

# *Sustainability in Teaching -course*

Session 5



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A decorative circular graphic on the right side of the slide, composed of several colored segments in shades of orange, pink, yellow, and blue, arranged in a semi-circle.

11.11.2022  
12:15-15:00

# 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

# 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!*

# Groups

*Group 1: Eero, Irina, Janet, Eeva B.*

*Group 2: Susan, Henrikki, Jacky*

*Group 3: Tamara, Janika, Julia*

*Group 4: Karolina, Eeva R., Jouni*

*Group 5: Ville, Henrik, Marja,*

*Oguz, Viktor, Sam*



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Seth Schwiet / Unsplash

# 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/ED2U4H3>

# *Break*

10 min



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# 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.
- [Sustainability in Teaching | Aalto University](#)
- Feedback and contact: Paula Schönach [paula.schonach@aalto.fi](mailto:paula.schonach@aalto.fi) (or Meeri)



# Assessment in sustainability education

## What level is being assessed?

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

## What is being assessed?

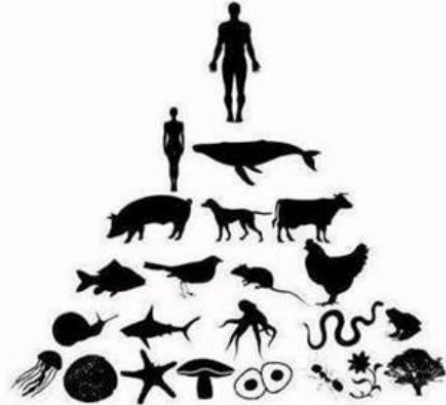
- Competencies / skills
- Knowledge & understanding
- Perceptions & attitudes & behavior

## 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



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



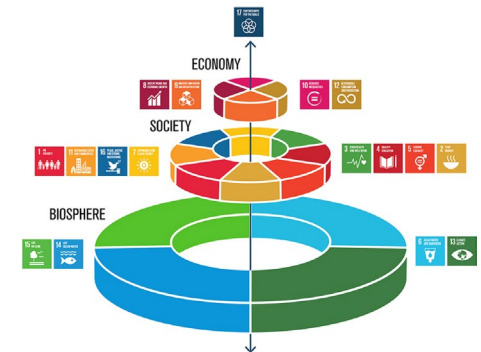
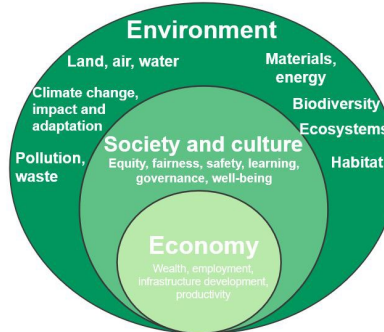
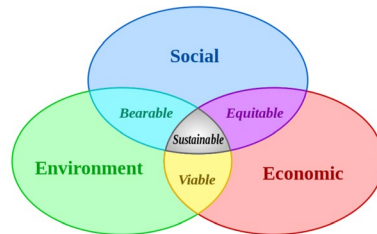
World as a resource  
“Anthropocentric”



