

# Sustainability in College Learning and Teaching

Research report summary



## Executive summary

Colleges play a crucial role in equipping people and communities with the knowledge and skills we need. In a world of accelerating social and environmental crises, this includes learning for sustainability, so we can reach our ambitious targets for people and the planet. However, little is known about sustainability in college learning and teaching in Scotland.

This research explored the current status of sustainability in college learning and teaching, as well as barriers, opportunities, and the most impactful actions to advance sustainability. Using a mixed-method approach, key findings from our engagement with 15 Scottish colleges include:

- **Measuring sustainability in learning and teaching** requires holistic approaches that include collaboration, training and qualitative methods.
- **Current status:** While there are strong examples of teaching staff integrating sustainability into their practice, these are often pockets and require more support for sustainability to be embedded in learning and teaching in colleges. Which sustainability aspects are integrated more or less strongly depends on the subject area, but data suggests that especially environmental and economic sustainability aspects such as biodiversity, global supply chains and net zero require more support. Findings also indicate that sustainability aspects are more likely to be addressed in learning and teaching activities than in assessment.
- **Barriers:** Competing priorities and a lack of explicit sustainability content in qualifications present some systems wide barriers. Within institutions, lack of supportive structures, lack of capacity of teaching staff, and knowledge gaps on sustainability in learning and teaching are major obstacles. This is further exacerbated by an often limited understanding of sustainability as well as a lack of quality training and resources.
- **Opportunities and drivers:** Staff, students and leaders can be powerful drivers of sustainability, especially when supported by supportive institutional structures. There is evidence that student and staff develop positive attitudes towards sustainability where relevant and engaging learning opportunities on sustainability and LfS/ESD are provided. Changes to qualifications and government priorities have the potential to be significant enablers of sustainability in learning and teaching increasing in breadth and depth.
- **Impactful actions and recommendations:** To advance sustainability, impactful actions include empowering students and providing resources and professional development for staff that build on existing internal approaches. Importantly, top-down institutional structures must support this, for example through explicit recognition and prioritisation of sustainability, both in strategy and in practice. Quality assurance processes also have the potential to play a significant role in supporting sustainability in learning and teaching, highlighting the role of sector bodies and qualification authorities. Collaboration between institutions, organisations and industry, adequate funding and further mixed-method research are key to enable progress.

**What can you do now?** Whether you work in policy, a sector organisation, industry, or are a lecturer, manager, senior leader or student: use the findings from our research to identify the most impactful actions for your context. There are challenges - but together, we can turn ambition into impact and ensure college education leads the way to a better, sustainable future for all.

## How to use this document

This document provides an overview of the premise, results and recommendations of our research. We recommend exploring the contents and findings listed in this summary document and refer to the respective sections in the full report for further detail. The [full report can be found on our website](#).

If you have any questions or comments, please do get in touch with us by emailing [info@eauc.org.uk](mailto:info@eauc.org.uk).

## About the EAUC



The Environmental Association for Universities and Colleges (EAUC) is the leading body for sustainability in the post-16 education sector in the UK and Republic of Ireland. We have been promoting sustainability, which we see as a holistic concept encompassing social justice, environmental integrity, and economic viability, in universities, colleges and other post-16 education providers for over 20 years. Primarily a membership body, we serve 300 organisations whilst also working to change systems that enable sustainability action. We promote holistic whole organisation approaches where leadership and governance, estates and operations, teaching and learning and collaborations are all actively driving sustainability so that we are equipping learners for their lives, being responsible organisations and shaping society for the better.

Since 2012, our Scotland branch consists of a dedicated Scotland team funded by the Scottish Funding Council (SFC). Since 2021, the Scotland team has a staff member specifically focussing on sustainability in learning and teaching, which has allowed us to provide more targeted support for teaching staff, and therefore enabled us to conduct this research.

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# Part 1: Setting the scene

## 1 Introduction

In a time of accelerating environmental and social challenges, a key solution for creating a more just and sustainable world is education that centres around sustainability (e.g. [UNESCO, 2024](#)). Existing research on sustainability in education is often focussed on schools and universities, while there has been limited exploration of college learning and teaching contexts. However, colleges play a pivotal role in shaping communities and equipping individuals - almost 250,000 people in Scotland and nearly three million learners in the UK every year - with the knowledge, skills, and behaviours necessary to address global issues.

