

Students Driving Curriculum Quality for Sustainability

Executive Summary

Education for Sustainability (EfS) is no longer a niche concern, with consistent large-scale cohort data pointing to student interest in developing knowledge and skills for sustainability, and an increasingly diverse response is emerging in courses across the academic map. However, the sector has yet to develop shared benchmarks for what quality means in EfS, or consistent ways to measure progress in its integration into courses.

This report shares outcomes of [Students Driving Curriculum Quality for Sustainability project](#) – which aimed to drive quality in EfS, positioning students at the core, as co-producers and quality assessors. Funded by the Quality Assurance Agency (QAA) from February 2022 to June 2023, it was led by University of Gloucestershire (UoG), with University of the Arts London and King's College London. It was based on an assessment approach to EfS created at UoG, and used in partnership with academic teams to rate the whole portfolio in 2021.

Project Activities

- Co-creation dialogues with students to troubleshoot the quality principles and ratings framework
- Advice provided by the QAA Student Strategic Advisory Committee on the project need and outputs
- Student-led review of sector developments and approaches to EfS covering 35 prominent universities
- Students developed a series of 6 short films and a speed-learning and course rating dashboard
- Engagement activities online and offline to actively involve students in road-testing the materials
- Development of the website blueprint resources and student-led EfS co-creators toolkit

Project Results

- 132 students used the dashboard to rate 87 courses for sustainability and provide feedback
- 74% positive response to the quality principles after road-testing in 3 different university settings
- Student feedback led to adoption of a change to the framework to better reflect decolonisation

The project underlined how claims by universities on EfS in courses often focus only on taught content, can treat issues in silos, and involve optional modules - bypassing core learning. From the student viewpoint, this can leave students confused about the depth of sustainability learning on offer in their course.

We produced a tested framework and principles, to offer an adaptable 'blueprint' for the sector for measuring how EfS is being integrated across diverse courses. It can be used by course teams and universities to review and develop their offer, providing a quality lens that recognises progressive levels of EfS curriculum design, not just entry level sustainability learning. It can also be used by students, alongside the 'anti-greenwash education' toolkit, to help students lead dialogues with universities on developing their sustainability offer.

Project Outputs

[Project website](#): contains details of the project aims and team, quality framework, sector landscape, road-testing methodology, results and outcomes, including examples of the framework decision-making in action, and the key resources, with short film reflections from the students and staff in the project team.

[Anti-greenwash education kit](#): the insights and speed-learning resource created for students by the student leads in the project team, with key project information, sustainability learning essentials, and series of short films developed by students, to enable other students to assess quality EfS in their courses.

Student-led sector review: the results of an inquiry by the student team lead, into the ways that universities are developing EfS and assessing their progress in its adoption into courses, and exploring how universities are supported and recognised for this work within the sector and in sustainability league tables.

1. Project Overview

[Students Driving Curriculum Quality for Sustainability](#) was funded by the UK Quality Assurance Agency (QAA) Collaborative Enhancement Projects, and ran from February 2022 to June 2023. It was led by the University of Gloucestershire (UoG), in partnership with King's College London (KCL) and University of the Arts London (UAL). All three institutions are known for their expertise in the implementation of sustainability in HE.

Education for Sustainability (EfS) – also known as Education for Sustainable Development (ESD) – is becoming more visible in mainstream dialogues about education for the future, reinforced by insights from students and employers about the pressing need for this learning. But the pace of integration into HE courses is still frustrated by lack of clarity about how to integrate EfS in different courses and what good practice involves.

Recognising the need for sector dialogues about quality in EfS, the project aimed to:

1. Support the HE sector to start to develop EfS quality standards that can be used for cross-portfolio progress assessment, based in good practice and tested in different institutional settings.
2. Empower students in the development of EfS in HE, specifically to hear the perspectives of diverse learners on what matters for course experiences, in order to raise quality in EfS practice.

The project foundations – the original principles and criteria for assessing EfS progress – were created at UoG and delivered as a whole-portfolio EfS stocktake with academic teams in 2021.

