ISCN 2013 Conference
The Future Is Now

Working Group 3
Integration of Research, Teaching, and Facilities

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Key Questions Discussed

• Day 1: Research
Who are our research partners (Use of modes of research that extend beyond to include students and external partners).

What are the advantages and challenges of integrating research across disciplines and connecting beyond the academy?

Through two case studies (Japan, France) we examined the question of how to do this new type of complex work.

• Day 2: Education
Who are we educating (e.g. all students for sustainable citizenship vs. training of students with specific professional reasons, or programmes open to all citizens for life long learning)? We considered the role of experts and peers in such learning.

And through two case studies (Malaysia, Lux.) we were provided two comprehensive studies for how to do this work.
WG 3: Key Findings

• Transformative research projects were abundant in the case studies and deemed as successful for both sustainability goals and optimal learning platforms.

• Relationships between universities and stakeholders are important to develop, especially as two way street.

• Although WG3 found connecting research, practice, and education important, frank discussions revealed that the larger and more research focused universities were more siloed and difficult to change given that conventional metrics do not apply (difficult to get grants, work does not help traditional rankings) We discussed administrative support that could facilitate faculty/staff change but noted significant obstacles to this work that we may need support to influence.
WG 3: Goals for 2014

• Campus goals/WG 3 goals: We will develop case studies for publication in a special journal issue in the course of the next nine months.

• Reporting goals: We aimed to discuss the development of new metrics/indicators but we ran out of time in the meeting – but the co-chairs offer some first ideas for further deliberation at another occasion.
Indicators for sustainable universities

Indicators to consider for assessing organisational commitment:

# of dedicated head count to foster sustainable development in the organisation

Regular (annual or biennial) reporting, involving targets and monitoring?

-Learning opportunities: # degree programmes dedicated to sustainable development (judged by title and/or focus on problem-solving) – specialist education

Are there generally accessible course options on sustainable development?

Are there general education requirements relating to sustainable development?
Metrics for interdisciplinarity

Definition of indicators: multidisciplinarity in education – allowing students to take diverse courses each of which is rooted in a specific discipline - and ‘interdisciplinarity’ in education, where students are assessed on the development of the capacity to actively draw on insights from several disciplines to develop more effective problem-solving skills within a course, or within a degree programme.
Scope of indicators:

**Measures for multidisciplinarity in education:**
Input: Can students take courses that are not formally associated with their degree programme but that count towards their degree?
Input: Count the # of courses open to all students.
Output: # of graduands with at least 10% of their credits from courses that are not an integral part of their degree programme.

**Input measure for interdisciplinarity in education:**
‘# of ‘Open Courses’ or degree programmes actively assessing the students’ capacity to draw on at least two disciplines for problem-solving’.

**Measures for ‘interdisciplinarity’ in research:**
input measure for organizational commitment to interdisciplinarity in research can be deduced from counting the # of interdisciplinary centres or other ‘organisational structures’ featuring on the organigram.
An output measure could be the number of research projects to which natural and social scientists contribute (this is the most ambitious type of interdisciplinary endeavour).