ESD at UCL: Enhancing education, employability and the student experience

# Introduction

This document proposes how UCL could meet its commitment around Education for Sustainable Development (ESD) – both clarifying its commitment to ESD and presenting a plan to fulfil that commitment.

The plan is represented as ‘Four Corners’, to illustrate how diverse approaches can combine to create a strong structure for ESD learning and teaching. Each of the corners enhances the employability of our students.

The implementation of ESD provides a focal point for a cohesive narrative for a UCL education. One that:

* is research-led and provides our students with the skills and experience they need to address global challenges;
* is future-focused, and capable of enhancing the employability of our graduates as they enter workplaces that will increasingly seek employees who have the knowledge, competencies and technological skills needed to address the challenges facing the world, notably climate change, environmental degradation and increasing social and economic inequalities;
* embraces the issues surrounding decolonisation, particularly through the inherent need to work in equal partnerships with partners from across the globe to address the challenges facing the world; and
* encourages our students to become global citizens, equipped to progress in an increasingly globalised and inter-dependent world.

# ESD at UCL

# ESD is defined by UNESCO (2021)[[1]](#footnote-1) as:

# “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, in the present and for future generations.”

In October 2019, as part of its [Sustainability Strategy: Change Possible](https://www.ucl.ac.uk/sustainable/sites/sustainable/files/change_possible._the_strategy_for_a_sustainable_ucl_2019-2024.pdf), UCL committed that by 2024 every student would have the opportunity to study and learn about sustainability. This commitment covers both undergraduate and postgraduate students. This objective is shared with the UCL Sustainable Development Goals (SDGs) Initiative[[2]](#footnote-2) strategy, the student-focused objectives of which are to:

* improve how we educate our students to equip them to address the SDGs and solve complex challenges in their future careers as required by employers; and
* encourage and support our students to take part in other activities that contribute to the SDGs.

In 2022, the ESD Steering Group, chaired by Professor Jane Holder (UCL Laws), was established jointly by Sustainable UCL and the UCL SDGs Initiative to clarify UCL’s ESD commitment and to create a plan and programme of works for UCL’s ESD work. The Steering Group reports jointly to the UCL Sustainability Committee and the UCL SDGs Board.

As part of the UCL Strategic Plan consultation in 2021–22, the Steering Group  [responde](https://liveuclac.sharepoint.com/:w:/r/sites/UCL-strategic-plan-2022-27/Community%20feedback%20submissions/UCL%20Education%20for%20Sustainable%20Development%20-%20response%20to%20papers%203%20%26%205.docx?d=w85b1c4261b6044949d7145a6c94c0377&csf=1&web=1&e=DnZLDn)d to Paper 3 (Evolving the UCL Grand Challenges) and Paper 5 (Education Priorities and Programmes). Building on that response, this paper sets out the Group’s draft proposals for its ongoing programme of work to develop ESD at UCL. It seeks your advice on next steps, including your comments on:

* the proposed Four Corners approach and programme of work, particularly Corner 3 (to increase opportunities for students to engage with sustainability beyond the taught curriculum);
* who might be an appropriate sponsor for the proposed ESD programme of work;
* the best way to update you and others in VPESE on the ESD Steering Group’s progress to ensure complementarity with the Education Strategy – perhaps through updating UCL Education Committee; and
* how we might further embed ESD within UCL’s Faculties.

# Why ESD is an important part of a ‘UCL education’?

A report published in 2021 by the Students Organising for Sustainability (SOS) found that 91% of students agree their place of study should actively incorporate and promote sustainable development, and that 84% would like to see sustainable development actively incorporated and promoted through all courses.[[3]](#footnote-3)

ESD is now at the centre of a range of academic initiatives and professional development programmes in HE. For example, the new Professional Standards Framework[[4]](#footnote-4) for the HEA Fellowship programme provides a structure to support institutions and individuals to meet the evolving needs of learners and society, such as through acting in support of the SDGs.