The project tested the applicability of this approach for driving quality of EfS practice at other institutions, and involved students in testing and improving the framework by rating courses using the quality principles, and developing resources to empower other students, to help raise quality in EfS across the sector.

Its ultimate objective was to generate a flexible blueprint that could be used within the sector to help drive up quality and consistency, as more courses and universities start to integrate EfS. This approach to gauging quality sustainability learning has been informed by diverse student viewpoints and provides course teams with simple, flexible, easy to use principles for curriculum design, that they can tailor to their area.

This quality blueprint recognises entry level engagement through to deeply embedded EfS. It is adaptable to enable different applications, either at course level, or to lock a quality lens into whole portfolio initiatives, without losing sight of important thresholds for assuring students of meaningful sustainability learning.

The project process was approved by the University of Gloucestershire Research Ethics Committee to ensure appropriate measures were taken to protect student participants providing input to the project and to ensure the anonymity of courses and universities taking part in the road-testing and in the sector review.

This report summarises core project activities, findings and outcomes, and the project outputs.

2. Project Team

The project funding supported paid student roles in each of the 3 partner institutions, working alongside members of staff with responsibilities for EfS development in their institutions. The team members were:

Dr Alex Ryan, Director of Sustainability (UoG) – Project Director
Miriam Webb, Sustainability Engagement Manager (UoG)

Bea Hughes, EfS Co-ordinator and PhD student (UoG)
Professor Dilys Williams, Director of the Centre for Sustainable Fashion (UAL)
Nina Stevenson, Head of Education (Sustainability), Centre for Sustainable Fashion (UAL)
Roberta Davico, Student Team Member and Postgraduate student (UAL)
Kat Thorne, Director of Sustainability (KCL)
Alexandra Hephlethwaite, Sustainability Officer (KCL)
Katie Gard, Student Team Member and Undergraduate student (KCL)

The team held 8 meetings during the project lifecycle, including a 2-day methodology workshop to explore and develop shared understanding of the project framework and its educational and implementation issues.

The project used co-creation methodology to drive its outcomes, including:

- Appointment of paid student team members with clear role briefs into co-producer roles
- Student team members were fully involved in all meetings and led on specific workstreams
- Involvement and advice sought from national student advisers working on quality enhancement
- Students involved in all 3 institutional settings to carry out ratings and feedback on materials
- Student team members used wider student input to develop the student-facing project output
- Advice taken from student feedback to adjust the main quality framework of the project

Student team members were appointed in the first phase and contributed to all meetings and workstreams, leading on delivery of the sector review, production of training films and resources, and creation of the 'anti-greenwash education' student toolkit.

Reflections from student team members on the experience and benefits of this approach included:

"It was valuable to have the role for a student to contribute and reflect the views of other students. I feel that our students contributed more or as much as I did – I have gained valuable insights from this project and from what was discussed in our meetings with students and seeing how the evaluation of EfS can be practically implemented. It serves as a good foundation for meaningful conversations around EfS."

"Participating in a large-scale analysis of the sector was a great development opportunity, allowing me to practically engage with the content. It was also critical in demonstrating to me the importance of a defined quality standard. Students were able to provide a more thorough analysis of their course when in the context of a tangible set of principles, especially when given examples, as this prompted deeper critical thinking."

3. Project Activities

The project aimed to test and develop EfS quality principles, by working actively with students, and to design and deliver training, workshops and resources to support students to influence EfS practice.

The following core activities were carried out to support delivery of this aim:

- i. Initial consultations and input workshops with students, including student course representatives and students working in sustainability roles, to explore the principles and identify training needs.
- ii. Input from the QAA Student Strategic Advisory Committee (SSAC), to obtain views on the quality principles and project purpose, and invite members to rate their courses and feedback on materials.
- iii. Review of current sector practice on EfS integration in courses, from the viewpoint of the student EfS Co-ordinator, including 35 prominent universities active in this area and covering the work of sector charity Students Organising for Sustainability UK (SOS-UK) as well as key sustainability league tables.

