Sustainability in Teaching -course

Session 3

14.10.2022
12.15-15

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Outline, objectives

- Reflections on last weeks session
- Sustainable Development Goals (SDGs) in different contexts

  Break

- SDGs in HEIs and teaching
- *Break*
- Hands-on work:
- SDGs in your field / teaching

Intended learning outcomes of the session

After this session you should be able to

- Reflect on how SDGs are used in business and HEIs
- relate the SDGs to your own specific subject field.

Designated group (note changes)

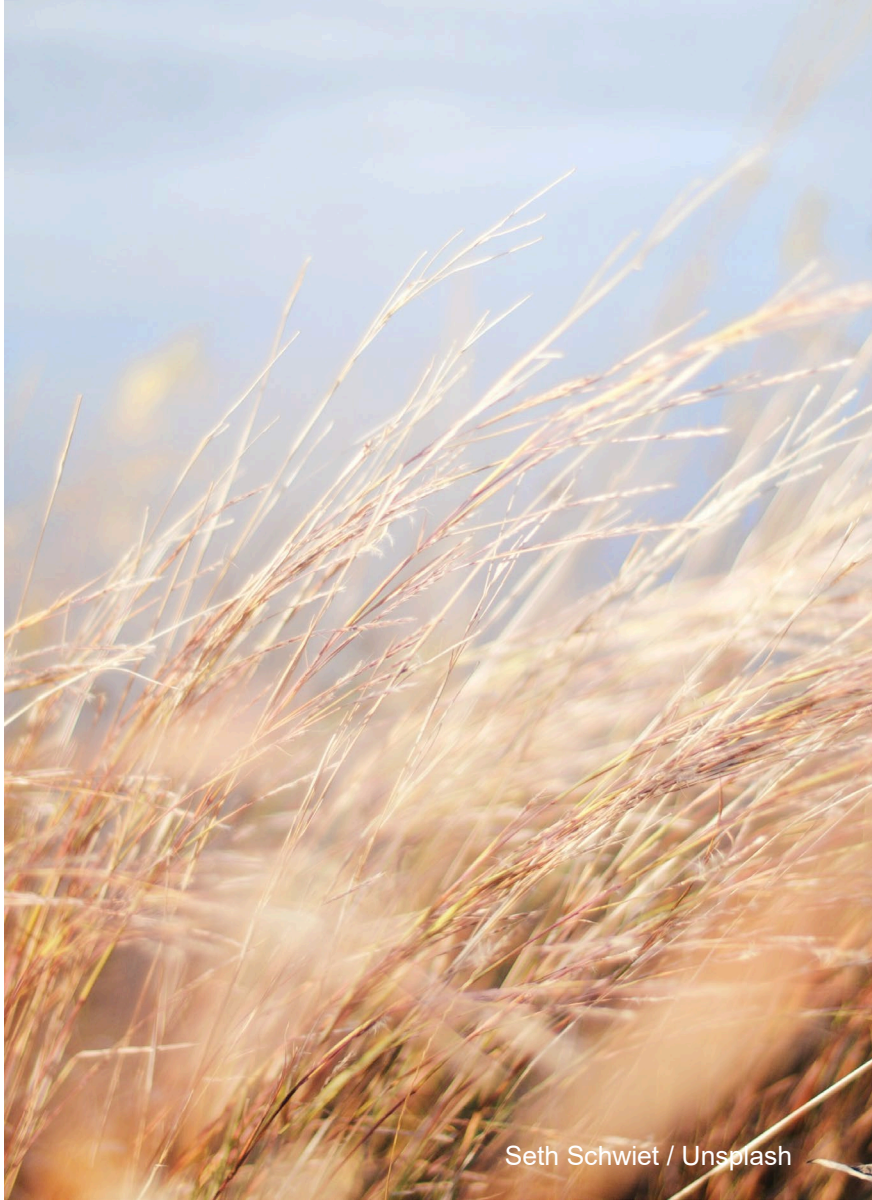
Group 1: Tamara, Victor, Janet, Marja

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



Your reflections

General guidelines:

Breakout room: 10 min

- Field specific groups
- Group chair: Longest hair

Topic of discussion:

How did the peer discussion go?

