and the world's biggest band.

- Nature: Hamburg is one of the greenest cities in Europe with a number of parks, botanical gardens, nature reserves and deep forests.

- Places of Worship: Discover steeples, organs, narrow stairs and panoramic views.

To get an overview on Hamburg and its main sights, you can visit the official homepage of Hamburg www.hamburg.com or the official tourism website www.hamburg-tourism.de.

Further Sustainability-related Events in Hamburg

We like to draw your attention to some additional sustainability-related events in Hamburg taking place during the HSDS 2017 week.

9th Hamburg Climate Week

September 24 - October 1, 2017

Organised under the roof of the German Ocean Foundation, the Hamburg Climate Week has become a broad initiative addressing the realisation of the United Nation's 17 Sustainable Development Goals in the Hamburg metropolitan region. According to the UN Environmental Program, the Hamburg Climate Week has an impact far beyond Germany being Europe's largest event for climate communication.

The Hamburg Climate Week is a major interactive and integrative communication platform. By promoting a dialogue between stakeholders from economy, politics, environment, and society, it gives information on climate change and aims at motivating people to use resources sustainably.

This is achieved with the help of different modules being the following:

- Lectures and discussions

- Educational program including workshops and excursions

- Theme parks surrounding the Hamburg television tower as well as hands-on activities

- Cultural events

Some single modules may even been offered in English. This year, the Hamburg Climate Week will host a Solar Initiative together with established renewable energy suppliers. Feel free to check out more information www.klimawoche.de.

Fair Week Hamburg

September 15 - 29, 2017

Hamburg as fair trade town offers annually various events within the fair week (German language only). Find out more information and program details under www.faire-woche.de.

Exhibition: food revolution 5.0

May 19 - October 29, 2017

Exhibition in MK&G, Museum für Kunst und Gewerbe

Will we eat insects in the future? Will we plant vegetables on islands? Beehives on our roofs? Will we chew our food or pop proteins and vitamins pills? We look at these and other questions through the visionary ideas of international designers – some ideas have become a reality while others are still in the mind's eye. This exhibit takes you from ancient wisdom for food preservation, to indoor kitchen farming, to turning to our own bodies for food sources. Available in German and English.

Find out more information on http://food.mkg-hamburg.de/en/.

Zukunftskongress: "Land unter und alle wohlauf?"

Saturday, September 30, 2017
10 a.m. - 6 p.m., Wälderhaus

Event in German language

Congress of Future Council Hamburg, funded by Norddeutsche Stiftung für Umwelt und Entwicklung.

With friendly support by BUND Hamburg, NABU, umdenken – Heinrich-Böll-Stiftung-Hamburg, Eine Welt Netzwerk, Gemeinwohl-Ökonomie Hamburg, DGB Hamburg. Medienpartner: Oekom Verlag, SCHIERRIEGER

Free entrance – you are kindly asked to register at Zukunfsrat in advance.

More information: www.zukunfts-rat.de/fileadmin/Programm_Kongress_2017-08-14.pdf

HVV

U S A R

Schnellbahn-/Regionalverkehr
Rapid Transit/Regional Rail

hvv.de
040/19 449

Information-Fahrpläne | Timetables - Service

Hamburg AB

Stand: 11.12.2016

Grindelhof

Joseph-Carlebach-Platz

Schlüterstraße

Binderstraße

Feldbrunnenstraße

Heimhuder Straße

Allende-Platz

VMP 8

VMP 6

Mensa

Binderstraße

Johnsallee

VMP 11

Von-Melle-Park (VMP)

VMP 9

VMP 4

Mensa

Kindergarten

Rothenbaumchaussee

Feldbrunnenstraße

Heimhuder Straße

VMP 5

Schlüterstraße

Curio-Haus Hamburg

BAföG-AMT

Grindelallee

Moorweidenstraße

Moorweidenstraße

ESA1

Hamburg Sustainable Development Summit 2017

PLANTEN UN BLOMEN

Tiergartenstraße

Edmund-Siemers-Allee

MOORWEIDE

Parksee

Congress Centrum Hamburg

Theodor-Heuss-Platz

Mittelweg

Marseiller Straße

DAMMTOR

STEPHANS-PLATZ

Bucerius Law School

Alter Botanischer Garten

Teich

Neue Rabenstraße

Gorch-Fock-Wall

Dammtordamm

Alsterglacis

Esplanade