While UCL has ranked highly for ESD in People and Planet’s University League,[[5]](#footnote-5) the ESD agenda is constantly evolving, and we need to continue to improve for sound pedagogical (and reputational) reasons. Increasing numbers of individual academics, students, and departments across UCL are engaged in ESD, but there has been no coordinated strategy so far, and there are opportunities to share good practice and offer support where there are gaps in provision across the institution.

# UCL’s ESD vision

Our vision is to make UCL a global leader in ESD, furthering UCL’s reputation of solving global challenges through research and education, enabling UCL to continue to rise through HE rankings and having a positive impact on society. Employers will recognise UCL graduates not only from the quality of the education in their formal disciplines but also the attributes they have gained through a well-rounded and worthwhile ESD education.

This vision complements UCL’s futures-focused education approach as referenced in the [UCL Strategic Plan 2022–27](https://www.ucl.ac.uk/strategic-plan-2022-27/ucl-strategic-plan-2022-27).

# UCL’s ESD approach

The ESD Steering Group applied the IOE’s Professor Tristan McCowan’s curriculum topography approach to climate change in HE[[6]](#footnote-6) more widely to ESD. McCowan conceives the role of the university ‘as curating a diverse environment of learning experiences – taught, self-directed and through peer collaboration – in distinct spaces within and beyond the campus and virtual space of the institution’; in short, the classroom, campus, and community.

At UCL, we propose that this approach to ESD be underpinned by the following principles:

* ESD should encourage the development of competencies and skills that will enable students to address the challenges of sustainable development in their lives beyond UCL, for example, critical thinking and collaboration.
* ESD should be based upon addressing the UN SDGs, recognising opportunities arising from the mutual reinforcement of the goals.
* ESD should encompass a range of opportunities and activities beyond those arising from the taught curriculum.
* Students in all UCL’s disciplines should have the opportunity to learn about sustainable development as defined by one or more of the UN SDGs, as well as the interactions between the Goals.
* ESD should be applicable and applied across UCL’s faculties and disciplines.
* ESD should permeate the environment in which students learn as well as the content of courses and programmes.
* Further development and implementation of ESD should be fully inclusive and co-produced in partnership with students, and members of the UCL academic and administrative communities, recognising the relevance and significance of the work on Transforming the Curriculum, and the potential impact of ESD on staff workload, which the proposed plan seeks to mitigate by providing high levels of teaching and learning support for staff.
* ESD should support student and staff mental health and well-being and UCL equalities policies, including the use of equalities impact assessment procedures to measure and take account in decision making the positive and negative impacts arising from sustainability activities and policies.
* ESD should benefit local communities, encouraging rewarding and productive partnerships and social, environmental, and educational benefits.

# Clarifying UCL’s ESD commitment

Based on these principles and the above interpretation of ESD, this paper proposes ESD at UCL could be given effect through a ‘Four Corners’ approach:

1. Welcome: A ‘sustainability induction’
2. Sustainability within the taught curriculum
3. Learning beyond the curriculum
4. Increasing ESD for postgraduate researchers

A diagram of various jobs

Description automatically generated with medium confidence

The proposed activities support the UCL Pillars of Employability. Each of the four corners contributes to our responsibility and efforts to enhance the employability of our students, who will graduate into a world that will increasingly demand the knowledge and competencies needed to address the complex challenges facing the world.

This approach will be adapted in alignment with the implementation of the new UCL Strategic Plan.

## Welcome: A ‘sustainability induction’

**All students are introduced to the concepts of sustainability and how to be a sustainable citizen during their time at UCL.**

The foundations for this corner have already been put in place with:

* a 15-minute Sustainability Induction programme on Moodle that is accessible via the UCL New Students page;
* a [‘green module’ within the Introductory Programme](https://www.ucl.ac.uk/introductory-programme/discovery/green) that is open to all students;
* a Sustainability Fair and events programme co-hosted by Sustainable UCL and Students’ Union UCL during the Welcome Week; and
* sustainability as a component of one of the UCL Discovery weeks in October.

