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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*

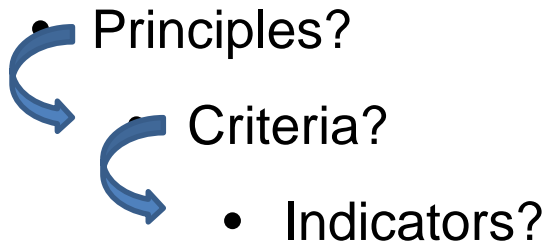
What does assessment do (ideally)?

- ✓ 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:



- 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?

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?

Current proposal for assessing 5000 courses

Assessment criteria	Implementation
<p>Extent of time available: How much time do students have for learning?</p>	<ul style="list-style-type: none"> • Case study in a lecture (20-30 mins) • 2-hour course in a lecture • Whole course throughout the term • Module • Whole study programme • ...
<p>Evaluation a) ECTS? b) Tested by an exam?</p>	<ul style="list-style-type: none"> • Yes/no
<p>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?</p>	<ul style="list-style-type: none"> • Yes/no • Examples with boxes that can be checked • Space for entering additional examples

Group InVention Method (GIVE©) by SPES

- **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

Five questions

Overall question:

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

1. **What** exactly should be assessed:
duration? contents? didactics? learning outcomes? impact?...
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

Thematic link to SD	Theoretical reflection on science	Development of SD-relevant competences
<ul style="list-style-type: none">• Establish thematic link with discipline• Establish a concrete and systematic relation to at least 1 model of SD (3 pillars, SDGs, doughnut...)	<ul style="list-style-type: none">• Reflect on understanding of science within own discipline• Discuss values in own discipline	<ul style="list-style-type: none">• Know how to deal with incomplete knowledge and uncertainties in complex systems• Think in a networked and future-oriented way• Define societal and environmental problems integratively and develop integrated ideas for solutions and data collection• Cooperate in scientific teams, manage conflicts

A number of further possible (not obligatory) criteria for each category...