

Higher Education and Education for Sustainability

Student-led Quality Review in the UK

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1. Introduction

This review was part of a project funded by the UK Quality Assurance Agency (QAA) to help drive up standards in the sustainability-related learning students receive in universities. The project [Students Driving Curriculum Quality for Sustainability](#) was a partnership of three institutions – University of Gloucestershire (project lead), University of the Arts London and King’s College London.

The project used student co-creation methodology to test and develop a way of rating how university courses integrate sustainability. Students had paid roles in each of the universities, to guide project thinking and involve their fellow students in testing the approach. As the EfS Co-ordinator student role at the University of Gloucestershire, I carried out this review of activities in the higher education landscape around the project, from a student viewpoint, to inform the creation of the project output for students.

This briefing gives a student perspective on how UK universities are approaching and measuring integration of Education for Sustainability (EfS) into courses. It recognises that as sustainability becomes part of more university courses, there will be variety in what is offered. But this may easily lead to potential for ‘greenwash’ to appear – and students need to be able to make judgements on what they are being offered.

So I explored three main aspects of student sustainability experience within this project:

1. **How universities are moving forwards on EfS** – based on a review of 35 prominent UK universities actively working on EfS, including the 3 universities in the project team.
2. **How universities are recognised for integrating EfS** – based on scoring methods in the most common leagues that students might see (People & Planet, Times Higher Education, QS and UI GreenMetric).
3. **How EfS is supported by external student-oriented organisations and public league tables** – based on the activities of charity SOS-UK that supports students to influence EfS in higher education.

The method and key questions behind the review are in section 2, main findings in section 3, and section 4 has the conclusions from a student viewpoint for the project and the sector. Appendix 1 has detail on the EfS support programmes reviewed from SOS-UK; and Appendix 2 has findings from the sustainability leagues and rankings examined for how they reward EfS.

2. Scope and Method

The critical questions for this review are about how students are seeing, experiencing and valuing learning experiences offered to them under the banner of EfS. The aim was to take a view on EfS activities that are visible in universities, e.g. for an ordinary student looking for information on EfS as part of their choice of university or course, or where they are already studying.

At its initial meeting, the project team discussed the main aim of EfS to mainstream sustainability learning across higher education – and how important it is for students and course teams to have clear sense of what this involves and what ‘good’ EfS looks like. Experiences of all the project partners in their EfS work so far - and views of their students who have been involved - led to the main issues and questions for the review:

- The need for **mainstreaming** across university courses – is the sector looking to target all courses not just typical ‘environmental’ and ‘sustainability’ subjects and to offer EfS to all students equally?
- The lack of an agreed way of looking at **quality** of course learning experiences – is the sector pushing for true EfS and is there consistency for students in the kind of learning courses are offering?

The focus was on the UK and core credit-bearing university courses in a sample of universities, not informal learning, student action projects or university change projects. The review also asked if universities offer EfS learning options outside core courses (i.e. the co-curriculum), e.g. non-credit bearing introductory courses.

This review does not give a full picture of activity across the whole sector, as many universities have yet to begin on EfS. In sampling I looked for strong performers in sustainability leagues and awards, and universities involved in noticeable sector initiatives and national expert groups on EfS. The sample of 35 universities gave coverage of the UK and Ireland, with 4 in Scotland, 3 in Wales, 1 in Northern Ireland, and 2 in the Republic of Ireland (although outside the UK, practice developing in this area was of interest to this review).

This review is part of a wider project and its scope was based in public information online, with data gathered from material on public websites. Searches were carried out on main university websites and sustainability webpages, using search terms ‘EfS’, ‘ESD’ and those terms in full – Education for Sustainability and Education for Sustainable Development. The 3 project partners are included and gave their own responses.

I sent direct follow up emails to representatives of the universities, to offer the opportunity to reply and confirm initial findings, and to share more information. 22 of the 35 universities responded (62%). This good overall response rate, and the helpful clarifications received from universities, means we have confidence in the findings as a fair reflection of the overall trends in current practice.

The project team advised on criteria used in rankings and leagues, and EfS support initiatives to consider, as well as places to find news of activities and updates on EfS (e.g. the SHED-SHARE JISC list). The sustainability league tables and assessments reviewed were those most commonly seen being used by these universities, mostly global in reach, but the People & Planet league being the exception with its UK focus.

Support initiatives I found on EfS were mainly offered by SOS-UK, an organisation students might be aware of, as they speak directly to students and offer ways to engage (e.g. their Responsible Futures scheme), as well as acting as a representative for students in sustainability across the education sector. I also explored activities to support universities led by organisations such as QAA, AdvanceHE and EAUC, but these are not so likely to reach student awareness, or directly involve them, so were not included in this review report.