This report, funded by the Scottish Funding Council (SFC) under the [2024/25 EAUC Scotland Outcome agreement](#), takes important steps to fill this knowledge gap on sustainability in college learning and teaching. It explores current progress and gaps, barriers and opportunities for sustainability in learning and teaching, and aims to provide actionable recommendations for enhancing sustainability in college education. It is written for key stakeholders in the education sector, including funding and quality assurance bodies and support organisations, as well as staff, college leaders, and students.

## 2 Learning for Sustainability and Education for Sustainable Development

Approaches to education for a more just and sustainable world include Learning for Sustainability (LfS) and Education for Sustainable Development (ESD), which are the two most commonly referenced sustainability education frameworks in Scottish further and higher education.

**LfS** is defined as a “cross-curricular approach which enables learners, educators, learning settings and their wider community to build a socially-just, sustainable and equitable society; and as an effective whole-setting approach which weaves together global citizenship, sustainable development and outdoor learning to create coherent, rewarding and transformative learning experiences.” ([Scottish Government, 2023](#))

**ESD** is defined as empowering “individuals to make informed decisions and take action, both individually and collectively, to change society and protect the planet. It equips people of all ages with the knowledge, skills, values, and ability to tackle issues such as climate change, biodiversity loss, overuse of resources, and inequality that impact the well-being of people and the planet.” ([UNESCO, 2024](#)).



## Indicators of quality: How we operationalised LfS/ESD

While LfS and ESD need to be adaptable to diverse educational contexts, clear indicators on what quality LfS/ESD looks like in practice are needed to evaluate practice. Thus, we have synthesised the following indicators of quality LfS/ESD from widely used guidance documents, enhancement projects, and academic papers. These include but are not limited to, [QAA and Advance HE ESD Guidance, 2021](#); [QAA Collaborative Enhancement Projects, 2023](#); [Christie and Higgins, 2020](#); [Vogel et al, 2023](#) - for a full overview of sources used, refer to the [full report](#).

**Overarching indicator: A whole institution approach.** Sustainability forms a golden thread across the 'four Cs': curriculum, campus, community and culture. This enables collaboration and co-benefits for learners, staff, and wider stakeholders.

**Curriculum indicator 1: Addressing sustainability holistically.** Sustainability is addressed in ways that recognise and emphasise the interconnectedness of social, environmental, and economic sustainability aspects, rather than tying sustainability to siloed environmental or social issues.

**Curriculum indicator 2: Engaging head, hands and heart through teaching and assessment methods.** Teaching and assessment methods support the development of sustainability knowledge, skills, values, attitudes and behaviours (agency) - often summarised as sustainability competencies.

**Curriculum indicator 3: Positioning sustainability as an integrated part of learning and teaching, not an add on.** LfS/ESD is woven into content, teaching methods and assessment, highlighting the relevance of sustainability to the respective subject area - going beyond siloed approaches and one-off learning activities.

**Curriculum indicator 4: Including connections to learners' personal and professional lives.** Learners and staff are inspired and enabled to take action to contribute to sustainability in their personal as well as professional lives.

These indicators guided how we approached this research and evaluated our data. They also provide a foundation for actionable recommendations aimed at improving sustainability integration in teaching and learning.

## Examples of effective practice

Some examples of integrated LfS/ESD approaches that meet many or all of the above indicators include:

**UHI Moray's Under the Scissors project:** future hairdressers were trained to have conversations about climate change and climate anxiety with their clients.

**City of Glasgow College's Smogware project:** Students integrated 'dust' resulting from transport emissions into ceramic designs, raising awareness of air pollution and impacts on health.

**CECA Academy:** A partnership programme to develop civil engineering skills - key for a greener infrastructure - with no entry requirements and addressing wellbeing alongside technical skills.

## 3 Scottish Colleges and LfS/ESD

Scottish colleges, with 24 institutions across 13 regions, are vital educational hubs, delivering 68 million hours of learning to nearly 250,000 students annually. They play a key role in supporting Scotland's economy and are central to advancing environmental and social goals such as net zero targets and accessibility and inclusivity of education. However, financial pressures, reduced funding, and staffing challenges are increasingly affecting colleges' ability to meet these demands.