What new insights did you gain from the peer discussion?

Sustainable development goals

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Global roadmap to sustainability: one possible framework

- UN Agenda 2030 for Sustainable Development (in force since 2016)
- Summary of complex set of environmental, socio-political and technological problems and the respective solutions
- Political compromise
- Holistic, thematic

→ **17 goals**

→ **169 targets**

Global roadmap to sustainability: one possible framework

Stockholm Recilience Centre
https://www.stockholmresilience.org/research/research-news/2016-06-14-how-food-connects-all-the-sdgs.html

- UN Agenda 2030 for Sustainable Development (in force since 2016)
- Summary of complex set of environmental, socio-political and technological problems and the respective solutions
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- Holistic, thematic

→ **17 goals**

→ **169 targets**

SDGs in business

Jussi Impiö

Head of sustainable solutions

Aalto University

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Break

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Warm-up

- **If you could choose one Sustainable development goal to be reached with a silver bullet, which one would you choose?**

Answer and justify your choice in the chat!

Hold your answer until told to press “enter”

Complexity of sustainability targets

- Understanding linkages and interactions
- Taking advantage of synergies
- Understanding and addressing trade-offs
- Accepting complexity
- Dealing with conflicting views (values!)

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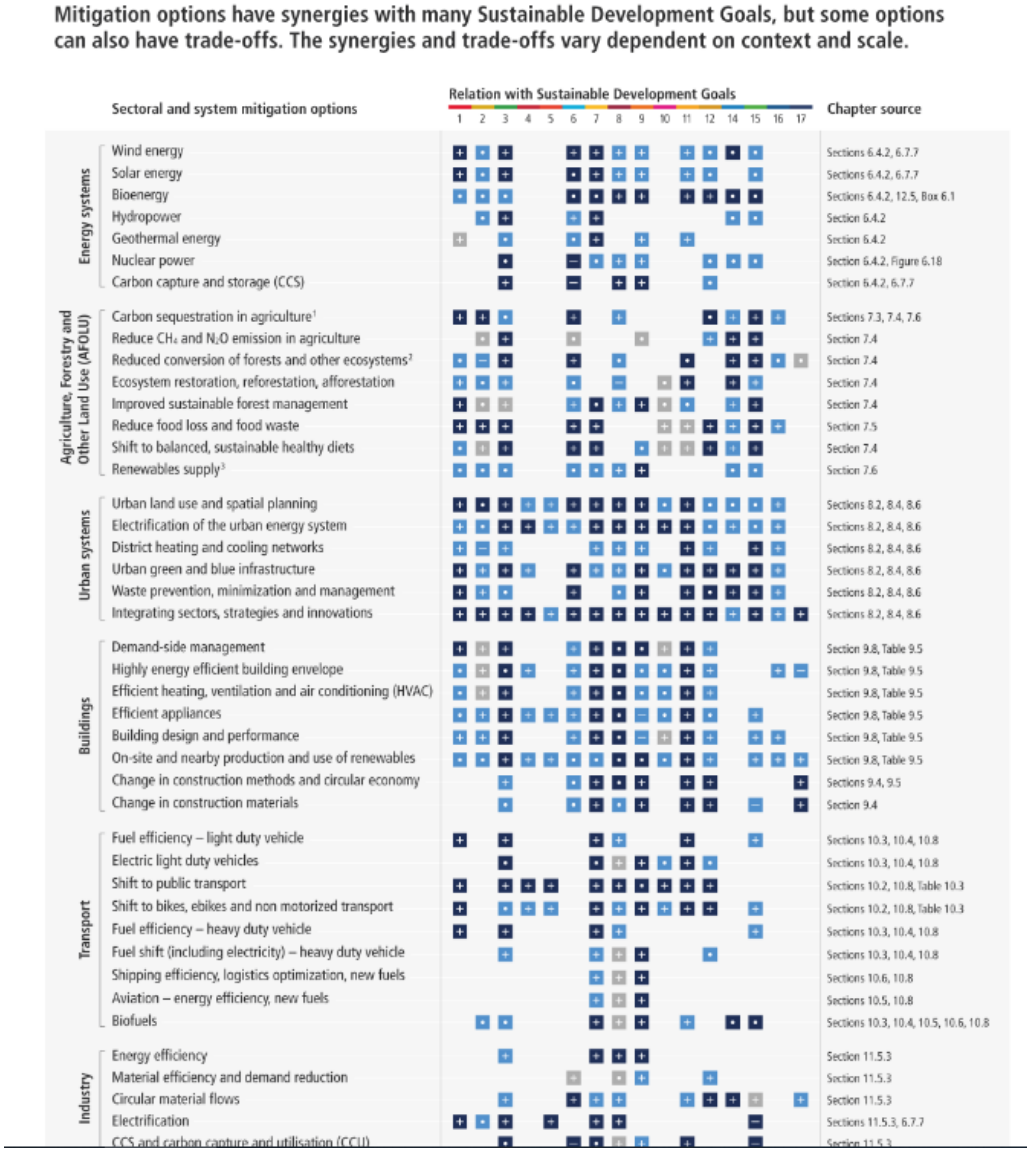
GSDR 2019, p. 6

