Sustainability

in Teaching

-course

Session 5

6.5.2022
12:15-15:00

Timeline of the course (changes possible)

Reading task for respective week	Mon	Tue	Wed	Thu	Fri
Tejedor et al Video	11.-15.4. Discussion with student (book time slot in time)				
	18.4.	19.4. Homework from session 3	20.4.	21.4.	22.4. Session 4: Teaching methods
Reading task Shephard & Egan 2018	25.4.	26.4.	27.4.	28.4.	29.4.
	2.5.	3.5. SULITEST Homework from session 4	4.5.	5.5.	6.5. Session 5: Teaching and assessment methods Values in teaching
Reading task Moser 2015	9.5.	10.5.	11.5.	12.5.	13.5.
	16.5.	17.5. Homework from session 5	18.5.	19.5.	20.5. Session 6: Dealing with emotions and anxiety Closing
	Deadline of final reflection: **3.6.2022**				

COURSE SESSION, at 12-15 EET

READING TASKS (due before contact sessions)

Home work assignment DLs

OTHER ASSIGNMENT

Using the course assignments for research purposes

With your permission, we would like to use the course assignments as research data.

The aim of the research project is to develop knowledge on how to support for educators in integrating sustainability into their teaching.

The results of the project will be utilised in the development work of sustainability integration within Aalto University and published in peer-reviewed journals.

In practice:

- We have now opened a Webropol form asking for your informed consent for data collection (link in MC).

- In the consent form you can either give the consent or answer that you do not give the consent.

- Your decision on the consent does not affect your course attainment in any way.

- You can fill in the consent form until Fri 3 June.

Outline, objectives

➢ Sharing and co-developing teaching methods in groups

• *Break*

➢ Discussion on sustainability toolbox

➢ Introduction to values in sustainability

• *Break*

➢ Group discussion on values

Intended learning outcomes of the session

After this session you should be able to

- Design and apply learning activities and assessment methods for sustainability learning
- Reflect on the role of values in teaching

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Sulitest

- ➢ **What are your thoughts on the usefulness of this tool?**

- ➢ **In what kind of situations would you consider using it?**

- *Write your spontaneous comments in the chat – 3 min!*

Your work on teaching methods

Some general observations

- Planning a learning activity in detail → better comments from peers

- Pre-assignments (pre-reading, video, quiz etc.)

- Motivation of students, "fitting examples",

- SDGs as useful framework to introduce sustainability

    → Are intro lectures always necessary? Check alignment with other courses! Pre-assignments useful for evaluation or securing of baseline knowledge

    → (Pre-) selection of specific SDGs?

- Charting possible readings or other material from your field

Group discussion

General guidelines:

Breakout room: 30 min

- Group 3 persons
- Discuss each method for 10 minutes.
- Make additions /specifications to your method (instructions) in FLINGA .

Topic of discussion:

Share the teaching method you described in your assignment. As a group, discuss and give feedback.

- What can be the learning outcomes of the activity? (E.g. which sustainability competencies?)
- How could the method or its instructions be further developed?

Flinga: https://edu.flinga.fi/s/E2NAPSN

Break

10 min

Sustainability in teaching toolbox

- There is a recognized need to share experiences and co-create a toolbox for sustainability integration for Aalto teachers.

- Toolbox for teachers (version 1.0) has already been published. To further develop it, we would like to receive your feedback and participation.

- **Feedback on the content**: give feedback to us regarding the page. As a teacher, what is most relevant for you? What would be helpful for you and your colleagues?

- **Would you be happy to share your ideas for sustainability integration** for the whole Aalto teacher community? We may ask some of you to share your methods for others as well.

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- Feedback and contact: Noora Jaakkola noora.Jaakkola@aalto.fi (or Meeri and Paula)
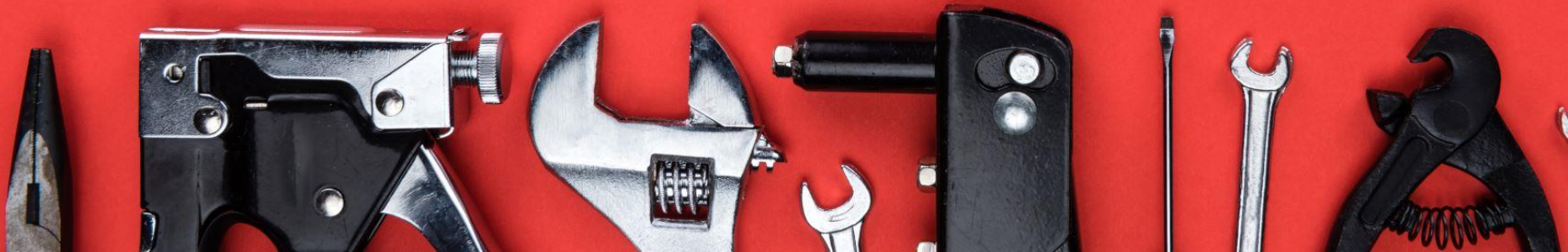
Assessment in sustainability education

