

Education for Sustainable Development: Resource Bank

Learning, Teaching &
Practicing Sustainable
Development :

Resources to help you
effectively integrate
sustainability into your
subject/s

A sustainable future will need graduates with the knowledge, skills and attitude to help make it happen.

The University of Greenwich is proud to take its sustainability responsibilities seriously. Sustainability runs through the new UoG Corporate Strategy 2030 and it will be impactful in helping deliver many of its objectives, including the Student Success strategic priority. Supporting this the new Sustainability Strategy includes Learning, Teaching and Practice for sustainability as one of the five core themes and illustrates the need to ensure our students and graduates are equipped with the knowledge and skills required to help deliver a net zero and sustainable world.

This resource bank supports our teaching staff to help them consider sustainability in their subject areas and develop teaching materials and approaches that effectively engage students in ways that embed learning and we hope provide opportunities to practice this learning.

Teaching sustainable development is one of the eight Dimensions of the [Curriculum Framework](#), agreed by Academic Council on 23rd June 2021. The Sustainable Development Dimension can be applied in ways that can deliver component parts of the other Dimensions.

Over the validation and revalidation processes courses will be required to show how they are contributing to student learning around sustainability. This document and the links it has will help academic staff better understand sustainability, understand techniques to apply it and ultimately create learning environments that can motivate students to become active in applying their knowledge to help solve the many challenges the world faces at all levels, across all areas encompassing environmental social and economic spheres.

The University of Greenwich recognizes the relevance and importance of sustainability and the need to ensure our students are able to apply sustainability considerations in their studies and that this will help inform decisions they make as graduates.

Sustainability is an issue that relates across almost every single programme. This resource will help you recognise its relevance, value and importance to our students, future employers and to the success of humanity and the protection of our planet.

We recognise how busy our academic community is and we hope that we can show you that by using sustainability it can help you and your students thrive, and potentially encourage connections between subjects, student bodies and encourage a stronger interest in academic exploration and learning.

What is Education for Sustainable Development?

One definition of Education for Sustainable Development is an "interdisciplinary learning methodology covering the integrated social, economic, and environmental aspects of formal and informal curriculum".^[1]

For [UNESCO](#), education for sustainable development involves:

integrating key sustainable development issues into teaching and learning. This may include, for example, instruction about [climate change](#), [disaster risk reduction](#), [biodiversity](#), and [poverty reduction](#) and [sustainable consumption](#). It also requires participatory teaching and learning methods that motivate and empower learners to change their behaviours and take action for sustainable development. ESD consequently promotes competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way.^{[2][3]}

[1] <https://plus.google.com/+UNESCO> (2013-05-10). "Education for Sustainable Development". *UNESCO*

[2] "[Education for Sustainable Development](#)". *UNESCO*. Retrieved 17 October 2017.

[3] Marope, P.T.M; Chakroun, B.; Holmes, K.P. (2015). [Unleashing the Potential: Transforming Technical and Vocational Education and Training \(PDF\)](#). *UNESCO*.

How to use this resource bank:

This document provides the following:

- The relationship of sustainable development teaching to UoG teaching and learning frameworks & systems
- Exploring what sustainability & sustainable development are
- Mapping existing 'Education for Sustainable Development' (ESD) Resources
- UoG internal support for teaching staff
- Supporting our ESD Community of Practice

The UoG Curriculum Framework

The [UoG Curriculum Framework](#) is the approach we use to help ensure that core outcomes are achieved through the learning we provide.

These outcomes are known as Dimensions and the content of which were developed with teams led and comprising academic staff, student representatives and specialists (such as the Sustainability Team) within the university. Work was then consulted upon across the university community.

Progress and agreement of the Curriculum Framework was done via Academic Council with sign off on 23rd June 2021.

Systems, resources and support will be put in place to help teaching staff understand and apply the objectives of the dimensions within their subject areas. Programmes are expected to integrate the curriculum frameworks and this will be reviewed via validation and revalidation of courses.

The UoG Curriculum Framework:

The 8 Dimensions:

Teaching staff are required to consider and integrate each of these Dimensions in their teaching:

- Inclusive
- Personalised
- Employment-focused and Industry-led
- International
- Student-informed
- Research and pedagogy-informed
- Supportive of wellbeing
- **For Sustainable Development**

The UoG Curriculum Framework:

What do I need to do?