Example 2:

- Climate action and SDGs: synergies and trade-offs
- Mitigation options assessed against SDG

IPCC WG III report (mitigation), p. 54



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Critique of the SDG-framework

E.g.

- Non-binding nature, collective responsibility
- Growth-paradigm
- Lack of financial means, prioritization of means, cost-efficiency
- Contested definitions of e.g. poverty, development, clean energy
- Measure and follow-up

E.g. Bali Swain (2017)

Measuring progress (towards goals)

Indicator (sets)

- Knowledge tool at different levels
- Monitoring and assessment instrument
- Policy tool
- Simplification of complex system
- Communicative function

Ideally

- Specific, measurable, accurate, relevant, timely (SMART)

What is the real societal influence of indicators?

Risks
- Over-use
- Non-use
- Mis-use

(Lyytimäki et al 2021)

SDGs in higher education

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The SDG Accord

The University and College Sector's Collective Response to the Global Goals

SDG Accord signatories assert that "as leaders or individual practitioners, academics, students or researchers, we will [among others]:

Align all major efforts with the Sustainable Development Goals, targets and indicators, including through our education, research, leadership, operational and engagement activities"

SDGs offer a broad and globally accepted definition for a sustainable university and offers universities framework to show their impact.

Aalto University is committed to the SDG Accord since 2018.

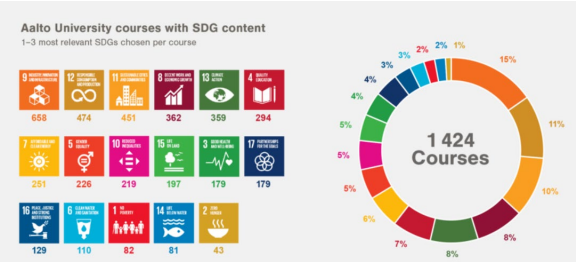
SDGs in higher education

Existing
- courses
- programs
- research projects /outputs
- activities

X

- Retrospective
- Reporting
- Crude focus areas
- Methodological challenges

? ”SDG-wash”