- iv. Creation of the speed-learning online dashboard with [six short films](#) introducing EfS and the quality principles, with a self-practice element and template for students to ‘rate their course’ for EfS.
- v. Engagement activities at all 3 institutions to obtain student ratings and input - participation online or at F2F workshops, using the dashboard materials, all aimed to surface the perceptions of learners of the sustainability learning experience in courses. At partners KCL and UAL, the focus was on delivery of group activities to generate depth of dialogue focused on selected courses. At UoG the aim was to source a higher volume response of student ratings, to compare with ratings of the same courses by staff, providing insight into divergences between course design intentions and received learning.
- vi. Development of the online blueprint and student toolkit, including the main project website and the ‘anti-greenwash education’ kit for students, with the training materials, guidance and examples, to enable any student to gauge quality in sustainability learning and influence change for EfS in courses.

Student inputs received, from piloting the EfS quality framework, totalled 132 student testers, who rated 87 different courses, delivered at 9 different universities, providing feedback on the framework and resources.

Organisation	Reponses	Courses Rated	Institutions
University of Gloucestershire	103	65	1
UAL: London College of Fashion	16	10	1
King’s College London	7	6	1
QAA Strategic Student Advisory Committee	6	6	6
TOTAL	132	87	9

4. Findings and Outcomes

The project generated a range of positive findings and outcomes, both in terms of the testing and validation of the framework of principles for EfS quality, and the development of resources to enable its use in practice.

i) Sector review

The sector review carried out by Bea Hughes, student team lead, used a desk-based inquiry to gain an overview into the development of EfS as whole-portfolio priority in UK universities, and approaches used to assess progress in its embedding into courses. 35 prominent universities active in this agenda in the UK and Republic of Ireland were reviewed using web-based public information, with follow up emails to each to seek clarifications and confirmation of findings (22 responded – 62% of the sample reviewed).

The findings are available in the [sector review report](#).

Headline messages from the review were:

- Universities active on EfS are mainly aiming to influence all courses with this learning, but the reach and depth of this emerging practice is limited by the fact that only a few currently target compulsory learning, that will reach all students, or have aims to embed EfS into all study levels.
- Some universities have started to audit and measure progress in EfS, but the majority evidence and communicate an entry level approach. Criteria for good practice are not always clear to students, nor is the difference between taught content linked to UN Sustainable Development Goals (SDGs), often used as an entry point, compared to more complete EfS approaches embedded in course design.

- Sector initiatives and mechanisms to support and recognise EfS development, or to engage students in driving change, are not yet making quality distinctions about what constitutes good EfS practice. Confusion of concepts and terms is still a prevalent issue and most league tables are not yet focused on mainstreaming this education agenda, with the exception of the UK People & Planet league.

The 4 recommendations to the wider sector from the student perspective were:

1. Overcome confusion on what EfS is
2. Develop more unity of standards
3. Reinforce a focus on mainstreaming
4. Empower student viewpoints

ii) Quality framework

Across all settings, 74% approval was received from the students who rated courses, with regard to the quality framework proposed. 51% were entirely positive towards the principles; 23% were mainly positive but provided constructive suggestions; 25% were neutral and only 1% had critical or negative comments.

Based on qualitative feedback from all the road-testing settings, no substantial changes were advised to the existing framework of quality principles. One additional element was integrated into the framework as a result of student input, to better recognise how decolonial practice can be reflected in alignment with EfS.

Feedback from the students acting as assessors and applying the framework included:

“I think this was an effective rating system to assist sustainability learning by analysing all the major corners of a student's education, better highlighting the key issues and needs for change” (UAL student)

“The system provides a clear guide to both students and staff that can give them a clear expectation of how a course is composed to ensure sustainability and the environment are at the core of the design” (SSAC student)

Several interesting issues emerged from student feedback around the ratings criteria that, although small in volume of responses, would benefit from further road-testing at scale and in more varied settings, including:

- Potential value in refinement of the postgraduate taught criteria to reflect PG learning experiences;
- Exploration of insightful comments received about learning in optional and compulsory modules;
- Desire for deeper consideration of quality in EfS assessment practices in diverse subject areas.

More details and examples of ratings decision-making can be found in the [project website](#).

iii) Training materials

The road testing saw different modes of engagement with the framework and training, in group workshops and solo via the online dashboard. All students provided ratings and feedback through a shared template, to offer advice on how the resources could be improved for use by students and with academics.

