


Sustainability *in Teaching* *-course*

Session 3



Aalto-yliopisto
Aalto-universitetet
Aalto University



21.4.2023
12-15

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 groups

Group 1: Sofia, Dina, Astrid

Group 2: Henriikka, Petra, Nina

Group 3: Tom B., Tom R., Hakan, Lena

Group 4: Neha, Tiia, Weiwei, Gerhard

Group 5: Donya, Anahita, Mika, Dandan

Group 6: Karin, Christine, Susa



Your reflections

General guidelines:

Breakout room: 10 min

- Field specific groups
- Group chair: Longest hair

Topic of discussion:

How did the peer discussion go?

Did you identify shared or contradicting views, or maybe both?

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 Resilience 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)
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SDGs in business

Jussi Impiö

Head of sustainable solutions

Aalto University



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Break

10 min



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Warm-up I

- If you could choose **one SDG** to be reached with a snap of your finger, **which one would you choose?**

Answer and justify your choice in the chat!

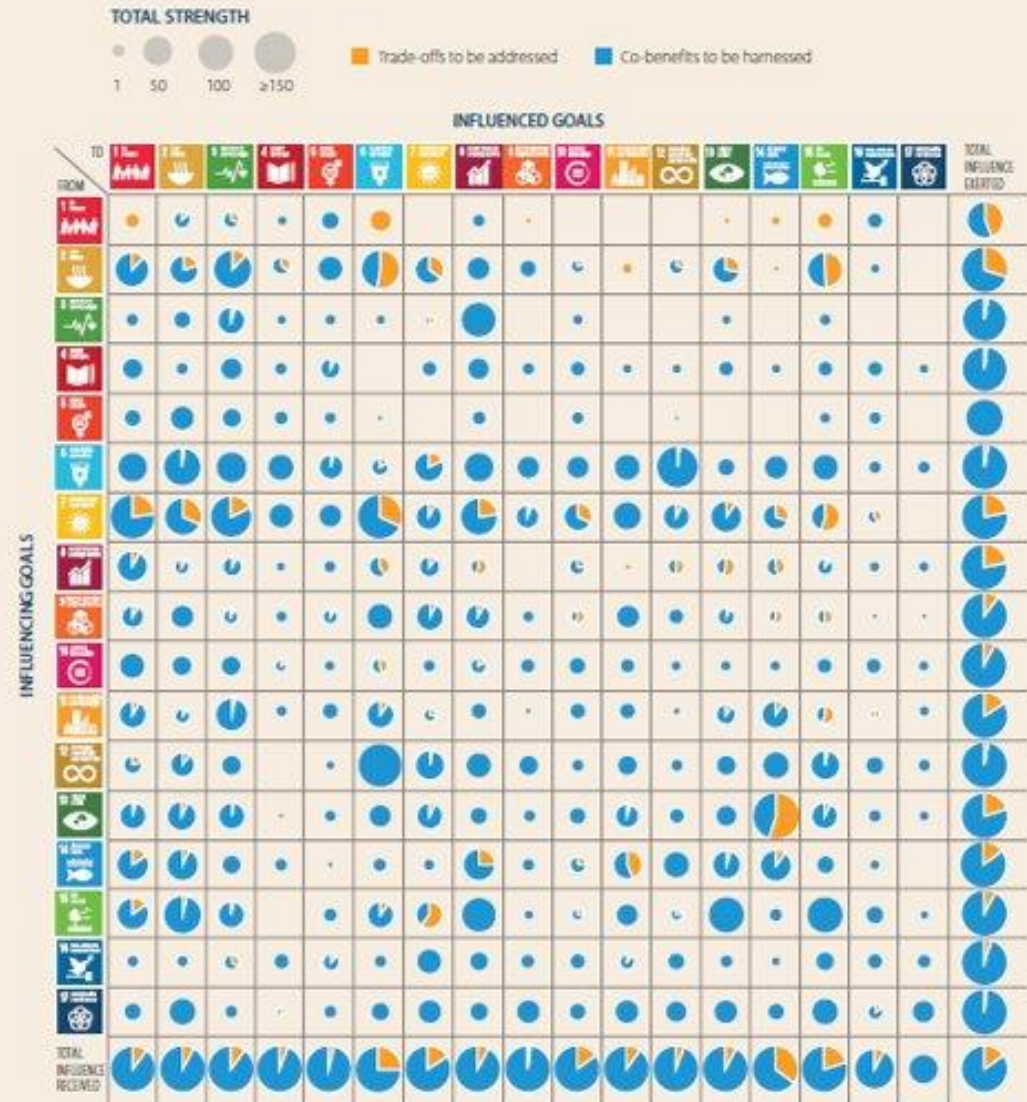
Hold your answer until told to press “enter”