Aalto sustainability report 2019

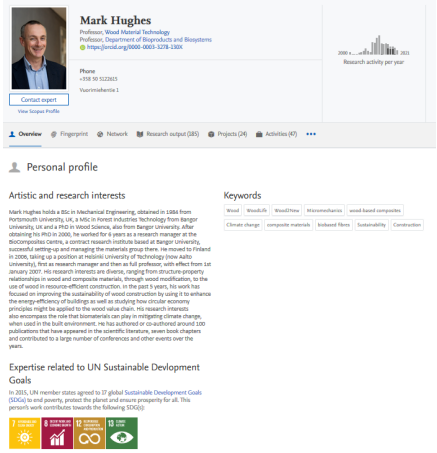
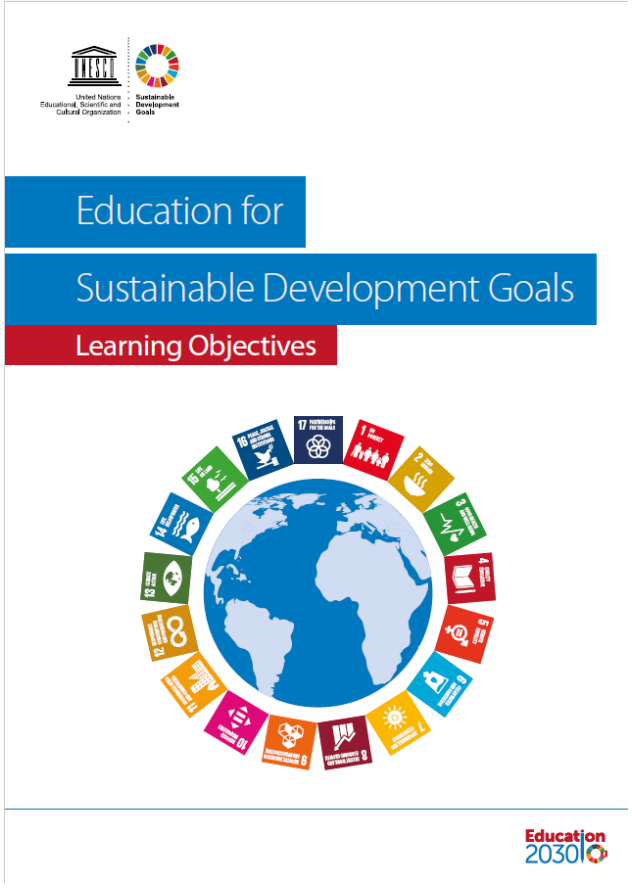


Fig. 2.1 SDG mapping of the selected university initiatives

Korhonen et al (2019)

SDG-approach to sustainability integration

- SDGs as a tool to connect course content and sustainability thematically
- Focus on 169 sub-targets in finding relevant and meaningful connection
- SDGs can be used to facilitate the learning of sustainability competencies
- Learning objectives (cognitive, socio-emotional, behavioural) and pedagogical approaches



https://unesdoc.unesco.org/ark:/48223/pf0000247444

SDG labels in Aalto courses

The aim of the SDG labels in course descriptions is

- to make visible the educational offering Aalto University has in the field of sustainability.
- to help students to find sustainability relevant courses within and beyond their own programmes.

The appropriate SDG tags help students to find courses that address sustainability challenges and solutions.

! To tag a certain SDG, the topic should be also visible in the course description (Sustainable development is core content or part of learning outcomes of the course)

How to add SDG tags to a course description?

1. **Please familiarise yourself with the Sustainable Development Goals and the targets under them** before adding any SDG tags to course descriptions.
2. **Tag your course as sustainability-related** if its learning outcomes or key contents address sustainability or the SDGs.
3. **Select the sustainability theme that best describes your course.** Select one or several ***SDG tags*** or ***the wheel icon*** denoting a comprehensive approach to sustainability if the course provides a comprehensive approach that goes beyond individual SDGs. Please ensure that the SDG tags you select are visible in the course description!

→ *It is important that the SDG tags correspond to the actual course contents – after all, not all courses address sustainability.* ***If the course does not address sustainability or only does so in passing, select 'no'.***

SDG tags

The wheel icon
(Comprehensive approach to sustainability)

Help and support:

- **Sustainable development goals in course descriptions | Aalto University**

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Tool tip

Select 'yes', if course's core content or one or more of the intended learning outcomes relates to sustainability, Sustainable Development Goal(s) and/or their subtarget(s). Please make sure that the sustainability relevance is explicated also in the course description.

Select 'no', if the content of your course does not relate to sustainability or sustainability is only tangentially touched upon.

Link to: Sustainable development goals in course descriptions | Aalto University

Tool tip

If the core content or part of the learning outcomes of the course relates to particular Sustainable Development Goal(s), select appropriate one(s).

If the course deals with sustainability comprehensively beyond individual SDG topics, select the wheel icon ('Comprehensive approach to sustainability').

Link to: Sustainable development goals in course descriptions | Aalto University

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? Sustainable development is core content or part of learning outcomes of the course

? Specify the approach to SDGs or to sustainable development

Does the course relate to sustainability?

Aalto University develops solutions to global sustainability challenges, which can be addressed, e.g., through the United Nations Sustainable Development Goals (SDGs) (link: https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals). Information about sustainability content of courses is collected to help students to find sustainability related courses at Aalto University.