What level is being assessed?

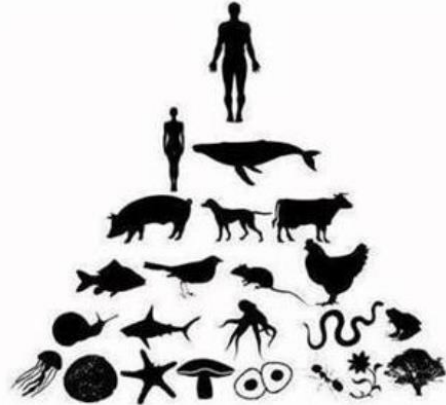- Level: specific task, course, programme, graduate performance / capabilities

What is being assessed?

- Competencies / skills

- Knowledge & understanding

- Perceptions & attitudes & behavior

Who does the assessment?

- **Student:** reflective writings, scaled self-assessment, focus groups/interviews

- **Teacher:** regular course work, scenario / case test

- **Test-based (Pre-defined set of criteria):** conventional exam (multiple choice answers), performance observation, concept mapping

BUT: Can everything be assessed? (e.g. motivation, empowerment and values)?

Redman 2020; see also Cébrian et al. 2019

All actions are influenced by **worldviews and values**

World as a resource
"Anthropocentric"

Interconnected

"Ecocentric"

Regenerative

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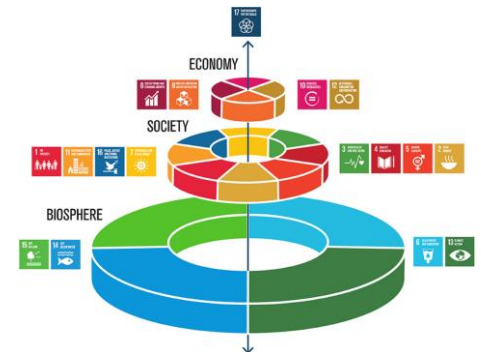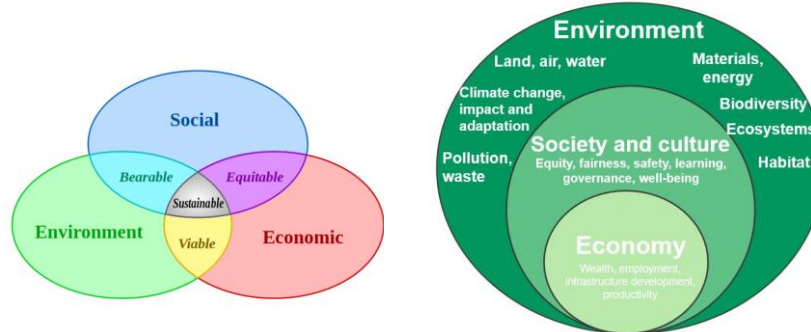
What is a necessity?

Sustainability dilemmas

Energy production

    health vs. climate vs. biodiversity vs. security

Forestry / bioproducts

    biodiversity vs. climate

Sustainable economy
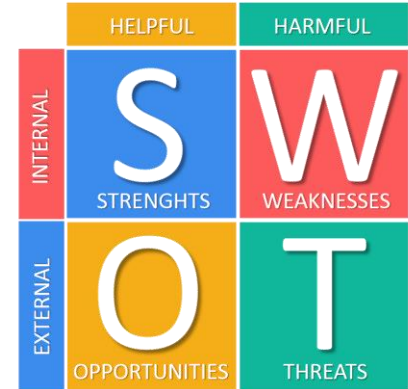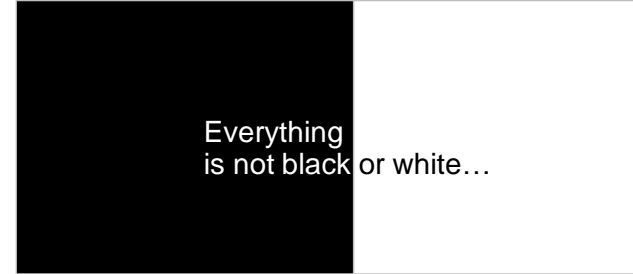
    growth (decoupling) vs. degrowth