Complexity of sustainability targets

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

Interactions among Sustainable Development Goals



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)

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"

Courses addressing the themes of the UN Sustainable Development Goals
1-2 SDGs per course




2 Towards Realising SDGs in the University of Helsinki



Fig. 2.1 SDG mapping of the selected university initiatives

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



The infographic is titled "Education for Sustainable Development Goals Learning Objectives". At the top left, it features the logos of the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Sustainable Development Goals (SDGs). The title is displayed in three stacked horizontal bars: "Education for" (blue), "Sustainable Development Goals" (blue), and "Learning Objectives" (red). The central graphic is a circular arrangement of the 17 SDG icons surrounding a blue globe. The icons are numbered 1 through 17 and include symbols for various goals such as Quality Education, Zero Hunger, Good Health and Well-being, Clean Water and Sanitation, Affordable and Clean Energy, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Sustainable Cities and Communities, Climate Action, Life Below Water, Life on Land, Peace, Justice and Strong Institutions, Partnerships for Sustainable Development, and Responsible Consumption and Production.

SDG labels in Aalto courses

The aim of the SDG labels in course descriptions:

- 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](#)

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](#)

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

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

? Specify the approach to SDGs or to sustainable development

Select the SDG:s relevant for the course



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



Questions?

Comments?

SDGs in analyzing your field: Warm-up II

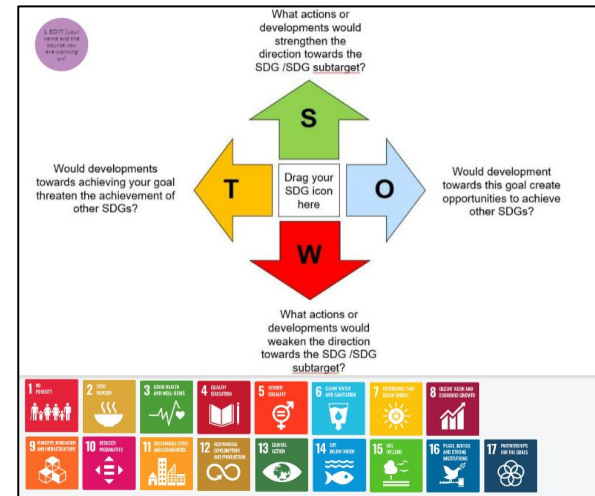
- What is the main, overarching *phenomenon* addressed in your course?
- How does it, or a (practical) application of it, relate to the SDGs (none, one or several)?
- Choose one relevant SDG for closer scrutiny
- Familiarize yourself with the respective SDG sub-targets
 - 7 minutes reading time now!