3. Headline Findings

This is a small-scale review of practice and approaches in universities at the front edge of EfS and asks questions about the current state of development. The core findings show how these 35 universities, who have been experimenters and made commitments, are making headway, when seen through student eyes.

3.1 Mainstreaming – are universities setting targets to reach all courses and students?

Findings from the 35 sampled showed that for target-setting:

- **20 have set targets: 14 have an ‘all courses’ target, and 6 were less clearly defined**
- **11 of the 14 with an ‘all courses’ target had specified a date for delivery on this**
- **The remaining 15 had not set targets yet for EfS integration**

Good quality embedding of EfS means reaching all courses so this finding is positive. For those who have set a target, their ambition is in the right place for the ethos of EfS to change mainstream education.

Those targeting all courses are mainly looking to make quick progress: of the 11 with dates, 5 are aiming for 2030, 3 aiming for 2025, 2 aiming for 2026, and 1 aiming for 2027. The other 3 had not shown a delivery date.

The 6 with less clear targets, e.g. for ‘all students’, ‘all academic activities’ or ‘educational operations’, were less easy for students to understand what is planned or how it will be measured, although 3 had set dates.

Findings about the reach of their EfS plans across these 35 were:

- **29 approach EfS with leeway for courses to include it in options/any module**
- **3 have targets to integrate in compulsory modules and 3 intend to develop this**
- **2 that target compulsory learning in all courses also aim to build EfS across all levels of study**

At the early phases of EfS development, course teams often bring this learning into any module in an overall course journey. Replies stated how this is an open-minded way to encourage courses to get started on EfS in the way that makes best sense for the course and respects course team decisions on how to do this.

2 of the project partner universities are significantly more ambitious and stated that their target included an aim to get EfS into the course experience right across the levels of study, not just in one part of the course. The extra benefit of this kind of holistic approach is the professional development for students that comes from building EfS right through the journey from entry to graduation.

From the student perspective, there are questions to be asked about how important EfS is seen to be, if it isn't put into compulsory modules all students will take – and how equitable this is, when it means that only certain students will receive that learning and not others.

Findings about additional learning opportunities outside core courses:

- **12 offer an introductory course open to any student**
- **3 offer a Carbon Literacy short course to any student**

An extra step many universities have seen as important, is to offer an entry point or ‘co-curriculum’ learning for students whose courses may not yet be delivering EfS. These were mainly described as introductions to sustainability or focused on UN Sustainable Development Goals (SDGs) specifically. I struggled to find details online regarding the uptake and interest levels for students, and very few had set targets for this.

For some universities this may be part of an approach to begin embedding into core curriculum: as 2 of these are credit-bearing and 3 stated they will be credit-bearing in future. One danger of entry level experiences is it might leave course teams feeling EfS is ‘covered’ and they do not need to further build it into the course – leaving students trying to join the dots on how sustainability links to what is studied in their subject area.

The trend to offer carbon literacy training is not surprising with the rise in attention to the climate emergency and energy crisis, and these opportunities give students another way of beginning sustainability learning if courses are not yet developing EfS. But it runs the same risks of leading attention away from mainstreaming into courses and confusion about differences between carbon literacy (sometimes called 'climate education') and EfS, which offers a wider learning perspective on more multi-faceted sustainability issues.

3.2 Quality – are universities developing and monitoring an authentic EfS offer?

Findings about how the sample of 35 define and measure EfS:

- **29 are measuring EfS as single issues or single SDGs in the teaching content**
- **9 of these do encourage a deeper EfS approach but do not require or measure it yet**
- **Only 2 universities have an approach to measure EfS in course design and pedagogy**

A stand-out trend I identified was the finding that when talking about their EfS work, most universities are looking at how teaching content matches the topic areas of the UN Sustainable Development Goals (SDGs). In these cases, universities set what 'counts' as EfS at a minimum of content or issues related to 1 SDG.

The SDGs can be a starting point on sustainability, but degree subjects will inherently have links or references to such issues, even without any EfS going on. The SDGs can be criticised for not truly reflecting sustainability 'systems thinking' and for gearing learning around a certain political agenda or ideology. Another issue is that the SDGs have a large set of indicators measuring specific aspects in defined ways, for global level reporting. They do not always easily map onto university learning, where complex issues are not so easily boxed and might be using other sustainability progress indicators at different levels e.g. local community impact.

It was the majority – 83% of this sample – that allow teaching on single SDG content to amount to inclusion of EfS. This message is being sent to students about what EfS is, but I would argue that universities have a responsibility to better demonstrate the interlinks and 'systems thinking' approaches of EfS pedagogy.

