**RESULTS FROM STUDENT-LED SUSTAINABLE DEVELOPMENT GOALS CURRICULUM AUDIT**

FOR THE UNIVERSITY OF KENT

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# Introduction and Background

Between 25th May to 1st August, 16 students from the University of Kent took part in the University’s Sustainable Development Goals Curriculum mapping project. Together, the students mapped 1291 undergraduate and postgraduate modules against the United Nations Sustainable Development Goals (SDGs), wider aspects of sustainability learning and methods used in education for sustainable development (ESD). Prior to mapping, students attended a training workshop exploring the SDGs and the role of education in contributing to sustainability, how to critically engage with SDGs and how to audit modules descriptors against the 17 SDGs as well as a set of criteria on the wider aspects of sustainability learning and ESD methods.

The purpose of the curriculum audit is to provide the University of Kent with a baseline understanding of how faculties and modules are supporting students to see the relevance of sustainability in a range of disciplines as well providing practical experience to equip students with skills and competencies to be able to contribute to a more sustainable world.

The following report provides results from the audit on how the SDGs, wider sustainability learning and ESD methods are incorporated into modules – categorised by faculty or division, followed by key recommendations to progress embedding sustainability into teaching and learning.

## Methodology

The methodology for the SDG curriculum audit was developed by Students’ Organising for Sustainability in partnership with the University of Winchester and Winchester Students’ Union. The audit uses module descriptors from 1291 modules at the University of Kent. These descriptors typically provide an overview of intended learning outcomes, an overview of content, and a summary of teaching methods/pedagogy and assessment.

The student auditors review the module descriptors to identify:

* To what extent the themes encompassed by the SDGs are included (scoring 0 – nothing, 1 – a little or implicitly included, and 2 – a lot, or explicitly included);
* To what extent wider aspects of sustainability learning are included (same scoring as above);
* And to what extent ESD pedagogies, or methods, are used (again same scoring).

Please see the University of Kent [SDG Curriculum Mapping form](https://forms.office.com/Pages/ResponsePage.aspx?id=PvoqtL1Si0ix2I1Miy10oA98S-1DXQVGunitXndOLxxUQzJISVVHNUpXMkhOUU5ZTTRRNzFEN1BNOS4u) to see the different criteria modules were mapped against or the information provided in Appendix 1.

The SDG descriptors come from the [United Nations’](https://sdgs.un.org/goals) site and the latter two lists are modified from the AdvanceHE and QAA [ESD Guidance](https://www.qaa.ac.uk/quality-code/education-for-sustainable-development) (2021).

Student auditors record the numerical value for each sub-category under each of these three thematic areas as well as keeping note of further information they wish to highlight (e.g., particularly strong examples or areas of opportunity for further embedding of sustainability). They also flag any questions which have arisen.

This report is accompanied by an Excel spreadsheet sharing raw data from the audit as well as auditor comments about each module mapped.

## Methodology: Limitations

Because a number of students take part in the audit, and they all may interpret the audit slightly differently, there may be variations across the data. This is natural and the training seeks to ensure as much uniformity in the audit as possible. Some variation should be expected and where this is identified, can be rectified.

There may be examples of sustainability in modules that are not described in the module descriptor. This may mean that the data is not exhaustive in highlighting all information. Where it is identified that there are examples of good practice which have not been covered in the audit, course leaders should be encouraged to update module descriptors accordingly. Having up-to-date module descriptors helps students to understand and identify where sustainability relates to their discipline and also safeguards that sustainability content for future years, should the module leader change.

The SDGs are an imperfect model and have been criticized for their focus on a neoliberal and capitalist economic model. Nevertheless, they are largely accepted as the ‘road map’ and common language for sustainability this decade and are used, in this project, as a descriptor for the breadth of sustainability.

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## Purpose of a Curriculum Audit

**Outcomes from a curriculum audit**

There are a number of beneficial outcomes from conducting a curriculum audit, including:

* Building on other audits
* Identifying existing good practice within teaching and learning
* Opening up discussion with academics, deans and across faculties
* Establishing a quantitative baseline
* Measuring progress over time

**The SDGs - a shared language**

Additionally, the SDGs form an important part of how universities and colleges conceptualise sustainability. This is demonstrated by a range of initiatives within further and higher education including:

* [SDG Accord](https://www.sdgaccord.org/) – university and college sector commitment to celebrate and advance the integral role education plays in progressing sustainability and delivering the SDGs, and to do more to deliver on the goals, including reporting annually on signatory’s progress. The SDG Accord is signed by 227 institutions, 55 students’ unions and 1734 individuals across all levels in an educational institution.
* [SDG Teach In](https://www.sos-uk.org/project/global-goals-teach-in) – annual campaign ran by SOS-UK calling on educators to pledge on embedding the SDGs in teaching, learning and assessment. 2022 SDG Teach In was the biggest yet, with 772 educators from 134 institutions pledged reaching 141,000 students globally.