While attendance at the fairs and events is good (1,654 attendees last year), completion rates for the online modules are low (with only 1,600 students completing one of the two available modules last year). There are still many students who will not be aware of these ‘welcome to sustainability’ opportunities.

To increase awareness, the Induction programme on Moodle will be replaced by an induction developed by Students’ Union UCL with support from Sustainable UCL, which was agreed at their Policy Zone and will be mandatory for all UCL Union officers.

It is also proposed that all departments include sustainability within their induction programme. This could be achieved through:

* OVPESE encouraging faculties to develop a faculty-wide sustainability induction relevant to their discipline by [modifying a template](https://liveuclac-my.sharepoint.com/:p:/g/personal/uczborf_ucl_ac_uk/EQIOgFIcbXxHgH9m9D0pkToBHHOY3xFyYTIX5OjIc2GxPw?e=k6tF7m) induction, much like the Faculty of Arts & Humanities has already done; and
* faculties introducing sustainability across their departments during the welcome period (explaining both the relevance of sustainability to their discipline and opportunities to learn how to be a sustainable citizen within the department).

## Sustainability within the taught curriculum

**All students receive discipline-relevant sustainability knowledge during their taught programme.**

The extent of implementation of this corner currently varies across the institution. There are already many examples of courses and programmes in all faculties that incorporate ESD, for example: UCL Medical School’s Health & Climate Module, open to all first-year students; the MSc in Artificial Intelligence for Sustainable Development, run by UCL Computer Science; and the Land Use, Sustainability and Environmental Justice module for Planning and Law students. However, there are gaps across UCL, which the proposed programme of activity plans to address.

To measure the extent of ESD in the taught curriculum, the UCL SDGs Initiative used an AI tool to map modules offered in academic year 2022–23 against SDG-related keywords (as a proxy for sustainable development). It found 2,160 modules with SDGs-related content. The results of this exercise were published in the second [UCL SDGs Report](https://www.ucl.ac.uk/sustainable-development-goals/ucl-sdgs-report-2021-2022) in December 2022. This provided an indication of sustainability content, but more detailed work is still required to assess the coverage of sustainability within each programme.

Work on this corner aims to shift institutional and teaching cultures, so that the content and presentation of teaching material and the development of relevant skills and competencies reflects the broader institutional commitment to ESD. The ambition is for all programmes to be offering a significant ESD component within a module or as part of a programme which all students can take by 2024.

**In this process of curriculum development, the emphasis is on enabling rather than mandating change, through providing support and opportunities for staff development.**

This will be a gradual process, but the expectation is that, in due course, all students will have the opportunity to engage with sustainability and the SDGs framework via their learning on both compulsory and optional modules. To support such a change it proposes the following upskilling resources and activities, and set of institutional changes, some of which are already underway:

**Upskilling**

* ESD Toolkit: developed by the UCL ESD Steering Group and due to be launched in May 2023
* A [short online course](https://www.futurelearn.com/courses/educating-for-sustainable-development-in-schools-and-universities) to support school and university educators in teaching about sustainable development, developed by academics at the IOE, UCL's Faculty of Education and Society, was launched in November 2022.
* The programme design workshops facilitated by the Arena Centre already include ESD as a curriculum perspective.
* ESD Network: A newly developed network is being launched in May 2023 for staff who are already practising ESD within their courses and wish to share their experience with others, and for those who want support in embedding ESD in their programmes.

**Institutional and cultural changes**

* Identifying ESD Faculty Leads, to coordinate their faculty’s ESD work and support academics to implement sustainability/SDGs content into their programmes.
* Recognition and incentives: ESD criteria are now embedded into the UCL Education Awards and Student Choice awards, but clearer communication about these criteria, and showcasing successful applications in this respect is still needed. Case studies highlighting good ESD practice will be published on Sustainable UCL, SDGs Initiative and UCL Arena communications channels.
* Monitoring and reporting
  + Supplementing the existing Diversifying the Curriculum Checklist for Programmes with sustainability criteria.
  + Training for students to identify ESD content within UCL’s programmes (existing national initiatives already offer this).
  + Faculty-level reporting on ESD as part of UCL’s Sustainability Dashboard, which is in development, and in the annual UCL SDGs Report.

