Commitment and implementation of Sustainable Development in Higher Education

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Introduction

• HEIs have developed and signed an array of *declarations, charters, and initiatives (DCIs)* to provide guidelines or frameworks for HEIs to demonstrate their commitment and better embed sustainability into their system (Calder & Clugston, 2003; Lozano et al., 2013; Wright, 2004)

• However, signing a declaration or endorsing an initiative does not *ensure* that the signatory institutions implement SD (Bekessy, Samson, & Clarkson, 2007; Wright, 2004)

• It can also result in HEIs being accused of ‘green wash’, if they fail to implement SD throughout their system after signing a declaration or initiative (Bekessy, et al., 2007; Wright, 2002)
### Brief History of the efforts taken in HE for SD

<table>
<thead>
<tr>
<th>Year</th>
<th>Event/Declaration</th>
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<tbody>
<tr>
<td>1972</td>
<td>Stockholm Declaration on the Human Environment</td>
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<tr>
<td>1990</td>
<td>Talloires Declaration, France.</td>
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<td>1992</td>
<td>Rio Conference: Agenda 21, Chapter 36</td>
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<td>1992</td>
<td>Association of University Leaders for a Sustainable Future founded.</td>
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<td>1999</td>
<td>First Environmental Management for Sustainable Universities conference first held in Sweden</td>
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<td>2000</td>
<td>Global Higher Education for Sustainability Partnership (GHESP)</td>
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<tr>
<td>2001</td>
<td>Lüneburg Declaration</td>
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<tr>
<td>2002</td>
<td>World Summit on Sustainable Development in Johannesburg, South Africa (Outcome: the Ubuntu Declaration)</td>
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<tr>
<td>2004</td>
<td>Declaration of Barcelona</td>
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<tr>
<td>2005</td>
<td>Start of the Decade of Education for Sustainable Development (DESD)</td>
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Methods

• A survey was developed to collect data from HEI representatives on SD commitment and implementation in their institutions.

• The survey was divided into eight sections, based on the elements of HEI system and the topics found during the exploratory literature review.
Survey sections

• Background of the respondent and the HEI
• Institutional framework
• Campus operations
• Education
• Research
• Outreach and collaboration
• SD through on-campus experiences
• Assessment and reporting
Survey details

• 121 close-ended questions (most of them employed a 5 point Likert scale from ‘totally agree’ to ‘totally disagree’, which were complemented with 107 open-ended questions

• Made available to prospective respondents via Bristol Online Surveys for eight months

• There were 87 respondents from 70 HEIs (10.88% response rate)

• The data were analysed by via a combination of descriptive statistics, grounded theory, and inferential statistics.
Geographic division

Europe: 79%
America: 15%
Africa: 2%
Asia: 2%
Australia: 1%
Declarations signed

- Talloires Declaration: 15
- Halifax Declaration: 3
- Kyoto Declaration: 3
- Swansea Declaration: 4
- COPERNICUS Charter: 4
- Global Higher Education for Sustainability Partnership (GHESP): 0
- Lüneburg Declaration: 1
- Barcelona Declaration: 1
- Graz Declaration: 4
- Turin Declaration: 1
- Abuja Declaration: 2
- Bonn Declaration: 1
- Don't know: 1
- Other (please specify): 0
- Other: 0
Staff and student numbers

**Full time equivalent staff numbers**

- 1-500: 15%
- 501-1,000: 17%
- 1,001-2,000: 12%
- 2,001-3,000: 14%
- 3,001-5,000: 11%
- No answer: 31%

**Full time equivalent student numbers**

- 1-3,000: 7%
- 3,001-5,000: 8%
- 5,001-10,000: 11%
- 10,001-15,000: 12%
- 15,001-30,000: 23%
- No answer: 12%

- 50,001-100,000: 2%
Campus operations
Education and curricula
Accumulated results
Normalised comparisons of the SD commitment
Normalised comparisons between the ideal situation and the real results for the *SD*implementation* variable*
Clusters of commitment to and implementation of SD

Cluster 1
Mean = 5.60
Mean = 64.68

Cluster 2
Mean = 10.14
Mean = 95.46
Discussion (1)

- There has been a larger interest in SD integration in HEIs in Europe than in other regions of the world.

- In general, the numbers of students or staff per institution do not seem to be a key factor in the implementation of SD in HEIs.

- There has been considerable SD implementation throughout the system.

- There have been some efforts in joining between the system elements, where the majority of HESD efforts have focused on operations and education, followed by research, assessment and reporting, on-campus experiences, and outreach and collaboration.
Discussion (2)

• The results show that the HEIs that have signed HESD DCIs could be good examples for other institutions on how to incorporate and implement HESD into their systems.

• Signing a DCI could encourage the communication on SD implementation to external stakeholders.

• Also, signing a DCI reinforces the commitment from the HEI and its leaders to SD.

• It was not possible to detect causality between being committed, signing DCI, and implementing SD initiatives.
Conclusions

• There was a high level of inter-linkages between commitment, implementation, and signing a DCI

• SD commitment leads to signing a DCI and implementing SD

• The challenges for HEI leaders and their faculties are to fully commit to SD and to holistically implement SD into all of their institution’s activities
Recommendations for higher education leaders

1. **Acknowledge** that the HEI system is comprised of several inter-related elements

2. **Commit** to SD by integrating SD into the HEI’s policies and strategies

3. **Show** the HEI’s commitment by signing a DCI

4. **Establish** short-, medium-, and long-term plans for the institutionalisation of SD

5. **Ensure** that SD is implemented throughout the system
A **paradigm revolution** is needed to break through existing knowledge barriers and current unsustainable mental models, and foster metanoia for sustainability.

**New ways of learning** are needed, which actively and consciously engage in the use and protection of **natural resources**, and the safeguarding and improvement of **societal well-being**, for this **generation and future ones** (see Burke, 2000; Cortese, 2003; Rosner, 1995).
This revolution has to be based on **holism**, i.e. examining a thing from outside and asks questions while it works (Lovelock, 2007), **transdisciplinarity** (Brown, Harris, & Russel, 2010), **system thinking** (Bagheri & Hjorth, 2007), and long-term thinking (WCED, 1987).
Bridging ‘science and the arts’

Fostering and supporting creativity can help to break silo mental models, by bridging the schism between rationality and emotions, as well as that between science and the arts.
To develop a complete mind:
Study the science of art;
Study the art of science.
Learn how to see.
Realise that everything connects to everything else.

Leonardo da Vinci
Thank you!

Rodrigo Lozano, PhD

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