Summary of International Efforts re: Sustainability Higher Education

1. Declarations
2. Growth of Networks/Consortia
3. Green Ratings/Rankings

Content provided by Ann Kildahl
Summary of International Efforts re: Sustainability Higher Education

1. International Declarations re: Sustainability in Higher Education *(partial list)*

- Talloires Declaration (1990)
- Halifax Declaration (1991)
- Swansea Declaration (1993)
- Kyoto Declaration (1993)
- Copernicus Charter (1994)
- Lüneburg Declaration (2001)
- Ubuntu Declaration (2002)
- G8 University Summit/Sapporo Sustainability Declaration (2008)
Summary of International Efforts re: Sustainability Higher Education

2. Growth of Networks/Consortia *(partial list)*

- Magna Charta Universitatum (1988)
- Alliance for Global Sustainability (AGS) (1997)
- University Leaders for a Sustainable Future (ULSF)
- American College and University Presidents Climate Commitment (ACUPCC)
- Northeast Campus Sustainability Consortium (NECSC)
- Ivy Plus Sustainability Working Group
- COPERNICUS ALLIANCE (European Network, Higher Education for Sustainable Development)
Summary of International Efforts re: Sustainability Higher Education

- Environmental Association of Universities and Colleges (EAUC)
- Higher Education Environmental Performance Improvement (HEEPI)
- Association for the Advancement of Sustainability in Higher Education (AASHE)
- International Sustainable Campus Network (ISCN)
- Network of Networks (University of Tokyo/G8 University Summit)
- UNU Regional Centres of Expertise (from 2005)*
- International Association of Research Universities (2006)*
- Global University Leaders Forum (2006)*
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- International Sustainable Campus Network (2007)
- G8 University Summit/Sapporo Sustainability Declaration (2008)
- Australasian Campuses Toward Sustainability (2002)
- “IR3S” Integrated Research System for Sustainability Science (2005)
- Korean Association of Green Campus Initiatives (2008)
- Hong Kong Sustainable Campus Consortium (2010)
- Sustainable Futures Leadership Academy (2010)

* These networks/Consortia have a mission beyond sustainability
3. “Green” Ratings / Rankings *(partial list)*

- NWF State of the Campus Environment (2001)
- The People & Planet Green League (2007)
- Sierra Club “Cool Schools” list (2007)
- College Sustainability Report Card (Sustainable Endowments Institute) (2007)
- “STARS” Sustainability Tracking Assessment & Rating System (pilot 2007; launch 2010)
- Princeton Review "2010 Green Rating Honor Roll"
Campus
KAUST
King Abdullah University of Science and Technology
Sustainability Diagram - Laboratories and Pedestrian Spine

1. High performance roof
2. Solar tower
3. Passive ventilation
4. High performance glazing
5. Integrated shading
6. Local evaporation
7. Passively cooled courtyards
8. Filtered daylight
## 100 Green Buildings at Harvard

### 78 LEED CERTIFIED PROJECTS

<table>
<thead>
<tr>
<th>Platinum</th>
<th>Gold</th>
<th>Silver</th>
<th>Certified</th>
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<tr>
<td>12</td>
<td>39</td>
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Additional 22 registered projects pursuing certification

46 Blackstone Street
LEED-EBOM Platinum January 2012
LEED-NC Platinum April 2007
Curriculum
Ecoversity Journey 2004 - 2014

Phase 1
Pre 2005
- Environmental Management
- Estates led – operational focus

Phase 2
2005-2006
- Sustainable Development
- Launch of Ecoversity
- Sustainability at the heart of living and learning

Phase 3
2007-2010
- Whole Institutional Change
- New structures, process and methods

Phase 3
2007-2010
- Normalising
- Everyone’s business
Phase 3- Whole Institutional Change

Curriculum

• University adopts UNESCO framework for Education for Sustainable Development (ESD) to guide academic policy
• Academic staff seconded in each school to champion and develop ESD in all subjects and disciplines
• New regulations introduced requiring ALL courses and programmes to articulate ESD
• Monitoring and impact evaluation process via school plans, course evaluation feedback forms and annual monitoring reports track progress and achievements

7 Academic schools, 12,000 students, 500+ courses
Student Leadership
Nigeria: Students Taking Leadership

A full view of the park, showing the first environment-friendly project voluntarily done by a student environment club in the University of Port Harcourt, in partnership with the environment unit of the institution (CEBAS) using the 3 ‘R’ s to construct a Recreational/Relaxation Park.
University of Toronto Sustainability Office
Student Success Story: Solar Hot Water

- Largest system in the city or at any Canadian University
- Supplies nearly 25% of the hot water for Athletic Centre showers and laundry at peak

Student Innovation:
- Conceived by Faculty of Applied Sciences undergraduate Ashley Taylor in 2006
- Now employed full-time by the University's sustainability office, Taylor worked with the facilities and services division on campus to see the project through to completion.