All students providing ratings were asked how useful the tools were for insight into sustainability learning. The majority commented on having enjoyed the training, with positive comments about the contents of the training package, noting the value of the bite-size learning and digital format. Examples were:

“This helped me understand more about sustainability learning and realise that just because you take a subject related to environment does not mean you study sustainably. The use of short films helped to clearly explain the meaning of sustainability learning and how the university are approaching this” (UoG student)

“Strengths: clear and concise videos, easy to read text, structure of vids/text flow well and are logical, nice bright colours, sets the context of why quality sustainability learning is required (albeit briefly)” (KCL student)

No substantial negative comments were received and 20% of users made specific or constructive points to improve the package, focusing on wraparound materials, terminology and explanations. Student project team members proposed the inclusion of glossary items and more practice examples in the tool, to reflect the feedback and their observations of how students engaged with the material in road-testing activities.

iv) Student validation of staff ratings

Having audited its whole portfolio using the quality framework, the UoG road test aimed to understand how well student ratings based on the 'received curriculum' would align with the intentions of course designs. Piloting activities generated 103 responses and student ratings for 65 courses (27 of them from appointed course representatives). This represented 40% of the course titles rated in its 2021 stocktake.

56% of these student ratings of courses agreed with those generated by staff (where staff ratings had been concluded in dialogue between the senior academic cluster leads and course leads, and EfS expertise of the sustainability team members, agreeing the evidence and ratings against the criteria). This suggested a good overall level of shared perspective of the learning, between course design and the learner experience.

There were some interesting divergences: 23% of student ratings were more positive than those of staff, and 21% less positive – with some differences attributable to course changes since the 2021 stocktake. Looking at outliers using subject level analysis drew attention to interesting points of variation in how the criteria had been viewed (e.g. less optimistic student ratings in IT and Computing, where routine focus on energy efficiency and systems design allowed good ratings, but students' EfS expectations were higher).

Multiple students rated the same course for 21 courses and in 8 cases, ratings were consistent in multiple responses, with examples at all levels (Bronze, Silver, Gold – and 'no medal') and diverse subject areas. In 7 cases there were differences, spanning next-closest rating levels, and wider divergences for 6 courses, some due in part to variations in the perception of courses by students at different levels of study.

Overall, the level of alignment between the course ratings by staff and by students, and across different student views of the same course, suggested a positive validation for how the framework can be used with consistency, by staff and students, to support alignment between education design and learner experience.

v) Impact on Students

Students were asked if the process of rating their course changed their expectations about sustainability learning. Responses from the QAA SSAC members were indicative of the views from diverse settings. These respondents were of particular interest as the views of diverse students with wide-ranging experience of analysing processes to raise quality and to support students to influence the curriculum:

"This has made me more aware of how little sustainability is built into the learning I experienced at an UG and PG level. For all the talk of sustainability in the classroom, it has rarely if at all gone beyond surface-level input. However, the content shared as part of this project has given me a sense of excitement for the steps that can be taken by course teams across institutions to rectify this and make sustainability a key feature of all courses."

"It made me realise how even studying a topic where it would naturally embed, in a values driven University, there is still so much to be done to join the dots explicitly and go beyond intentions. It clearly defined what should be expected to meet the desired standards and how this may differ from lived experience."

The SSAC feedback was also valuable in the way these student advisers identified effectively the significant change and implementation issues that accompany EfS and how to best equip students and academics in the sector to engage in quality conversations around sustainability learning.

In the UoG cohort, 45% of students said their expectations had increased, from this high-volume response cohort that deliberately aimed to attract mainstream (not 'keen green') student responses. Examples were:

"It hadn't occurred to me how sustainability could be relevant in my field of study unless you were interested in going into environmental journalism but I think a lot of my classmates never think about these issues as they're in positions where it doesn't currently affect them. We would all benefit from this kind of education."

"This training has been really useful because it took me through every aspect of sustainability learning and now, I understand it a lot better than when I started. I plan to take this new understanding into consideration. What I would like to see from my course is more clear connections to sustainability within course modules."

vi) Impact for partners

The project partners benefitted from participation in the project to help drive their work to develop EfS within their institutions, specifically through increasing the active involvement of students in this work.