The following resource bank will help you understand more about sustainability and sustainable development, review selected and key materials available to help you consider and effectively identify themes that would be of relevance and importance to your subject and identify a range of teaching methods that can help you.

Sustainability relates to almost every area of life and almost every subject area. Because life is dynamic it is useful to recognise sustainability never stands still. Challenges and opportunities, relationships and solutions, stakeholders and interests will all influence how we consider sustainability.

What is Sustainability?

What is Sustainable Development?

Sustainability is a broad term that describes managing resources without depleting them for future generations. This concept goes beyond environmental sustainability, which concerns earth's natural resources, to include economic and social sustainability, which relate to meeting people's current economic and social needs without compromising future generations.

Sustainable development describes the processes for improving long-term economic well-being and quality of life without compromising future generations' ability to meet their needs.

[Source](#)

Resources that help you explore sustainability and sustainable development:

Moodle:

- The [Sustainability Moodle Pages](#) will be updated with content contributed by the UoG ESD Working Group and our academic Community of (ESD) Practice.

Workshops:

- Starting in September 2021 a series of fortnightly lunch and learn workshops will be held to help teaching staff develop their sustainability learning, learn techniques to apply it and share their experiences. Check the Moodle site for MS Teams diary links.

Video:

- [Sustainability Illustrated](#): providing a range of free videos exploring a range of sustainability issues

Key Sustainability Frameworks:

There are a number of ways to consider sustainability. This roadmap will focus on the UN Sustainable Development Goals as these can very easily be applied within most areas of teaching.

However, if you are envisaging teaching about strategic sustainability then Donut Economics, the Framework for Strategic Sustainable Development are useful approaches to utilise.

- UN Sustainable Development Goals
- Donut Economics
- Natural Capital
- Framework for Strategic Sustainable Development
- One Planet Living
- Principles for Responsible Management Education (PRME)

UN Sustainable Development Goals (SDGs):

The Sustainable Development Goals (SDGs) or Global Goals are a collection of 17 interlinked global goals designed to be a "blueprint to achieve a better and more sustainable future for all."

These Goals with supporting targets were agreed by the UN General Assembly in 2015. They are to be achieved by 2030 by organisations and individuals all committing to act to ensure success. SDG #4: Quality Teaching is recognised as an essential enabler to help raise awareness, knowledge and skills to help contribute to all other SDGs.

As the Goals are so broad, encompassing environmental, social and economic areas they become very useful for all subject areas as a starting point to identify sustainability relationships and contributions. This provides an opportunity for teaching staff to connect subjects up to issues that are relevant today and in areas that can further inspire student engagement and support their learning journeys.

Please take a moment and review the SDGs and identify at least one that would relate to your teaching. You may then begin identifying others that may also connect directly or indirectly. This provides a starting point for teachers to begin reviewing how sustainability can add interest, relevance and value to teaching and learning.



[1] United Nations (2017) Resolution adopted by the General Assembly on 6 July 2017, [Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development \(A/RES/71/313 Archived 28 November 2020 at the Wayback Machine\)](#)

Sustainability Resources: Education for Sustainable Development

- Education for Sustainable Development Guidance (2021) (AdvanceHE & QAA)
 - This guidance is intended to serve as a reference point for use in curriculum design, delivery and review. Crucial for programme leaders and module leaders to look at Section 3, which focuses on teaching, learning and assessment approaches for ESD. It introduces the key competencies for sustainability, course and module learning outcomes for ESD and guidance about developing learning environments to support ESD.
 - Other sections: Section 1 offers an introduction to ESD; Section 2 highlights key players that can help inform the framing and design of ESD across curricula and offers guidance for their contribution and support; Section 4 includes a diverse range of additional resources from a variety of organisations with a focus on supporting the design and implementation of ESD content.