**Student and staff demand for sustainability in teaching and learning**

From [research conducted by NUS and SOS-UK](https://www.sos-uk.org/research) over the last ten years, students surveyed consistently tell us that 84% of students would like to see sustainable development actively incorporated and promoted through all courses, and 66% say sustainable development is something they would like to learn more about. This is statistically significant across disciplines.

Through this research, students have highlighted that the most relevant ways they want to learn for sustainability are through applied learning opportunities such as placements, projects, and work experience.

Consequently, the purpose of a student-led SDG Curriculum Mapping is to better understand the incorporation of SDGs, wider aspects of sustainability learning and ESD methods in modules across the University, but also to provide students with an opportunity to explore the role of education in progressing sustainability, engage critically with the SDGs and to share their perspectives on sustainability in teaching and learning. Through this project, students are learning for sustainability through real-life experience, while supporting the University of Kent to ensure all students can learn for sustainability in their modules.

Upon completion of curriculum mapping, student auditors were awarded an ESD Auditor digital badge to evidence and celebrate their contribution to progress sustainability at their place of learning.

# Key Findings

Student-led curriculum mapping of 1291 module descriptors across 6 divisions at the University of Kent has presented key findings on how topics related to the SDGs, wider aspects of sustainability learning and ESD methods, are incorporated into teaching and learning.

**Incorporation of topics related to SDGs**

Topics related to “SDG 16 – Peace, justice and strong institutions" appear the most in modules, incorporated in around 29% of all mapped modules.

**69%** - Proportion of modules that contained reference (implicit or explicit) to topics related to 1 or more of the SDGs

**32%** - Proportion of modules containing explicit mention of topics related to 1 or more SDG

Topics related to “SDG 14 – Life below water” were incorporated into around 2.2% of all modules, making it the least incorporated SDG amongst all mapped modules at the University.

Mapping results show that modules from Law, Society and Social Justice (LSSJ) have the highest average incorporation of topics related to the SDGs at around 86% of modules, with Human and Social Sciences (HSS) modules having the second highest average at around 83% of modules. Computing, Engineering and Mathematical Sciences (CEMS) modules have the lowest incorporation of topics related to SDGs as the SDGs only appear in around 55% of modules.

**Wider aspects of sustainability learning**

According to student-led curriculum mapping results, students are supported to “think critically” in 85% of all modules at the University of Kent and are supported to develop competencies in “seeing the bigger picture” in around 53% of all modules – these make up the most supported competencies for students to develop. Only 25.5% of modules support students to “understand sustainable development” making this aspect appear the least in modules out of all wider aspects of sustainability learning mapped in this project.

**93%** - Proportion of modules that incorporated 1 or more sustainability learning skill

**59%** - Proportion of modules that strongly incorporated 1 or more sustainability learning skill

On a school level, wider aspects of sustainability learning appear the most on average in LSSJ modules, with around 38.5% of modules supporting students to develop at least one sustainability skill. HSS and Kent Business School (KBS) has the second and third highest percentage of modules supporting wider aspects of sustainability learning, respectively. CEMS the lowest level of incorporation of wider aspects of sustainability in modules, with 14.4% of modules supporting wider aspects of sustainability learning.

**ESD Methods**

Results show that “stimulus activities” appear in 58% of all modules and “problem-based learning” appear in 56% of all modules; these two ESD pedagogies are the most common methods on average across modules. Around 41% of all modules utilise “experiential learning” in teaching and learning, making it the least common ESD pedagogy across modules.

**85%** - Proportion of modules that incorporated 1 or more ESD method

**57%** - Proportion of modules that strongly incorporated 1 or more ESD method

ESD methods are utilised most prevalently in LSSJ modules with around 56% of modules employing ESD methods, and in HSS with 52% of all modules utilising ESD methods. ESD methods appear in only 42% CEMS modules, making it the School with ESD methods used the least.

# Results – All UG Modules

The following section provides a breakdown of how the SDGs, wider sustainability learning and ESD methods are included in all 1291 modules mapped by students.

# Results – Arts & Humanities Modules

The following section provides a breakdown of how the SDGs, wider aspects of sustainability learning and ESD methods are included in 468 ARTHUM modules mapped by students.

# Results – Computing, Engineering and Mathematical Sciences (CEMS) Modules

The following section provides a breakdown of how the SDGs, wider aspects of sustainability learning and ESD methods are included in 166 CEMS modules mapped by students.

# Results – Human and Social Sciences (HSS) Modules

The following section provides a breakdown of how the SDGs, wider aspects of sustainability learning and ESD methods are included in 169 HSS modules mapped by students.

# Results - Kent Business School (KBS) Modules

The following section provides a breakdown of how the SDGs, wider aspects of sustainability learning and ESD methods are included in 120 KBS modules mapped by students.

# Results - Law, Society and Social Justice (LSSJ) Modules

The following section provides a breakdown of how the SDGs, wider aspects of sustainability learning and ESD methods are included in 226 LSSJ modules mapped by students.