## Learning beyond the curriculum

**All students have the option to further their sustainability knowledge beyond the taught curriculum.**

While there are examples of good practice across UCL, not least those extra-curricular opportunities already coordinated by Sustainable UCL and Students’ Union UCL, there is potential to develop new or further enhance other existing co-/extra-curricular opportunities. The aim is to offer all students the opportunity to gain further knowledge about sustainability, beyond their engagement with the taught curriculum. This could be achieved through:

* A new UCL-wide truly interdisciplinary offer to enhance students’ employability and cross-disciplinary learning. This would: support and/or be framed by the SDGs; complement the proposed Grand Challenge online modules; and possibly fill some of the space vacated by the UCL Global Citizenship Programme[[7]](#footnote-7), which ceased operation. A similar programme[[8]](#footnote-8) is offered by the University of Leeds, in which students can undertake ‘Discovery Modules’ (e.g., Sustainable Futures) outside their main programme of study. UCL’s ESD Steering Group has formed a working group to explore further the challenges and opportunities of options for such a new programme.
* Campus-based research projects: Sustainable UCL’s existing programme, [Living Lab](https://www.ucl.ac.uk/sustainable/education/living-lab), enables students and staff to help solve UCL’s sustainability challenges through conducting estates-based research projects. This programme could be expanded with additional resources and academic infrastructure, and complements the inclusion of operations in the broader scope of UCL Grand Challenges in the new UCL Strategic Plan
* [Community Research Initiative for Students](https://studentsunionucl.org/volunteering/cris) (CRIS): a Students’ Union UCL service that enables master’s students to collaborate with charities and community groups on a mutually beneficial dissertation project.
* Widespread opportunities for student engagement (see Appendix 1): in decision making (through the UCL Sustainability Ambassador Programme and the Student Sustainability Council), volunteering, or through student clubs and societies, such as the Climate Action Society, the Environmental Collective, and the Green Economists.

## Postgraduate researchers

**Increase education for sustainable development among postgraduate researchers**

This fourth corner of UCL’s approach to ESD aims to further ESD within PGR programmes at UCL, instilling sustainability into research skills training, research ethics and research integrity. This is a relatively unexplored area of work in ESD scholarship and pedagogy, and thereby offers an opportunity for UCL to lead the sector in developing resources and processes.

The rationale for this corner is that PGR students are the engine of the university, with responsibility for driving future evolution and prominence of sustainability in the sector. We should be educating our postgraduate researchers in sustainable development just as we educate our undergraduate and postgraduate students.

It therefore makes sense to invest in understanding the current sustainability content and orientation of current PGR programmes at UCL and elsewhere,[[9]](#footnote-9) and to use this research to build policies and strategies aimed at the following:

* Research content: Identifying points of contact between a student’s chosen area of study and sustainability agendas, including the SDGs;
* Research methodologies: Minimising the impact on sustainable development of the methods students use to conduct their research, for example reducing their carbon footprint;
* Research impact: encouraging students to use their research to address the challenges framed by the SDGs;
* Research ethics**:** Promoting the idea that ethical research is not just research that is underpinned by academic integrity and protects the rights of participants, but research that is conducted sustainably as well.

This corner represents a considerable expansion of the scope of ESD, from the well-accepted concentration on learning and education strategies, implemented in sustainable estates.

However, training our doctoral and early career researchers in sustainable development fits well within UCL’s existing commitment to research-led teaching and should complement the work of the Research Ethics team and newly established Research Culture team in UCL Research, Innovation & Global Engagement.