Yes ◉ No ○

Tool tip

7 Affordable and Clean Energy
Ensure access to affordable, reliable, sustainable and modern energy for all

Select the SDG:s relevant for the course

Select the wheel icon, if the course addresses sustainability comprehensively beyond individual SDGs

Questions?

Comments?

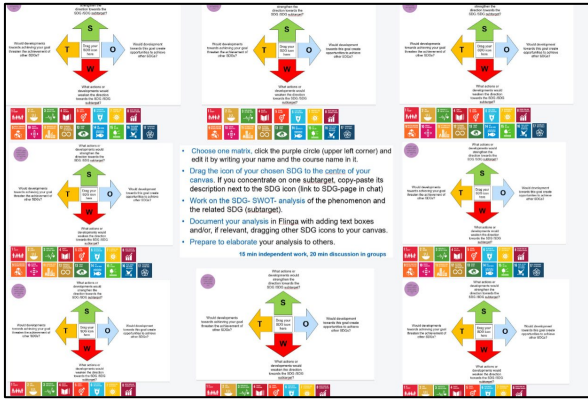
Markus Spiske / Pixabay

SDGs in analysing your field: Warm-up II

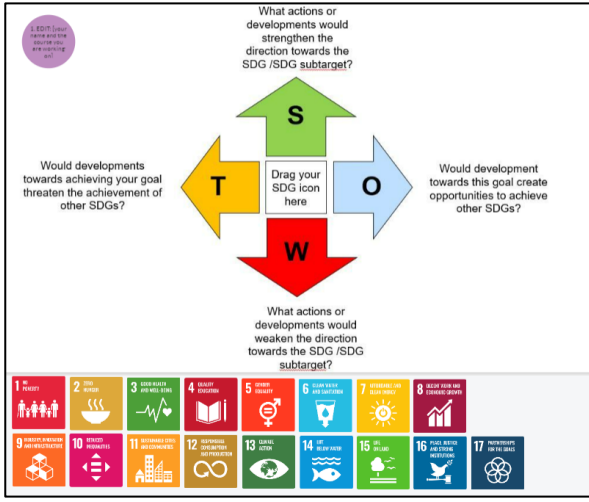
- What is the main, overarching *phenomenon* addressed in your course?
- How does it, or a (practical) application of it, relate to the SDGs (none, one or several)?
- Choose one relevant SDG for closer scrutiny
- Familiarize yourself with the respective SDG subtargets (5 min)

SDG-supported analysis of your course content and sustainability themes

We work in Flinga: three breakout rooms, three Flingas



- Go to the Flinga board assigned to you (see chat). Choose one matrix, click the purple circle (upper left corner) and edit it by writing your name in it.
- Drag the icon of your chosen SDG to the centre of your canvas. If you concentrate on one subtarget, copy-paste its description next to the SDG icon.
- Work on the SDG- SWOT- analysis of your phenomenon and the related SDG (subtarget). Document your analysis in Flinga with adding text boxes.



15 min independent work, ~15 min discussion in groups

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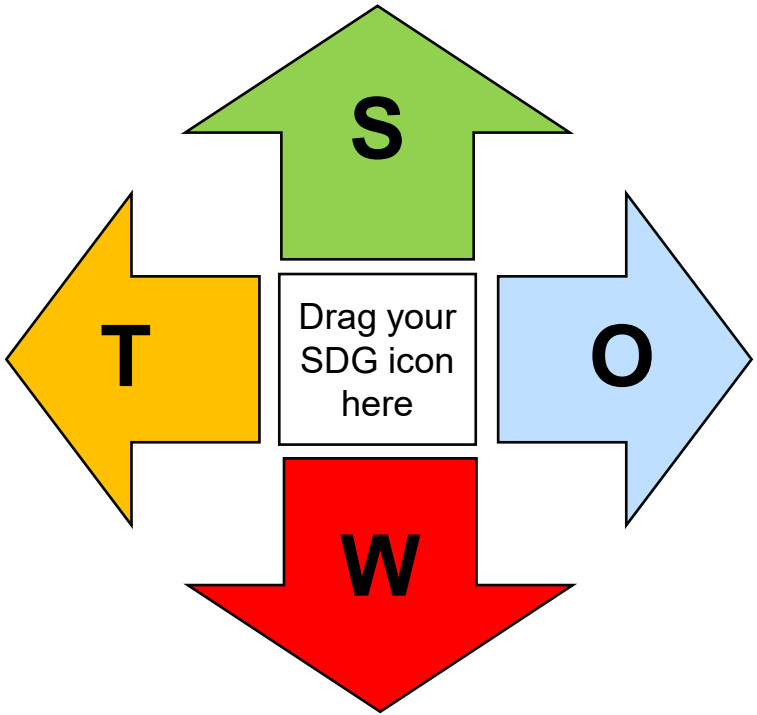
What actions or developments would strengthen the direction towards the SDG /SDG subtarget?