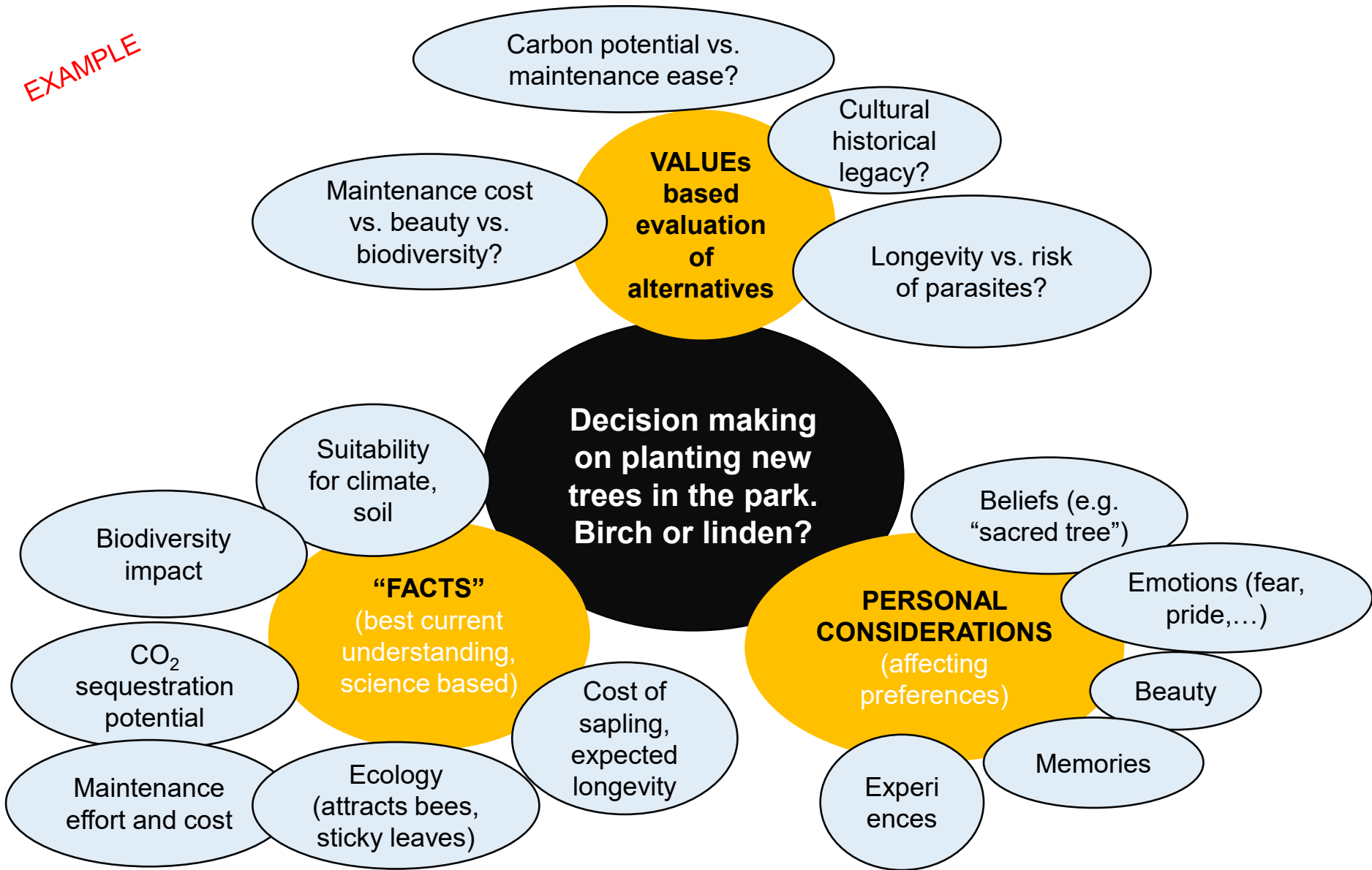
Interconnected  
“Ecocentric”



Regenerative



EXAMPLE



# Sustainability dilemmas

## Energy production

health vs. climate vs. biodiversity vs. security

## Forestry / bioproducts

biodiversity vs. climate

## Sustainable economy

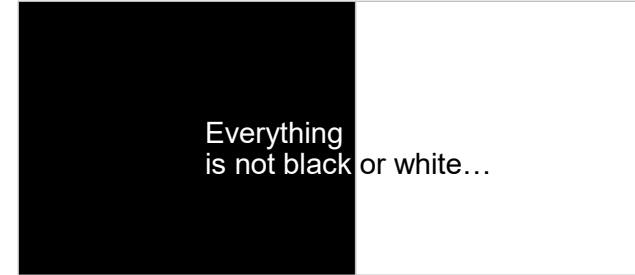
growth (decoupling) vs. degrowth

## 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



# 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/EZD88FD>
- **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
- Empowering own disposition through critical thinking and reflection

***“...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: action, reflection
- 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)

# *Break*



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# Designated group

**Group 1:** Tamara, Victor, Janet, Marja

**Group 2:** Jouni, Sam, Henrikki, Janika

**Group 3:** Karolina, Irina, Henrik, Oguz

**Group 4:** Eeva B., Susan, Julia

**Group 5:** Ville, Eeva-L. R., Jacky, Eero



# 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 (5 min):**

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

### *In Flinga (last 10 min)*

- How to address values in teaching?  
Share your thoughts and/or good practices.

# Timeline of the course *(changes possible)*

Reading task for respective week	Mon	Tue	Wed	Thu	Fri
Tejedor et al	17.-21.10. Discussion with student (book time slot in time)				
Video	24.10.	25.10. Homework from session 3	26.10.	27.10.	28.10. <b>Session 4:</b> Teaching methods TapRoom
Reading task Shephard & Egan 2018	31.10.	1.11.	2.11.	3.11.	4.11.
	7.11.	8.11. <b>SULITEST</b> Homework from session 4	9.11.	10.11.	11.11. <b>Session 5:</b> Teaching and assessment methods Values in teaching
Reading task Moser 2015	14.11.	15.11.	16.11.	17.11.	18.11.
	21.11.	22.11. Homework from session 5	23.11.	24.11.	25.11. <b>Session 6:</b> Dealing with emotions and anxiety Closing
Deadline of final reflection: 9.12.					

**COURSE SESSION,**  
at 12-15  
EET

**READING TASKS**  
(due before contact sessions)

**Home work assignment DLs**

**OTHER ASSIGNMENT**

# Next session...

- Assignment 5: (dl Tue 22.11.): Reflection on teaching methods
- Self-study on sustainability integration in courses (tool piloting!)
- Pondering with colleague or individually (prepare to discuss):  
Questions on emotions in teaching (see MyCourses)
- Reading task: Moser 2015

**Our final session on Fri 25.11.2022 on campus! U119 DELOITTE,  
Otakaari 1**

# Literature

Biesta, G. (2014) *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. & 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.