Sustainability Resources: Education for Sustainable Development:

- Education for Sustainable Development Goals: Learning Objectives (2017) UNESCO
- The publication intends to guide readers on how to use education, and in particular ESD, in achieving the SDGs. It identifies learning objectives, suggests topics and learning activities for each SDG. It can be used when designing modules and courses. The document is not prescriptive in any way but provides guidance and offers suggestions for learning topics and objectives that educators can select and adapt to fit concrete learning contexts. Has specific guidance for each SDG, specifying cognitive domain, socio-emotional domain, and behavioural domain objectives for each SDG. Has a strong emphasis on interconnectedness of SDGs and cross-cutting key competencies for achieving all SDGs.

- From Art to Zoo Management: embedding sustainability in UK higher and further education (NUS)
- This is a collection of good practice examples of ESD from a range of programmes across the UK. This is an initiative of SOS-UK – Students for Sustainability UK – a charity set up by students and staff at the National Union of Students in 2019.
- Embedding Sustainable Development in the Curriculum Guide (2009)
- This is aimed at staff within learning institutions and provides information on how to embed sustainability into what and how they teach. In an easy to follow format, the document identifies some of the approaches currently being used, gathers a variety of examples and provides a list of contacts should you wish to speak to anyone further.

Sustainability Resources: Institutional Application of the SDGs

- [Accelerating Education for the SDGs in Universities \(2020\) Sustainable Development Solutions Network](#)
- A new guide from the Sustainable Development Solutions Network (SDSN) that aims to help universities, colleges, and tertiary and higher education institutions implement and mainstream this “Education for the SDGs” within their institutions.
- [Environmental sustainability of learning and teaching Thematic Peer Group Report \(learning & Teaching Paper #14 \(2021\) European University Association.](#)
- This paper promotes and guides action to help embed a holistic approach to sustainable development within the university sector and its education provision. It uses the UN Sustainable Development Goals as its framework.

Sustainability Resources: Pedagogical perspectives of ESD

- [The Pedagogy of Transition: Educating for the Future We Want \(2021\) The Great Transition Initiative](#)
- *“The times call for pedagogies that cultivate integrated knowledge and global citizenship, yet we continue to educate for a world we don’t want. In the long term, we need educational systems aligned with new imperatives, while in the near term offering innovate curricula and teaching within existing systems. The forward-looking educators on this Forum’s panels—
Frameworks and Practices—probe each of these fronts.”*

Sustainability Resources: Tools to help your students:

- **Sulitest:** Sulitest aims to provide an international and universal applicable knowledge assessment tool for the academic world. It is a free online platform that: Maps the Sustainability Literacy of incoming student body, Raises awareness amongst students, faculty and staff members, Assesses the institution's curricula (entry and exit testing), Collects data for research purposes, or for adapting courses and curricula and Preselects students for a specific course or programme. It is already being used by large parts of UoG.

Sustainability Resources: Community of Practice:

- The University is setting up an Education for Sustainable Development (ESD) Community of Practice. This aims to, for example:
 - Provide a platform to share experiences, techniques, materials and maximise the potential and possibilities for ESD application at Greenwich
 - To help create a self-organised community with the potential to create the support network to encourage all teaching staff to realise the relevance and value that sustainability can deliver to subjects across the university
 - To create resource libraries to help ensure subject areas have access to a wide range of materials that can be used for ESD teaching
 - To internally and externally showcase great practice happening within our teaching communities.

Sustainability Resources: External ESD Communities:

- Sustainability in Higher Education Developers (SHED) Group (UoG is a member of the EAUC so can access many of the resources for free). SHED comprises higher and further education are to: Disseminate information about Education for Sustainability in higher/further education staff who specialise in ESD or incorporate sustainability issues in their work. Its aims are to: Stimulate discussion about the principles behind ESD, Holds up a critical lens to the concept of ESD and its alternatives, Connect ESD to wider educational concerns such as leadership and global citizenship and Sharing and monitoring strategies for organisational change

Training Support

The University provides training workshops to help teaching staff explore and recognize how sustainability can connect with their teaching, their students and future employers

- Training: The University provides a range of training to support our academic community to understand sustainability and support its integration of teaching at Greenwich.
- This is available in mixed subject groups or can be delivered to teams teaching particular subject areas. These explore ESD and use the UN Sustainable Development Goals as the framework to help staff connect their teaching with specific social and environmental issues and then create wider connections that students will find useful in their academic development.