Would developments towards achieving your goal threaten the achievement of other SDGs?

Would development towards this goal create opportunities to achieve other SDGs?

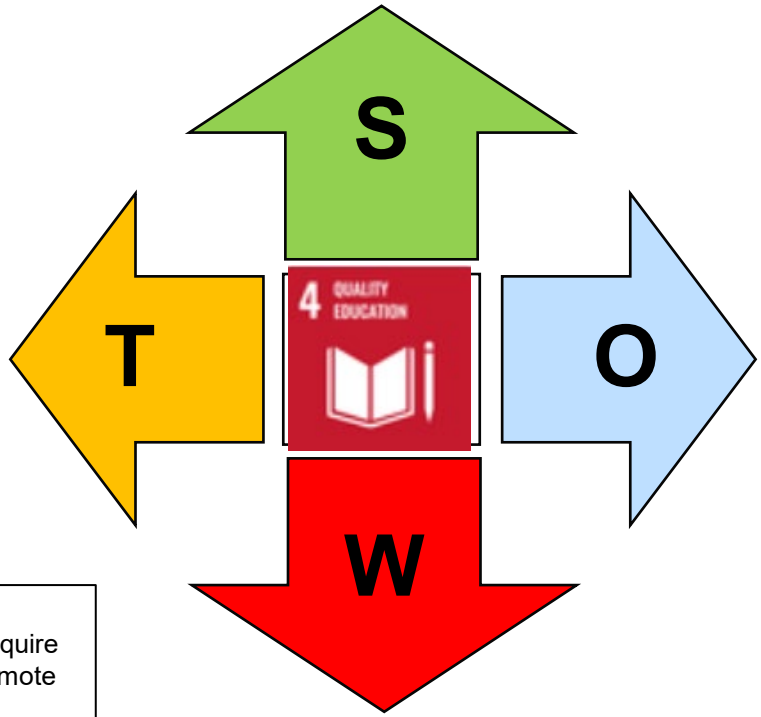
What actions or developments would weaken the direction towards the SDG /SDG subtarget?

EXAMPLE

What actions or developments would strengthen the direction towards the SDG /SDG subtarget?

- Incentives to take part in education
- Refine educational strategies to include required competences
- Integration ESD in all educational levels

Would developments towards achieving your goal threaten the achievement of other SDGs?



Would development towards this goal create opportunities to achieve other SDGs?