# Results - Natural Sciences (NATSCI) Modules

The following section provides a breakdown of how the SDGs, wider aspects of sustainability learning and ESD methods are included in 142 NATSCI modules mapped by students.

# Recommendations

The following recommendations can support the University of Kent to effectively utilise findings from the SDG Curriculum Mapping exercise and progress embedding of sustainability in learning.

1. **Celebrate good practice**

Utilise findings from the report and accompanying module-level data to celebrate good practice and uncover allies. This could look like sharing key findings on social media, creating case studies from high scoring modules featured on the University website, or sending congratulatory emails to module leaders.

1. **Meet with School, programme and/or module leaders to discuss findings**

Meeting face-to-face with educators to discuss findings alongside sharing the report can facilitate understanding of the results, as well as key next steps. Holding meetings ensures that the audit findings reach relevant stakeholders, and that staff have a space to ask questions, share ideas and feed into and agree upon next steps.

1. **Provide a space for students to read findings and ask questions**

Education for sustainable development processes support students to co-create their learning experience alongside their educators. Share findings with students via the Students’ Union or course representatives. Provide a space for students to share thoughts on the findings, as well as to feed into next steps to progress sustainability in learning; this could be either an online forum or a suggestions box in the Students’ Union or a discussion after lectures.

1. **Encourage educators to take part in the 2023 SDG Teach In**

[The Sustainable Development Goals Teach In](https://www.sos-uk.org/project/global-goals-teach-in) is a global campaign calling on educators to pledge to incorporate the SDGs in teaching and learning; the campaign shares resources and workshops to support educators to do this. The campaign provides a useful and effective space for educators to innovate and test new ideas linking their teaching to sustainability, whilst contributing to larger curriculum reform. The 2022 Teach In had 772 educators take part from 134 institutions, reaching 141, 369 students globally.

1. **Continue work in partnership with students**

[Responsible Futures](https://www.sos-uk.org/project/responsible-futures) is an accreditation and supported changed programme partnering universities with their students’ union to embed sustainability in all aspects of student learning. The programme provides the university and students’ union partnership with a unique and holistic framework, bespoke and network support including informal check-ins with participating partnerships, webinars, and support afternoons. Every two years, the partnership is audited by their students and awarded Responsible Futures accreditation recognised by People & Planet University League.

[Education for Sustainable Development (ESD) Changemakers](https://www.sos-uk.org/project/education-for-sustainable-development-changemakers) is programme supporting student leadership and students as co-creators in transforming education. Participating institutions are supported to partner students and staff to co-create ESD approaches through bespoke and network support and informal catch ups.

# Appendix 1

**Wider aspects of sustainability learning**

Alongside looking at the 17 SDGs, students are asked to look for how wider aspects of sustainability learning are incorporated in modules. These aspects include:

**Understanding Sustainable Development:** Covers a holistic understanding of sustainable development within the context of the subject

**Seeing the Bigger Picture:** Students develop systems thinking or futures thinking skills, helping them to critically engage with and understand the bigger picture.

**Ethics and Values:** Students use or apply an ethical framework in relation to their subject.

**Collaborative Problem Solving:** Students work together with others to address a real-world issue.

**Critical Thinking Skills:** Students learn skills to help them analyse and critique information.

**Challenge Business as Usual:** Students encounter different-paradigm ways of thinking, e.g. circular economy in field of design; doughnut economics in business, or directly experience a different paradigm (e.g. via a study trip).

**Take Real-World Action:** Students have a chance to take real-world action to support sustainable development (through activities with real-world impacts done through the course, such as placement or project). Not just using real-world problems to trigger thinking.

**ESD Methods**

Students are also asked to look for the inclusion of ESD methods in teaching and learning. These methods include:

**Case studies:** Real-life examples of sustainable development issues - from local to global - and how these have been, or might be, addressed, introduce students to the concept of sustainability in practice.

**Stimulus activities:** Providing a prompt (such as a poem, dance, artwork, quotation, piece of music or newspaper article) can stimulate discussion or reflection on a sustainability topic. Stimulus activities are well suited to group work and can be open-ended, encouraging students to extend their thinking beyond the confines of their own discipline.

**Simulation:** Activities and projects that simulate real-life situations and encourage students to participate can help develop focused thinking around sustainable development issues, and can contribute to the formation of students' own attitudes and the social norms that they find acceptable. Such activities include role plays, debating, mock trials and gaming, and they can be used across a range of disciplinary and interdisciplinary contexts to help students develop appropriate professional behaviours.

**Experiential project work**: Experiential, interactive, or participatory activities enable students to engage with sustainability issues at a number of levels, not only in relation to their discipline, but also in terms of reflecting on their own values, attitudes and accepted social norms. Working through issues in an authentic setting is also valuable for identifying potential interdisciplinary or transdisciplinary links.

**Problem-based learning:** Problem-based learning approaches can be used to good effect in teaching and learning about sustainability, since they provide opportunities for student-led, collaborative work which can be focused on a real-world problem or issue