SDG-supported analysis of your course content and sustainability themes

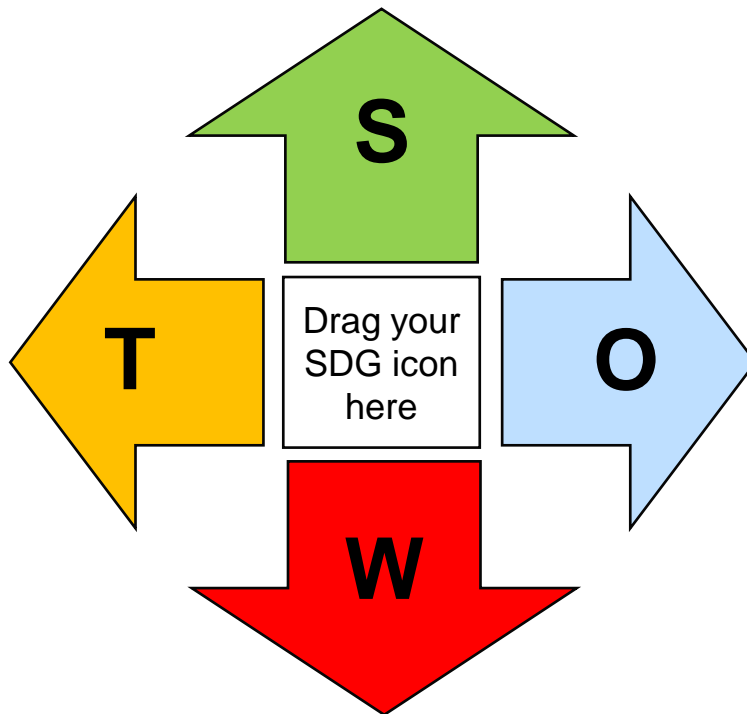
General instructions:

- We work in Flinga (you'll get the link in the BR room). 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 center of your canvas. If you concentrate on one sub-target, copy-paste its description next to the SDG icon.
- Work on the SDG- "SWOT" analysis of your phenomenon and the related SDG (sub-target). Document your analysis in Flinga with adding text boxes.



15 min independent work – 10 min BREAK - 20 min sharing in groups

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?
(trade-offs)

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

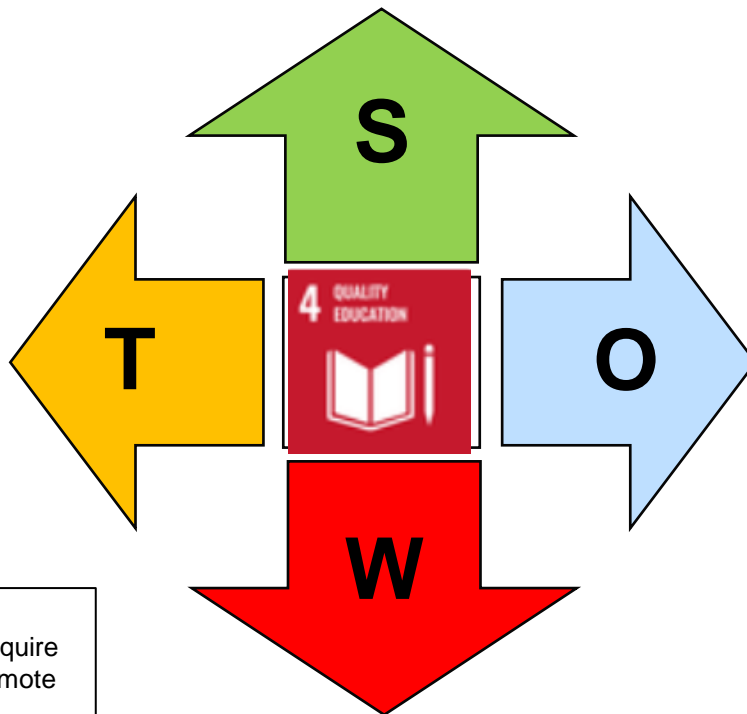
What actions or developments would weaken the direction towards the SDG /SDG subtarget?

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
- Integrate ESD in all educational levels

Would developments towards achieving your goal threaten the achievement of other SDGs? (trade-offs)



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

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

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

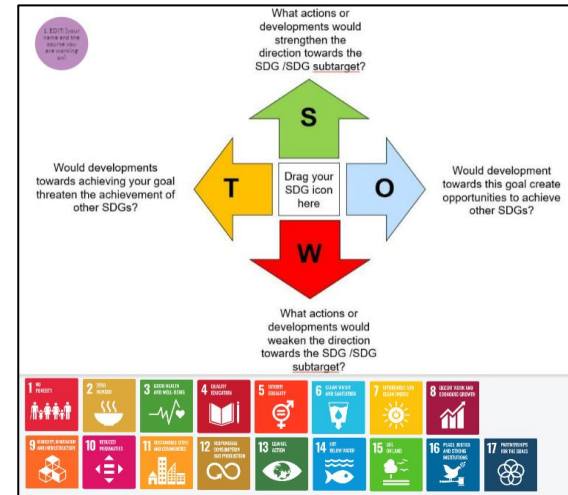
Subtargets:

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...