Findings about auditing activities to date in EfS:

- **19 have audited all their courses in the past 5 years to see progress on EfS integration**
- **12 of these 19 audit UN Sustainable Development Goals (SDGs) in taught content**
- **Only 2 of the 19 monitor EfS in course design not just taught content**

It is positive to see universities starting to assess their progress and 54% had done at least one audit in the past 5 years. Some had audited 1 or 2 Schools, 9 had no sign of audit yet, and several had audited but methods were not clear. The main approach to auditing is around SDGs, rather than a complete approach to EfS. It may be that SDGs are easier to define, but it blurs the difference between SDGs as a first step and true EfS.

It was also obvious that the majority use an audit method based on searching for keywords in the course descriptions, which can be seen as more of an ambition statement, linked to course marketing, rather than the reality of what is taught on the ground. Unfortunately, this can make for an imperfect indicator as it is may not be reflective of what actually happens in the course or the learning students are actually receiving.

Not all audit method details are available publicly, so it is worth suggesting that some may go further, e.g. building EfS into assessments. 4 of those using an SDG approach stated they look at learning outcomes or skills, not just taught content, and 2 universities are developing more sophisticated ways to measure EfS.

These results underline how few universities currently have evidence of an authentic EfS course design approach, so good practice is visible to students. The majority are communicating an entry level approach to sustainability in the curriculum, mainly in terms of taught content linked to UN SDGs.

3.3 Initiatives and Recognition – how is EfS being supported in the wider sector?

The initiatives in the wider higher education sector were analysed for principles, strengths and weaknesses, around the key issues of mainstreaming and quality of EfS. See Appendices 1 and 2 for the details.

Key findings on support initiatives for EfS:

- With SOS-UK, EfS services offered are fee paying, so universities take the role of customer and can essentially dictate what they want. The drawback is this may not be comparing 'like for like' on definitions, audit methods and trainings for student auditors, which are bespoke to the institution.
- SOS-UK programmes also appeared to use a wide range of terms and this may be adding confusion. The terms EfS, SDGs, sustainability, Climate Education, Climate Literacy, were all featured in their communications and initiatives, without spelling out the differences or being consistent.
- As a prominent voice, SOS-UK have potential to help push EfS forward, but bespoke approaches in the services on offer and different experiences universities can have under their guidance, could lead to furthering the inconsistencies around EfS as it is understood across the sector.

Findings on league tables and EfS:

- The UK focused People & Planet league was found to be the only league scoring the mainstreaming of EfS into university education – but in recent years this league formula has slightly devalued the weight of this section, against the weight given to more operational issues, which is disappointing.
- None of the international leagues currently score EfS in any way – some give scores for specialist sustainability courses, but the definitions are relatively meaningless (i.e. any university could put up an example that gains the score) and this approach sends counter-messages about mainstreaming.
- The SDGs are featuring in international leagues but mainly in scoring for research – drawing scoring weights towards research measures, often on single SDG issues, and essentially drawing attention away from education and the aim of EfS to achieve mainstreaming into courses.

4. Conclusions

EfS – as it says in UK guidance produced by QAA and AHE in 2021 – is more than teaching specialist knowledge or isolated issues, and instead aims to build change skills for graduates in different careers and as members of society. Building it into core learning and assessments is the key to unlock this potential.

The heart of this report and points within it need to be seen through student eyes. Findings about definitions of different kinds of sustainability learning, about course descriptions rather than real course experiences, are critical for universities to make EfS embedding really valuable in ways that will benefit students.

Avoiding 'curriculum greenwash' in the sector, as more universities begin their journey to embedding EfS, is an important issue for universities to start thinking through in how they go about this journey. The review has underlined how important understanding and consistency is for students, when developing EfS in courses – and some of those who replied noted that this is also key when offering training to academic teams.

Four key recommendations are clear from the review:

4.1 Overcome confusion on what EfS is

This analysis highlighted the inconsistencies that come from a 'bespoke' approach to EfS, which can lead to general weakness across the sector, through a lack of multi-faceted understanding that links environmental, social, economic, and cultural pillars of sustainability (instead of individual SDG identification). If the aim is 'true' sustainability learning in the curriculum, being too broad and inclusive on EfS can lead to missing the importance of shared understanding and ways to compare and develop good quality learning.

Although SDG mapping is a useful introductory approach for universities at the beginning of their journey, only focusing on teaching content can mean students missing out on crucial sustainability skills they need to bring with them into their future careers. And the SDGs as a system of keyword identification measurements across a curriculum database doesn't evidence graduate empowerment, as it would in true EfS learning.

