

ISCN Working Group 3 Research Agenda

Principle 3 of the ISCN-GULF Sustainable Campus Charter:

To align the organization's core mission with sustainable development, facilities, research, and education should be linked to create a "living laboratory" for sustainability.

On a sustainable campus, the built environment, operational systems, research, scholarship, and education are linked as a "living laboratory" for sustainability. Users (such as students, faculty, and staff) have access to research, teaching, and learning opportunities on connections between environmental, social, and economic issues. Campus sustainability programs have concrete goals and can bring together campus residents with external partners, such as industry, government, or organized civil society. Beyond exploring a sustainable future in general, such programs can address issues pertinent to research and higher education (such as environmental impacts of research facilities, participatory teaching, or research that transcends disciplines). Institutional commitments (such as a sustainability policy) and dedicated resources (such as a person or team in the administration focused on this task) contribute to success.

Principle 3 covers topics related to the integration of teaching, research, and campus operations such as:

- Topical integration (multidisciplinary and/or sustainability courses)
- Social integration (participatory courses, behavior change campaigns, interactions with industry/government/broader society)
- Research on specialty facilities (laboratory hazardous waste reduction /IT energy management)
- Commitments and resources for campus sustainability (sustainability policy, participation in voluntary programs, staffing and fiscal resources)

Preliminary Research Agenda

Case-Based Research on Sustainable Campus Development and Community Connection

The overall objective of Working Group 3's research will be to develop case studies of 'sustainable university projects' across three continents with a focus on undergraduate curriculum reform and one selected research project for sustainable campus development and connecting campus and local communities. The case studies shall highlight existing tensions and trade-offs in local definitions of sustainable development objectives and approaches to achieve these. Processes for priority setting shall be discussed. See Appendix A for suggested structure of case studies.

Research Context and First Steps

The starting point will be a working paper provided by Nancy Budwig (Clark University) and Ann Kildahl (University of Hong Kong) which includes an introduction describing how a campus can

be seen as a living laboratory for sustainable development. Subsequent sections provide working definitions for:

- a. Interdisciplinarity as it relates to education and research;
- b. Practice based research and learning; and
- c. Impacts on communities and municipal governance.

The conclusion of this paper will speak to changes in the mission of universities in the face of sustainable challenges with a particular focus on curricular reform and objectives for learning for sustainable development ('building communities of practice' will be used as bridging concept).

At the 2011 ISCN conference, there will be discussion of the first descriptive case studies. We will also explore how case studies might be strengthened with empirical data, in particular as it relates to assessing learning and impacts of changes in curriculum design with regard to objectives of learning for sustainable development.

Long-Term Objectives

The long-term objectives for Working Group 3 include development of additional case studies to be fully representative of international efforts (institutions from various continents), with other objectives to be defined as the research evolves.

Appendix A: Suggested Structure of a Case

After an introduction with a strategy for sustainable development and connection to local community, the case should describe how the project came about and the priorities for its implementation. The case shall provide an:

- 1) Overview description of undergraduate curricular reform activities in view of learning for sustainable development, including one detailed example of an activity or course.
- 2) Overview on sustainable campus research and a detailed description of a sustainable campus research project (possibly student-driven).

The two detailed descriptions of the education and research initiatives shall respectively relate to:

- a. Interdisciplinarity
- b. Practice basedness
- c. Impact on community (-campus community, -local community, and -municipal governance).

Fig. 1. Structure of Case

University strategy on sustainable development: origins, development and rational for priorities		
Sections	1. Educational activity	2. Research project
	a. Interdisciplinarity	a. Interdisciplinarity
	b. Practice basedness	b. Practice basedness
	c. Impact on community -campus community -local community -municipal governance	c. Impact on community -campus community -local community -municipal governance
How do they relate to University strategy on sustainable development?		