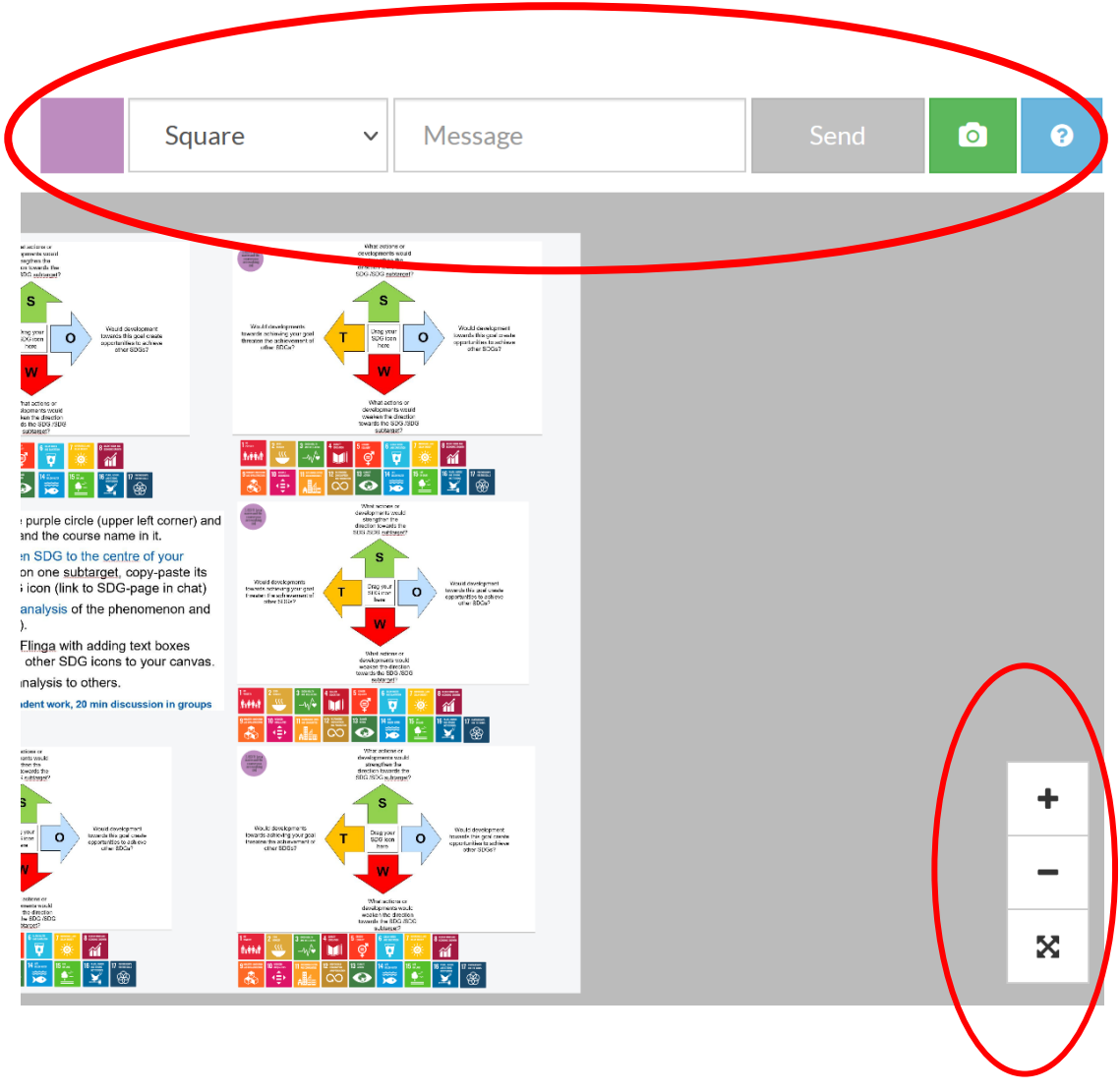
Subtargets:
4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development,…
4c By 2030, substantially increase the supply of qualified teachers…

What actions or developments would weaken the direction towards the SDG /SDG subtarget?

- Cuts in resources for education
- Decreasing motivation to participate in training

Instructions to Flinga

- Link to Flinga in the chat, when in the breakout room.
- Choose one matrix and write your name in the purple circle (in “Message”)
- You can move the SDG images and add notes in the board by sending “messages”.
- Zooming functions can be found in the bottom corner.



GROUPS

Breakout room group 1 (Marja): https://edu.flinga.fi/s/EE7NMH7

Tamara, Victor, Janet, Marja, Eeva B., Susan

Breakout room group 2 (Meeri): https://edu.flinga.fi/s/EWAEGN7

Jouni, ~~Sam,~~ Henrikki, Janika, Karolina, Irina, ~~Julia~~

Breakout room group 3 (Paula): https://edu.flinga.fi/s/EDXWCRH

Ville, Eeva-L. R., Jacky, ~~Eero~~, Henrik, ~~Oguz~~

Timeline of the course (changes possible)