“It has been very fulfilling to see a simple research question become a reality.”

- Taylor

Photo Credit: Tanja Tiziana, YongeStreetMedia.ca
Engagement
SUSTAINABLE BUILT ENVIRONMENT MANIFESTO FOR A SCHOOL OF ARCHITECTURE IN BANGALORE:
ROAD MAP FOR CAMPUS SOCIAL RESPONSIBILITY (CSR)

PROF. S. SHIVA KUMAR, DIRECTOR,
ACHARYA’S NRV SCHOOL OF ARCHITECTURE (ASArch)
ACHARYA INSTITUTES, HESARAGHATTA ROAD, BANGALORE 560090
ACHARYA’ S NRV SCHOOL OF ARCHITECTURE (ASArch)
WALK LIGHTLY, REDUCE CAMPUS FOOTPRINT
Small Steps Lead to Big Changes

• It all begins with education. College campuses are the perfect places to demonstrate changes we can make to reduce our carbon footprints.

• We need to show people that small steps lead to big changes.
ACHARYA’ S NRV SCHOOL OF ARCHITECTURE (ASArch)
Research
- Sustainable University -
Transformation processes in a whole system approach

Germany
Leuphana University’s leadership has worked out a clear strategic framework.

1) Policy & planning

2) Institutional arenas

3) Vision / final goal

- Research
- Education
- Partner-ships/outreach
- Campus & facilities management/administration

Foundation for operational & cultural changes (history, key principles, master planning, etc.)
Research: Leuphana University has developed a clear research focus on the sustainability sciences, and, as part of this process, has been establishing the Faculty of Sustainability Science with 27 professorships by 2013.

The sustainability sciences are at the forefront in the acquisition of external funding and the number of publications at Leuphana University, which shows the research staff’s support for the sustainability research focus.
Collaboration to Accerate
Evaluation of the impact of the Green Academy programme and Case Studies

Dr Andrew McCoshan and Professor Stephen Martin

The United Kingdom
Programme

28 July – Tongji University Campus, 1239 Siping Road
Tools and Networking for Campus Sustainable Development

10.30 Introduction
Overview on the ISCN goals and how it operates. Bernd Kasemir, ISCN Project Director
The ISCN Charter and Guidelines, Ariane Konig, University of Luxembourg, Luxembourg
Relevance of the ISCN activities to China
Hongwei Tan, Biaotong Zhu, officer, Ministry of education of China,
Yong Wu, officer, Ministry of housing and urban-rural Development of China

11.00 The ISCN Awards
Overview on the ISCN Award Scheme, Claude Siegenthaler, Hosei University, Japan
2 case presentations of award winners

12.00 Overview of other ISCN activities and tools
ISCN data base for case studies. Rene Lisac, University of Zagreb, Croatia
Work on the integration of research, teaching and facilities, Eddi Omercan,
University of Gothenburg, Sweden
Work on financial mechanisms (tbd)

13.00 Lunch

14.00 Demonstration of Chinese tools for monitoring reporting and learning and Tour of Tongji Campus
Hongwei Tan, Vice Executive Director of Research Center Green Buildings & New Energy, Tongji, China

15.45 Tea break

16.00 ‘Communication tools to foster sustainability in campus and urban communities’
Petra Schwester-Ries, University of Saarbrücken, Germany

16.30 Panel discussion on tools for international information exchange and research

17.00 Close of Symposium

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Sponsors
The Competences for educators in education for sustainable development

Learning to know
The educator understands...
- The basic systems thinking, ways in which natural, social and economic systems function and how they may be interrelated
- The interdependent nature of relationships within the present generation and between generations, as well as those between rich and poor and between humans and nature
- Their personal world view and cultural assumptions and seek to understand those of others
- The connection between sustainable futures and the way we think, live and work
- Their own thinking and action in relation to sustainable development

