Education for Sustainable Development Guide

As climate change, resource depletion and biodiversity loss become critical, UCL has the opportunity and responsibility to solve our local and global challenges through teaching and research. UCL has made the commitment that by 2024 every student will have the opportunity to study and be involved in sustainability at UCL.

What is this guide for?

This guide is intended to assist UCL academic staff seeking to incorporate sustainability within teaching and learning as a way to encourage student's development competencies and contribute to social and environmental change in different contexts. The guide also signposts the student opportunities and research topics that Sustainable UCL offer that take place in the campus and the local community that could enrich your teaching and learning.

This guide can be used in conjunction with: Five steps to developing a Community Engaged Learning programme, module or project

What is ESD?

Education for sustainable development (ESD) is the process of equipping students with the knowledge and understanding, skills and attributes needed to work and live in a way that safeguards environmental, social and economic wellbeing, both in the present and for future generations (Education for sustainable development: Guidance for UK higher education providers, HEA & QAA, June 2014)

Sustainability can be embedded into any degree and is not limited to environmentally focussed degrees. There is no definitive knowledge content that should be included in a curriculum addressing sustainability, but the Sustainable Development Goals are a tool to use when considering which topics you could address as part of ESD.

ESD is understood as competence-based. Competence can be defined as "a functionally linked complex of knowledge, skills, and attitudes that enable successful task performance and problem solving" (Wiek et al., 2011, 2014).

Pedagogical approaches in ESD

There is no 'correct' pedagogy for sustainability education, but approaches that are particularly effective in the context of education for sustainable development tend to have an authentic aspect, enabling students to relate their learning to real-life problems and situations.

Experiential and interactive approaches are also particularly well suited to education for sustainable development, particularly where they encourage students to develop and reflect on their own and others' values.

Critical reflection on values and assumptions may in some cases lead to what is known as 'transformative learning'.

In addition, **participatory learning approaches, peer-learning and collaboration** - within and beyond the classroom - are encouraged, allowing students to be exposed to multiple perspectives and enabling creative responses to emerge.

A glocal curriculum conceives of sustainable development in terms of problems and solutions in local and global contexts (Brundiers and Wiek, 2013; Brundiers et al., 2010; Wiek and Kay, 2015). A glocal curriculum empowers students to contribute to social change across cultural and geographical contexts. Therefore ESD lends itself to **real-world case studies, project-based learning and the use of the campus as a learning resource.** UCL's Community Engaged Learning Service (CELS) and 'Living Lab' programmes can be utilised for this (see resources below).

Additional methods include but are not limited to:
- Case studies
- Stimulus activities
- Simulation
- Experiential project work
- Problem-based learning
- Scenario planning/Futuring
- Role play

Ways to integrate sustainability into the curriculum

- Incorporate sustainability themes across the discipline – e.g. sustainability in business, criminology for a just and society, or environmentalism in law.

- Reorientate teaching to focus on sustainability – e.g. pluralist economics, leadership for sustainability, etc.
- Provide students the opportunity to choose sustainability-focused projects or research topics as part of the course.

Assessment

There are a number of ways in which students can be assessed for achievement of the graduate outcomes identified in this document, and it is likely that a variety of methods will be used.

Assessment should provide opportunities for students to demonstrate achievement of graduate outcomes in the core areas of global citizenship; environmental stewardship; social justice, ethics and well being; and futures thinking.

In this context, it is also likely to involve:

- Formative tasks that enable the development of critical thinking and problem-solving
- Opportunities to apply these skills to real-world problems
- Synoptic assessments that explore the relationship between students' main academic discipline and sustainability
- Activities that encourage affective learning in the domains of values, attitudes and behaviours.

Assessment in education for sustainable development can also benefit from:

- Engaging the perspectives of other interested parties (stakeholders)
- Peer contributions

Resources to help you at this stage

Explore the quality assurance processes related to ESD teaching and assessment: Education for sustainable development: Guidance for UK higher education providers, HEA & QAA, June 2014

View examples of sustainability activities per discipline: From Art to Zoo Management: embedding sustainability in UK higher and further education NUS Report 2017

Provide real-world case studies in your teaching and solve UCL's Sustainability Challenges, with Sustainable UCL's Living Labs Programme: https://www.ucl.ac.uk/sustainable/sustainable-campus/education-sustainable-development/ucls-living-lab

To develop a sustainability teaching and learning activity or project with community groups or to reach out to community groups: Email the Community Engaged Learning Team on Communityengagedlearning@ucl.ac.uk

View case studies of how departments have embedded sustainability into the curriculum here: https://www.ucl.ac.uk/sustainable/get-involved/education-sustainable-development.

Relevant literature

- Simone Strambach (2017) Combining Knowledge Bases in Transnational Sustainability Innovation: Microdynamics and Institutional Change, Economic Geography, 93:5,
- 500-526
- Vann, J.; Pacheco, P.; Motloch, J. Cross-cultural education for sustainability: development of an introduction to sustainability course. J. Clean. Prod. 2006, 14, 900–905.