# Measuring ESD at UCL

To monitor progress towards our commitment that every UCL student has *the opportunity* to learn and study about sustainability by 2024, the ESD Steering Group has developed a range of metrics for Corners 1 to 3. These are detailed in Appendix 2 and will be developed in line with plans sets out in this paper.

They include measures of how many departments are providing students with this opportunity, as well as numbers of students taking up these opportunities. Initial metrics are measuring the extent of ES activity, but the group is also considering how the impact of that activity could be measured.

Metrics for Corner 4 will be developed by the ESD Steering Group in Term 3, 2023–24.

# Appendix 1: Selected existing ESD activity at UCL

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| --- | --- | --- |
| **Activity** | **Summary** | **Lead area** |
| **Curricular** | | |
| Departmental support | Supporting departments to embed sustainability into their taught curriculum e.g., UCL Medical School has new Climate Change & Health module, UCL Slade School has increased emphasis on sustainability of materials within its programmes. | Sustainable UCL |
| Module mapping | Measuring the quantity of ESD in the taught curriculum, initially by classifying modules against SDGs | UCL SDGs Initiative |
| Awards | Added a sustainability category in the UCL Choice Awards and the UCL Education Awards, which feed into the UCL Sustainability Awards, to incentivise and reward academic staff to embed sustainability into the curriculum. | Sustainable UCL |
| **Co-/extra-curricular** | | |
| Sustainability induction | Optional training for students, and mandatory training for all staff (which encourages ESD teaching). | Sustainable UCL |
| Introductory Programme | Green UCL discovery module on UCL’s Introductory Programme enables students to critically analyse different sustainability topics. | Sustainable UCL |
| The London Student Sustainability Conference | UCL co-hosts a conference enabling London students to showcase their research relating to the SDGs, providing networking opportunities, enhancing presentation skills and sustainability literacy. | Sustainable UCL |
| Community Research Initiative for Students (CRIS) | CRIS connects master’s students with charities and community groups to work on a mutually beneficial dissertation project as the subject of the students’ dissertation. | Students’ Union UCL |
| Student Sustainability Council | The Student Sustainability Council gives students an opportunity to have a say in UCL’s sustainability vision and provides students with knowledge on how large organisations deal with complex sustainability challenges. | Sustainable UCL |
| Laidlaw Research & Leadership Programme | 25 UCL Laidlaw Scholars undertake leadership training, a research project and the Leadership in Action project. | VPESE |
| Student clubs and societies | 19,500 students are members of clubs and societies, many of which are addressing one or more of the SDGs. | Students’ Union UCL |
| Volunteering Service | 2,000+ students are members of student-led volunteering projects or undertaking external volunteer placements that are addressing one or more SDGs. | Students’ Union UCL |
| Student Sustainability Ambassador Programme | 100+ students volunteer as Sustainability Ambassadors on departmental, university-wide and community sustainability projects | Sustainable UCL |
| Change Makers | Students and staff work in partnership on projects that improve the learning and wider UCL student experience. | UCL Arena |
| Living Lab | Students and staff address UCL’s sustainability challenges through research, teaching, dissertations, and projects. | Sustainable UCL |
| Millennium Fellowship Scheme | Students undertake a project that advances an SDG. 10 UCL students participated in the scheme in 2022–23. | External |