Learning to do
The educator is able to...
- Create opportunities for sharing ideas and experiences from different disciplines/places/cultures/generations without prejudice and preconceptions
- Work with different perspectives on dilemmas, issues, tensions and conflicts
- Connect the learner to their local and global spheres of influence

Learning to be
The educator is someone who...
- Is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews
- Is motivated to make a positive contribution to other people and their social and natural environment, locally and globally
- Is willing to take considered action even in situations of uncertainty

Achieve transformation
People, pedagogy and education system
- Why there is a need to transform the education systems that support learning
- Why there is a need to transform the way we educate/learn
- Why it is important to prepare learners to meet new challenges
- The importance of building on the experience of learners as a basis for transformation
- How engagement in real-world issues enhances learning outcomes and helps learners to make a difference in practice

Holistic approach
Integrative thinking and practice
- Actively engage different groups across generations, cultures, places and disciplines
- Facilitate the emergence of new worldviews that address sustainable development
- Encourage negotiation of alternative futures
- Challenge unsustainable practices across educational systems, including at the institutional level
- Help learners clarify their own and others worldviews through dialogue, and recognize that alternative frameworks exist

Envisioning change
Past, present and future
- Critically assess processes of change in society and envision sustainable futures
- Communicate a sense of urgency for change and inspire hope
- Facilitate the evaluation of potential consequences of different decisions and actions
- Use the natural, social and built environment, including their own institution, as a context and source of learning

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Turnaround Leadership for Sustainability in Higher Education

RESEARCH TEAM:

Geoff Scott (Australasia)
Leith Sharp (North America)
Daniella Tilbury (UK)
Elizabeth Deane (Australia)

A survey and consultation with 700+ faculty sustainability leaders around the world.
Leaders of Education for Sustainability in HE – their world cont’d

Local leaders

• Jumping into deep water, learning to surf, white water rafting
• Leading a dynamic start up company
• Being Tonto with the Lone Ranger at a bank-robbers’ convention
• Trying to interest people who like junk food in a healthy diet
• Learning Spanish but finding myself in China;
• Being a competitor on American idol
• Being Stephen Bradbury winning gold at the Winter Olympics
• Sisyphus, pushing a wheelbarrow of frogs down a steep hill
• Pinning jelly to the wall; drawing treacle from a well
Leaders of Education for Sustainability in HE - analogies describing their world

Most common analogies

- Cat herder
- Tight rope walker/juggler of multiple perspectives and agendas
- Swimming upstream, against the tide (at times with one paddle)
- Waving a flag from the back of a crowd

Senior leaders

- Carer, a parent, or a guardian
- Gardener
- Captain of a large ship
- A translator, intellectual broker
- Quilter
- Orchestra conductor/director a choir
- Teacher, coach, guide of a diverse group
<table>
<thead>
<tr>
<th>Number</th>
<th>Individual Capability</th>
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<tbody>
<tr>
<td>1</td>
<td>Having energy, passion and enthusiasm for learning and teaching</td>
</tr>
<tr>
<td>2</td>
<td>Being willing to give credit to others</td>
</tr>
<tr>
<td>3</td>
<td>Empathizing and working productively with staff/faculty from different backgrounds</td>
</tr>
<tr>
<td>4</td>
<td>Being transparent and honest in dealings with others</td>
</tr>
<tr>
<td>5</td>
<td>Being true to one's values and ethics</td>
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<tr>
<td>6</td>
<td>Thinking creatively and laterally</td>
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<tr>
<td>7</td>
<td>Listening to different points of view before coming to a decision</td>
</tr>
<tr>
<td>8</td>
<td>Understanding my personal strengths and limitations</td>
</tr>
<tr>
<td>9</td>
<td>Admitting to and learning from my errors</td>
</tr>
<tr>
<td>10</td>
<td>Making sense of and learning from experience</td>
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The 21st Century University/College
The 21st Century University/College

• Transdisciplinarity balanced with disciplinarity
• Co-creation of curriculum and research endeavors
• Action learning, action research, action governance
• More permeability in boundaries between university & community
• Synergies between learning, research, campus & community
One Overarching Theme is the Campus and Community as A Living Lab for Sustainability
A Response to These Demands
A Response to These Demands

1. Senior leadership support
2. Convening forums for developing a vision, partnerships & learning
3. New sustainability goals, governance & decision making structures
4. Piloting new projects and programs (starting small)
5. Creating resources & tools to make it easy for others to lead/own
6. A growing internal green economic engine: A means of funding green financial investments and reinvesting back into green growth

Leith Sharp
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