Now to the breakout rooms!

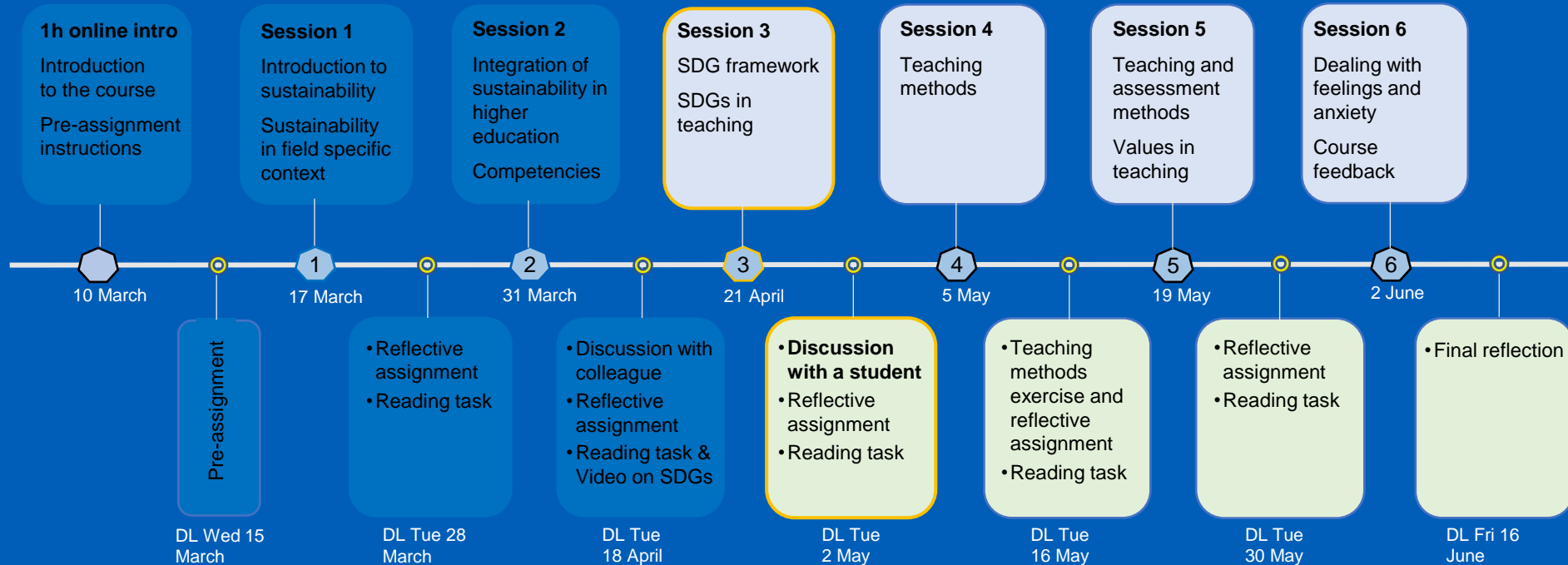
We work in Flinga: three breakout rooms, three Flinga-boards

- Go to the Flinga board. 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 center of your canvas. If you concentrate on one sub-target, copy-paste its description next to the SDG icon.
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15 min independent work – 10 min BREAK - 20 min sharing in groups

Sessions and assignments



Next session...

1. Written homework: (DL Tue 2.5.)

- 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%20Sustainable%20Development%20Goals_wheel%20graphic_2018_FINAL.pdf

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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.unesco.org/image/s/0024/002474/247444e.pdf>.