Discussing Criteria for Assessing Integration of Sustainable Development into Teaching at Tertiary Education Institutions

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The ESD Team at the University of Bern...

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Mainstreaming requires supportive assessment

ESD goals of the University of Bern:

1. **Integrate SD into teaching**: ensure that no student leaves the university without having heard about sustainable development in relation to his or her discipline (*minimal goal!*) and avoid delegation of the teaching task.
   In addition: offer a number of other possibilities (SD degrees at all levels, full courses with SD focus in many disciplines, professional development, etc.)

2. **Improve teaching** so that integration of SD is possible. Indeed, SD is not just “a topic”: it requires competences!

Purpose of assessment to support these goals:

1. **Self-evaluation**: am I on the right track as a teacher?

2. **Support progress in department/faculty**: What criteria do I need to fulfill to apply for funding for a pilot course? What steps are needed to integrate sustainable development in our curricula? What innovative potential do these steps contain for our discipline?

3. **Increase recognition of ESD efforts within the university and beyond**
What does assessment do (ideally)?

- Systematizes quality criteria
- Legitimizes them
- Sets standards
- Provides transparency
- Acknowledges what is there

- Helps identify innovative solutions
- Encourages more of the same as well as emulation
- Encourages discussion of what sustainable development means at the university
- Encourages engagement in the process of SD and with its values

-> If embedded in a good communication strategy!
What kind of assessment do we need for ESD?

Logic:

• Principles?
  • Criteria?
    • Indicators?

• Literature shows that…
  • … need to shift from performance criteria to a focus on supporting a change process
  • … agreement exists on criteria; but indicators are extremely diverse and depend on local contexts and needs

(Rammel et al 2015; Alghamdi et al 2016)
Example of an existing reference framework

GASU (Graphical Assessment of Sustainability in University, based on Global Report Initiative, developed for corporations; Lozano 2006):

Under **criterion** termed “educational”, **9 indicators**:

- Number & percentage of courses related to sustainability concepts
- Number of students enrolled in sustainability-related courses
- Number of courses with content on SD themes
- Courses to educate the educators in SD
- Management procedures to monitor incorporation of SD themes into curr.
- List of course titles & SD theme continued
- Course structure, goals & duration
- Management structure & incorporation follow up procedures, continuous improvement methods, etc.
- Administrative support
- Number & percentage of departments & colleges including SD courses & curricula

**BUT:** we want to go to a deeper level! Identify integration at **course level**; have a basis for discussion of what integrating SD into teaching (and research) means; and be able to monitor cost effectively
### Current proposal...

#### Assessment criteria

**Extent of time available:**
How much time do students have for learning?

- Case study in a lecture (20-30 mins)
- 2-hour course in a lecture
- Whole course throughout the term
- Module
- Whole study programme

#### Evaluation

- ECTS?
- Tested by an exam?

#### Contents and pedagogy:

- **Thematic link to SD:**
  do students acquire knowledge about SD / knowledge relevant to SD?

- **Theoretical reflection on science:**
  do students learn to reflect on how to deal with the theme of SD and how their disciplines can contribute to SD?

- **Development of SD-relevant competences:**
  do students learn to contribute to SD through collective action, in their role of scientists?
Current proposal for assessing 5000 courses

<table>
<thead>
<tr>
<th>Assessment criteria</th>
<th>Implementation</th>
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**Evaluation**

- a) ECTS?
- b) Tested by an exam?

**Contents and pedagogy:**

- a) **Thematic link to SD:**
  do students acquire knowledge about SD / knowledge relevant to SD?
- b) **Theoretical reflection on science:**
  do students learn to reflect on how to deal with the theme of SD and how their disciplines can contribute to SD?
- c) **Development of SD-relevant competences:**
  do students learn to contribute to SD through collective action, in their role of scientists?

**Implementation**

- • Yes/no
- • Examples with boxes that can be checked
- • Space for entering additional examples
- **Goal:** tap on your experience of ESD
  - produce a list of criteria for assessing integration of SD into teaching
  - discuss their monitoring power

- **Why the GIVE© Method?**
  - Very valuable and diverse experience in this room!
  - Increase validity of criteria by discussing them!

- **Rules of the game:**
  1. We offer questions
  2. You provide the content and prioritize the points to be discussed

Source: [www.spes.co.at](http://www.spes.co.at)
Five questions

Overall question:

How can we assess integration of sustainable development into tertiary teaching?

1. **What** exactly should be assessed:

2. What **external reference framework(s)** should be taken into account?

3. What are crucial assessment **criteria** based on your experience and knowledge?

4. Based on your experience, what are **barriers** (*use – sign*) to assessing integration of SD into teaching, what are **windows of opportunity** (*use + sign*)?

5. How can assessment be implemented with the aim of **empowering** teachers?
Criteria to apply for funds for a 1-semester, 2-hour elective course integrating SD in a discipline

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<tr>
<td>• Establish thematic link with discipline</td>
<td>• Reflect on understanding of science within own discipline</td>
<td>• Know how to deal with incomplete knowledge and uncertainties in complex systems</td>
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<td>• Establish a concrete and systematic relation to at least 1 model of SD (3 pillars, SDGs, doughnut...)</td>
<td>• Discuss values in own discipline</td>
<td>• Think in a networked and future-oriented way</td>
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<td>• Define societal and environmental problems integratively and develop integrated ideas for solutions and data collection</td>
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<td>• Cooperate in scientific teams, manage conflicts</td>
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A number of further possible (not obligatory) criteria for each category...