Assuming that labels like SDGs and EfS and sustainability are interchangeable is adding to confusion around these terms, which are unfamiliar to many students and academics. Not having shared ways of speaking about EfS or use of terms in the sector is confusing for both students and course teams.

4.2 Develop more unity of standards

From a student-focal viewpoint, it seems absolutely necessary to have reference points that are understood to offer thorough, measurable understanding of what good means for EfS learning, and to help benchmark universities throughout the UK. The national QAA/AHE guidance has picked up the message about true EfS, but there is still a wide range of interpretation and confusing interpretations on the ground in universities.

This is important for empowering students to understand this new learning and how to partner with course teams to build strong relevant learning in. The quality issue is critical for consistency, for students to orientate around and be able to make judgements even before starting a course or knowing much about EfS.

4.3 Reinforce focus on mainstreaming

The review shows the good start being made by many institutions, and supported by SOS-UK, but greater clarity about 'big picture' goals, and stronger focus on hitting the core learning experience, would add power to how EfS develops in the sector as an education issue of primary importance.

There are counter-narratives to mainstreaming in most league tables, as a university can currently 'be top' in most of the leagues examined, without doing any EfS at all. Education weightings, against other areas, could be increased, and scores for having data on EfS in courses would be ideal. This would give greater clarity for students in how the embedded education experience is directly interlinked within these global leagues. University positions in leagues can send big signals on a wider scale, so it is critical that in future the leagues look for quality EfS that equips graduates to go on to create impact for sustainability professionally.

4.4 Empower student viewpoints

To empower means inform as well as involve – collaboration with students to familiarise on what strong EfS really means and what it can look like and lead to (the value it brings) will be an important step. It opens up ways for them to collaborate with academics to bring about change and to influence what they are offered.

Student voice and action in itself is not powerful enough without the development of their own expertise, e.g. if an SOS-UK student auditor only audits for SDGs as single issues, some potential will be wasted on pushing for low level learning - which may not have the buy-in of academics seeking deeper approaches. The need is to equip students (and academics) to understand what matters in a university EfS experience – and to do this by seeing EfS through the eyes of learners, not just frameworks devised by universities.

Appendix 1 – EfS in SOS-UK Initiatives

Initiative	Principles Used	Review Findings
Responsible Futures (SOS-UK)	<p>Bespoke criteria, but no clear, demarcated definition of EfS that will be shared by all student auditors, potentially leading to inconsistency.</p> <p>SDG mapping used, but alludes to 'wider sustainability learning'. No further details, and unclear terminology. Historic SOS-UK literature to engage with course content has SDG focus not EfS.</p> <p>Students are involved as auditors working in partnership with staff.</p>	<ul style="list-style-type: none"> • No quality reference points within the criteria – so no consistency of measurement for accreditations across multiple universities. EfS evidence can be interpreted in different ways. Institutions could overlook holistic EfS in favour of limited, single-pillar aspects that 'tick boxes' in the learning given to students. • The 50 criteria in use are 'not prescriptive', or visible on public forums, so 'true' EfS content is unclear. RF seems to largely score processes rather than curriculum changes. • Framework used to train student assessors also not available for public access – some focus on students' own experiences but unclear if students have the same criteria or approach when assessing courses for EfS.
SDG and ESD Curriculum Mapping (SOS-UK)	<p>Student-led audits supported by 3-hour training workshop. Scope of audit determined by institution in approach and reach across courses.</p> <p>SDG measurement either by module documents or student experience. EfS 'methods and pedagogies' mapped, and ranked 'No, Yes – A little, Yes – A lot'.</p>	<ul style="list-style-type: none"> • QAA/AHE guidance referenced for EfS 'methods and pedagogies' but these are determined by institution audited – so no precise shared reference point. Leads to inconsistencies - phrases 'a little' or 'a lot', mean results will be subjective and variable. • Additional measurements - 'None, Some, Significant, and Substantial' - but with the university setting its own values and ideals as 'additional criteria' if agreed in advance of audit. Framework to train students for auditing EfS is not available for public access.
ESD Changemakers (SOS-UK)	<p>Co-creation approach with students and staff. Aims to align with 2021 QAA/AHE EfS Guidance on curriculum incorporation and link EDI & EfS.</p>	<ul style="list-style-type: none"> • Outputs unmeasured – no % measurable attainment goals for curriculum integration. • Emphasis on 'democratising, decarbonising, and decolonising' in teaching but as in the wider sector, precise links not always clear.
Learning Academy (SOS-UK)	<p>Breadth of topics covered in Learning Academy events - can all be taken, or universities can 'cherry-pick'.</p>	<ul style="list-style-type: none"> • Multi-pillared sustainability understanding, but topics separated into different options, so it may lack cohesiveness. Some workshop content is adaptable so no guarantee of consistency. Course reps session focuses on own course so may lack a wider all courses view. Some variable uses of terms.