Reading task for respective week	Mon	Tue	Wed	Thu	Fri
					9.9. Session 0: Course practicalities
Sustainability.now-material	**12.9.**	**13.9.**	**14.9.** Pre-assignment (questionnaire) Introduction	**15.9.**	**16.9. Session 1:** Introduction to sust. & Sust. in field specific context
Wiek et al 2011	**19.9.**	**20.9.**	**21.9.**	**22.9.**	**23.9.**
	26.9.	**27.9.** Homework from session 1	**28.9.**	**29.9.**	**30.9. Session 2:** Integration of sustainability in higher education, Competencies
SDG-articles, two options, read at least one Video	**3.10.-7.10.** Discussion with colleague (book time slot in time)				
	10.10.	**11.10.** Homework from session 2	**12.10.**	**13.10.**	**14.10. Session 3:** SDG framework

COURSE SESSION, at 12-15

READING TASKS (due before contact sessions)

Homework assignment DLs

OTHER ASSIGNMENT

Timeline of the course (changes possible)

Reading task for respective week	Mon	Tue	Wed	Thu	Fri
Tejedor et al Video	17.-21.10. Discussion with student (book time slot in time)				
	24.10.	**25.10.** Homework from session 3	**26.10.**	**27.10.**	**28.10. Session 4:** Teaching methods TapRoom
Reading task (tbc)	**31.10.**	**1.11.**	**2.11.**	**3.11.**	**4.11.**
	7.11.	**8.11.** SULITEST Homework from session 4	**9.11.**	**10.11.**	**11.11. Session 5:** Teaching and assessment methods Values in teaching
Reading task (tbc)	**14.11.**	**15.11.**	**16.11.**	**17.11.**	**18.11.**
	21.11.	**22.11.** Homework from session 5	**23.11.**	**24.11.**	**25.11. Session 6:** 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…

1. **Written homework**: (DL Tue 25.10.)
   - Getting back to your course's starting point regarding sustainability integration & reflecting on SDGs in own teaching
   - Modifying / generating ILOs *(if applicable)*
   - Looking ahead: Next week's theme is teaching methods. If you have specific questions regarding methods, please write them in your assignment.
2. **Two preparatory tasks for session 4**:
   - Reading task: Tejedor et al. 2019. Didactic Strategies to Promote Competencies in Sustainability
   - Inspirational video (10 min): Tomi Kauppinen / Encountering sustainability through using the SDGs as a topic of an assignment
3. **Book a meeting with a student**
   - Aiming to understand student perceptions on sustainability-related content and teaching in their programmes/courses
   - Prepare to share your "results" next time with others!

Literature

Bali Swain, Ranjula. (2017). A Critical Analysis of the Sustainable Development Goals. **In book: Handbook of Sustainability Science and Research (pp.341-355)** 10.1007/978-3-319-63007-6_20.

International Maritime organization (IMO) and SDGs: https://wwwcdn.imo.org/localresources/en/MediaCentre/HotTopics/Documents/IMO%20and%20the%20Sustainabe%20Development%20Goals_wheel%20graphic_2018_FINAL.pdf

IPCC AR 6 WGIII report (2022): Summary for policy makers, https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_SummaryForPolicymakers.pdf

Lyytimäki, J, Salo, H, Lepenies, R, Büttner, L, Mustajoki, J. Risks of producing and using indicators of sustainable development goals. *Sustainable Development*. 2020; 28: 1528– 1538. https://doi.org/10.1002/sd.2102

Thomas, I. 2016. Challenges for Implementation of Education for Sustainable Development in Higher Education Institutions. In Barth, M. (Ed.), Michelsen, G. (Ed.), Rieckmann, M. (Ed.), Thomas, I. (Ed.). Routledge Handbook of Higher Education for Sustainable Development. London: Routledge. 56–71.

Independent Group of Scientists appointed by the Secretary-General, Global Sustainable Development Report 2019:The Future is Now – Science for Achieving Sustainable Development, (United Nations, New York, *2019) https://sustainabledevelopment.un.org/content/documents/24797GSDR_report_2019.pdf*

United Nations Educational, Scientific and Cultural Organization, UNESCO (2017) Education for sustainable development goals: learning objectives. UNESCO, Paris, France. https ://unesdoc.unesc o.org/image s/0024/00247 4/24744 4e.pdf.