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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

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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*

-> *<u>If embedded in a good communication strategy!</u>*

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?

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
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 a) ECTS? b) Tested by an exam?	• Yes/no
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?	• 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

Source: 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:
   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

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Thematic link to SD	Theoretical reflection on science	Development of SD-relevant competences
• Establish thematic link with discipline • Establish a concrete and systematic relation to at least 1 model of SD (3 pillars, SDGs, doughnut…)	• Reflect on understanding of science within own discipline • Discuss values in own discipline	• 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…