Appendix 2 – Sector Rankings and EfS

Initiative	Principles Used	Review Findings
<p>People and Planet University League (UK)</p> <p>(performance league table ranking all universities in the UK)</p>	<p>Methodology questions on 14 sustainability criteria – Education is 1 of 14 and EfS development is scored within this section.</p> <p>Scoring information on this section gathered from public information on the respective university’s website.</p> <p>Students are assessors so able to make judgements and based on shared training and clear criteria.</p> <p>Uses ‘signposts’ to Responsible Futures Accreditation, Future Fit Framework, and QAA EfS guidance as reference points for how EfS is understood.</p>	<ul style="list-style-type: none"> • Education has 9% score weighting out of total 100% on measurable criteria – third highest, but its weight was dropped from 10%, despite being a core university activity. Ranked below Carbon Reduction (15%), and Environmental Auditing & Management Systems (10%). • Emphasis on EfS needing to be ‘proactive in mainstreaming across the curriculum’ to qualify for scoring, not single courses or departments. • No criteria to score whether EfS is being integrated into courses or modules - staff-focal scores such as training and capacity building. Lack of shared definition of what universities are calling EfS/ESD in order to get these scores. • Looks for currency – policies and activities must be up to date in the last 5 years to gain scores.
<p>Times Higher Education Impact Rankings (international)</p> <p>(opt-in performance league table)</p>	<p>Rankings based purely on SDG coverage across broad areas of research, stewardship, outreach, and teaching.</p> <p>Deliberately attempts to use indicators that can support universities in all global regions to score well (not just elites or those from the ‘global north’).</p> <p>Mandatory scoring on partnerships goal, giving emphasis to this area. Then options to choose ‘best’ 3 SDGs to be scored in the ranking.</p>	<ul style="list-style-type: none"> • In-depth methodology for measuring performance on each SDG, including research, practical application, policy evidence, student involvement. Research publications scored on each criteria, giving weight to research in overall score. • Use of only 4 SDGs to build the score is an opportunity to focus selectively on the positives and single issues, rather than joined-up sustainability contributions from universities or a ‘mainstreaming’ encouragement in how scores are given – instead reinforces partial responses. • No sign of dedicated scoring for EfS - suggesting no priority is being given to this or to mainstreaming sustainability in education and courses.

<p>QS World University Rankings: Sustainability (international)</p> <p>(opt-in performance league table)</p>	<p>Sustainability is a new score area for 5% in this mainstream ranking. This has 2 categories: environmental impact and social impact. Each category worth 50% weighting.</p> <p>Operational policy (e.g. net zero carbon) scored as well as educational and academic activities.</p> <p>EfS is not defined but research features strongly in scoring, using the labelling of SDG topics on publications.</p> <p>Must have evidence of a research culture aligned with SDGs, with minimum threshold for environmental and social impact categories.</p>	<ul style="list-style-type: none"> • Education is in the environmental impact category as 20% of this score, the largest weighted category within subsidiaries. • Impact of education is weighted separately in social impact category, split from employability and opportunity, knowledge exchange, etc. These categories overlap and separation devalues the importance of the lesser weighted areas. • Inclusion of sustainability in this mainstream league signals integration, but lack of EfS score is missed opportunity to mainstream sustainability into education/courses. • Opposite (non-mainstreaming) message is being sent as scores are available for having a course on a sustainability topic. • SDGs as basis for measurement on research publications.
<p>UI GreenMetric (international)</p> <p>(opt-in performance league table)</p>	<p>Education and Research (added in 2012) weighted 18% out of 6 criteria, that include 39 indicators overall.</p> <p>Universities submit own evidence including descriptions and document evidence to calculate ranking.</p> <p>No EfS criteria or explanation – sustainability ‘keywords’ suggested to determine a sustainability course, with no further depth.</p>	<ul style="list-style-type: none"> • Education and Research indicators consider ‘ratio of sustainability courses towards total courses’ – silo approach for specialised courses, the opposite message to mainstreaming. This indicator area is weighted 16.6% – meaning this course measure is only 3% of the overall weighting. • Definition of a ‘sustainability’ course can be ‘defined according to (each) university situation’ - meaning there is no standard consistent definition. • Emphasis on courses ‘offered’ - meaning an optional or less studied course is rated the same as compulsory sustainability learning.