One of the important elements of this process was the development of understanding within the staff and student team about quality in EfS. Early team dialogue and learning sessions were held to enable team members to acquire insight into quality enhancement processes and to develop knowledge about the critical issues for EfS, when seeking cross-portfolio change and to accommodate a diverse spread of courses.

Evaluation comments from the staff team in the partner universities included:

"My understanding of EfS has broadened as a result – I now have a more nuanced understanding of how EfS is approached and applied in different HEIs and through the lens of different disciplines. Discussions around measuring EfS quality in courses were interesting as they offered examples of how we might approach this."

"I gained further insight into how quality is managed in universities and extended my understanding of EfS – learning about various approaches and existing practices. My thinking developed to include how students can be involved in quality of EfS – and about using that as a lever for change across the sector as a whole."

All three partner institutions identified that the positive validation of the quality framework from a student perspective was critical in securing its use to help strengthen existing EfS course development activities.

For an institution like KCL seeking to upscale EfS commitment and implementation, the framework could be used to build a next level approach to move from the mapping of SDGs to more ambitious plans for EfS.

At institutions such as UAL seeking to further strengthen and expand an existing programme demonstrating good practices, the framework could be integrated into existing policy frameworks to add a quality lens:

'At UAL, the timing of the project has aligned with an institution-wide strategic effort to embed climate, social and racial justice principles into all courses. Working with UoG and KCL has offered a sector-wide touchpoint for EfS and analysis of how our commitments might line up with other HEIs, whilst keeping student viewpoints front of mind. This research and toolkit has the potential to lever change across institutions through creating student agency and voice.' (UAL project team lead)

At UoG, the project strengthened the existing EfS programme by building in significant student perspective and validation of the approach in place to monitor progress against its curriculum change targets in EfS. The project was included in the Teaching Excellence Framework submission as an example of EfS innovation as well as successful institution-wide curriculum enhancement and student influence on course experience.

5. Project Output and Legacy

There are a range of frameworks on EfS in use within the sector, which in the UK context includes the [QAA/AHE EfS guidance](#), which now sits alongside the move to reflect EfS in all [Subject Benchmark Statements](#).

However, many institutions have yet to gain traction on mainstream curriculum adoption, often citing a lack of shared understanding of EfS, or difficulty surfacing simple usable principles that accommodate the variety of applications of EfS in different course specialisms, as key obstacles to deeper adoption of EfS into courses.

As a result, EfS development initiatives within universities and at sector level are often framed in ways that allow excess variation and do not explicitly drive quality or provide direction in how to mature this practice.

Future students might reasonably call 'curriculum greenwash' on courses that make claims to have integrated this learning on the basis of surface level approaches or that do not reflect joined-up sustainability learning.

The advice of students in this project prompts an anticipatory dialogue in the sector about where 'red lines' should be drawn so that EfS develops in ways that best equip our future professionals to lead change, rather than paying lip service to it and selling them short on the challenging, boundary-crossing learning they need.

The EfS quality principles behind this project had been applied across a whole portfolio with the involvement of its curriculum owners, to test their usability across diverse courses and ways to embed EfS.

The project has now tested and validated the framework by students, against a significant share of that same portfolio, and in other university settings. Together with the examples and guidance, this forms the core 'blueprint' developed by the project, to help drive more deliberate approaches to quality in EfS.

One of the most important elements of this package is the 'anti-greenwash education' toolkit devised by the student team members to empower any student in understanding what quality sustainability learning might mean, and finding how to influence improvements to course design and learning experiences.

Ultimately this project offers a means of holding shared dialogues at multiple levels within universities about how we can develop powerful EfS learning, whether examining qualitative examples of course level learning, or assessing quantitative data about progressive integration into whole course portfolios.

Advancing these dialogues about quality EfS, between students and staff across the sector, will be a significant step in developing sector benchmarks and meaningful metrics on EfS, that can offer more transparency for students and more dynamic opportunities for course teams to empower their learning.