Land use

    recreational space vs. (critical) infrastructure
    indigenous land rights vs. critical minerals mining

Digitalization

    affordability of services vs. accessibility
    marginalized groups vs. energy consumption

Everything
is not black or white…

HELPFUL   HARMFUL

INTERNAL

S   W
STRENGHTS   WEAKNESSES

EXTERNAL

O   T
OPPORTUNITIES   THREATS

Individual reflection

What sustainability (/ethical) dilemmas have you identified

- in your field

- in the subject field of your teaching

- **Write down in Flinga:** https://edu.flinga.fi/s/EJWSGJA

- **Time: 5 min**

Balancing with values in education

Values education as professional socialization

- Explicit and implicit
- Field specific
- Not fixed but on the move, may include contradictions
- Educator's values

←→

Values education as subjectification

- Liberal democracies, freedom
- Critical thinking and reflection key in values-education

Inspired by Biesta 2013;
Shephard & Egan 2018

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"*…encouraging students to develop a disposition to explore their world critically is a form of values-education; and that this may be the only truly legitimate form of values-education open to higher education.*" (Shephard et Egan 2018)

Pedagogies related to values-education

Characteristics of pedagogies related to values

- Students as active participants
- Time for reflection

Examples

- Experiential learning
- Sustainability assessment methods
- Visioning methods
- Participatory normative methods (e.g. negotiation methods)

Wiek et al. 2016;
Shephard & Egan 2018

Examples of values-related learning outcomes

Student is able to:

- *Explore their own values, preferences and norms*
- *Identify value differences and trade-offs*
- *Construct visions that draw upon sustainability values and principles*
- *Assess the sustainability impact of one's job activities and envision a sustainable future for one's profession*

(Wiek et al. 2016)

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Break

Group discussion

General guidelines:

Breakout room: 15 min

- 15 min group discussion
- Designated groups
- Room chair: first one in alphabetics (father's first name)

Topic of discussion:

Based on the sustainability dilemmas identified earlier:

- What values do you recognize "hidden" or intentionally taught in your field and in your own teaching?

In Flinga (last 10 min)

- What challenges and/or good practices can you identify and/or share in addressing values?

Next session…

- Assignment 5: (dl Tue 17.5.): Reflection on teaching methods

- Pondering with colleague or individually (prepare to discuss): Questions on emotions in teaching (see MyCourses)

- Reading task: Moser 2015

Our final session on Fri 20.5.2022!

Literature

Biesta, G. (2016) *The beautiful risk of education* . London: Routledge.

Cebrián et al. (2019) Assessment of sustainability competencies: a literature review and future pathways for ESD research and practice. The Central European Review of Economics and Management
doi: http://dx.doi.org/10.29015/cerem.664

Redman et al (2020) Current practice of assessing students' sustainability competencies: a review of tools. *Sustain Sci* **16,** 117–135 (2021).
https://doi.org/10.1007/s11625-020-00855-1

Rieckmann, M. (2018). Learning to transform the world: key competencies in ESD

Schinkel, A. (2009) Justifying Compulsory Environmental Education in Liberal Democracies. Journal of Philosophy of Education Vol. 43, No 4, 2009.

Shephard, K., Rieckmann, M. & Barth, M. (2019) Seeking sustainability competence and capability in the ESD and HESD literature: an international philosophical hermeneutic analysis, Environmental Education Research, 25:4, 532-547, DOI: 10.1080/13504622.2018.1490947 https://doi.org/10.1080/13504622.2018.1490947

Shephard, K. & Egan, T. (2018) Higher Education for Professional and Civic Values: A critical reflection and analysis. Sustainability 10, 4442.

Wiek A, Bernstein M, Foley R, Cohen M, Forrest N, Kuzdas C, Kay B, Withycombe Keeler L (2016) Operationalising competencies in higher education for sustainable development. In: Barth M, Michelsen G, Rieckmann M, Thomas I (eds) 2016 Handbook of higher education for sustainable development. Routledge, London, pp 241–260.