# Appendix B: Measuring the extent of ESD at UCL

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| --- | --- | --- |
| **ESD Corner** | **Activity** | **Metric** |
| **1. Welcome: A ‘sustainability induction’** | Central UCL sustainability induction | % students taking the induction by Faculty  % Departments sharing UCL’s sustainability induction. |
| Faculty sustainability induction | # Faculties offering this |
| Introductory Programme green Module | # students taking the Green UCL module |
| **2. Sustainability within the curriculum**  Including:   * – ESD-related content in taught modules (the ‘what’); and * – discipline-relevant sustainability practice (the ‘how’) | Embedding ESD in staff development | # professional development opportunities that feature/consider ESD  # courses programmes that go through PMAP, which include ESD, e.g. content, learning objectives, assessment design  # case studies (inc. Micro-CPD format) submitted for publication |
| ESD Toolkit | # visits to the ESD toolkit web page |
| Community of Practice | # members of community |
| ESD faculty plans | # faculties that have included ESD in faculty sustainability plans |
| Faculty-specific sustainability modules | % of faculties with sustainability courses open to all students e.g., Medical School |
| Modules with ESD-related content in taught modules (the ‘what’) | * # and % of modules with ESD-related content (as defined by the SDGs) by faculty * # modules with ‘sustainability’ and ‘climate’ as key words in module descriptions * % titles on reading lists aligned to SDGs |
| Student/Staff Choice  Awards | # applications received for Sustainability Category in UCL Education Awards.  # applications received for the Education Category in UCL Sustainability Awards |
| Student/Staff partnerships’ | # of ESD-related ChangeMakers projects submitted by Faculties |
| Upskilling staff in UCL Arena and Digital Education | # staff upskilled who take part in the programme development workshops  # staff using their ESD work as a case study for HEA/Arena Fellowship applications |
| Embedding ESD into Academic Rep programme | Completed |
| **3. Learning beyond the curriculum** | Proposed new Interdisciplinary course (TBC on proposal from working Group) | # of participants |
|  |  |
| Student sports/ societies | # students taking part in activities aligned with SDGs, as judged by societies |
| SU volunteering projects | # students taking part in activities aligned with SDGs, as judged by SU staff |
|  |  |
| SU Sustainability Council | # students applied |
| Sustainability Ambassadors | # students applied |

1. <http://uis.unesco.org/en/glossary-term/education-sustainable-development?wbdisable=true> [↑](#footnote-ref-1)
2. The [UCL SDGs Initiative](https://www.ucl.ac.uk/sustainable-development-goals) was formed to maximise the impact of the university’s activities on the UN’s Sustainable Development Goals across all its teaching, research, operational and student extra-curricular activities. [↑](#footnote-ref-2)
3. Students Organising for Sustainability (SOS), ‘[Sustainability skills survey 2020-21](https://uploads-ssl.webflow.com/6008334066c47be740656954/60f6908f10bfcc10d2c87d55_20210716_SOS-UK%20Sustainability%20Skills%202020-21_FINAL.pdf)’, in *Research into students’ experiences of teaching and learning on sustainable development, p.2.* [↑](#footnote-ref-3)
4. Advance HE, *Professional Standards Framework for Teaching and Supporting Learning in HE* (2023) <https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/advance-he/PSF%202023%20-%20Screen%20Reader%20Compatible%20-%20final_1675089549.pdf> [↑](#footnote-ref-4)
5. [People and Planet](https://peopleandplanet.org/) is a student network aimed at transforming the education sector.

   [↑](#footnote-ref-5)
6. T. McCowan, ‘[Climate Change in Higher Education: A Curriculum Topography Approach](https://www.researchgate.net/publication/356086887_Climate_change_in_higher_education_a_curriculum_topography_approach)’, in *Transforming Universities for Changing Climate*, Working Paper Series No. 6, p.3. [↑](#footnote-ref-6)
7. [Global Citizenship Programme](https://www.ucl.ac.uk/global-citizenship-programme/ucl-global-citizenship-programme) [↑](#footnote-ref-7)
8. [Discovery Modules](https://students.leeds.ac.uk/discovery) at the University of Leeds give students the opportunity to broaden their academic experience and enhance their employability. Students can choose to take a Discovery Module which develops a specific skill (e.g. a language) or which allows them to pursue a personal interest (e.g. sustainability). [↑](#footnote-ref-8)
9. With funding from the Society of Legal Scholars, UCL has led research on sustainability in PGR programmes (with Universities of Cambridge, Oxford, Greenwich, and Nottingham). [↑](#footnote-ref-9)