### **Drivers of LfS/ESD and green skills**

Several policy initiatives have developed to address the integration of sustainability into Scottish college education in recent years. Key frameworks include the General Teaching Council for Scotland's Professional Standards for College Lecturers, Scottish Funding Council's Outcomes Framework and Assurance Model, and the NextGen HN qualifications by the Scottish Qualifications Authority, all setting out sustainability as an important part of college teaching and operations. Additionally, the importance of green skills is highlighted in various national policies and strategies for net zero. While green skills are often viewed through a technical lens, LfS/ESD offers a broader, interdisciplinary approach to developing critical skills like communication, behaviour change, and diversity, which are essential for achieving net zero goals.

### **Existing Research on LfS/ESD in colleges**

Studies and reports on LfS/ESD in Scottish colleges are rare, with most research focusing on schools or universities. Existing reports include the College Development Network Workforce report in Scotland and the Education and Training Foundation's findings in England. These highlight the relevance of LfS/ESD to learners, but also point to significant barriers, including a lack of time among teaching staff, inadequate training, and lack of sustainability in curricula and qualifications. While these studies provide a useful high-level overview, quantitative methodologies are limited in their ability to address specific challenges within the college sector. The current research thus aims to further explore barriers, opportunities, and practices to better understand causes and effects.

## 4 Methodology

The research design combined qualitative methods (in-depth interviews, focus groups, and workshops) with quantitative elements (a baseline pilot survey to explore the possibility of assessment of baseline of LfS/ESD, and a post-workshop survey). The study engaged 123 participants from 15 colleges across Scotland, through a purposeful sampling strategy targeting a range of lecturers, professional development staff, managerial staff, college leaders, as well as a small group of students.

Interviews and focus groups took place in May-July 2024, followed by workshops in August 2024. The workshops were designed to address knowledge gaps, which emerged from interviews as a key barrier to LfS/ESD. As part of these workshops, participants responded to a baseline pilot survey assessing how they integrated sustainability topics into teaching practice, as well as a post-workshop survey. Quantitative data from these surveys helped to gauge integration of sustainability topics in teaching, while a thematic analysis of the qualitative data revealed key barriers, opportunities, and areas for intervention, providing a deeper understanding of the contextual factors influencing LfS/ESD practices.

## Part 2: Findings and recommendations

### 5 Baseline: Indications, trends and initial insights

#### 5.1 The limitations of quantitative approaches: Why a reliable baseline is difficult to measure

Without training on sustainability and LfS/ESD, quantitative baseline measurements are at risk of being unreliable. This was evident in the baseline pilot survey that asked staff about integration of sustainability aspects in their practice: 66% of staff indicated that their responses would change if they had received training before filling in the survey.

**66%** of respondents would change their answers to a sustainability baseline survey after receiving training on LfS/ESD.

Additionally, solely quantitative assessments risk accidental 'greenwashing', where superficial integration of siloed sustainability issues is inaccurately portrayed as having achieved quality LfS/ESD ([see indicators](#)). A focus only on sustainability content that is common to quantitative assessments further diminishes the accuracy of measuring

quality LfS/ESD, as these methods fail to assess how learners develop skills, values, and behaviours for sustainability. Therefore, a qualitative approach that includes staff training, dialogue, and observation is essential for accurately assessing quality LfS/ESD and avoiding misleading conclusions. To account for this complexity, baseline findings in this report combine quantitative and qualitative results.

#### 5.2 Limited understanding of sustainability can affect visibility and quality of LfS/ESD initiatives

Understandings of sustainability that limit the concept to a small set of environmental issues can result in progress on LfS/ESD to be overlooked when asking college staff about their involvement with sustainability. Simultaneously, an overemphasis on a single pillar or issue of sustainability (e.g. only social issues) can lead to an overestimation of a college's integration of LfS/ESD when the addressing of one siloed issue is perceived as sufficient progress towards LfS/ESD.

#### 5.3 Pockets of LfS/ESD practice can be found across colleges and subject areas, but there is a need for more support to develop quality LfS/ESD

There are great examples of emerging or established LfS/ESD approaches to be found scattered across likely all colleges and most subject areas. However, disjointed examples also highlight how LfS/ESD is rarely consistently integrated and prioritised. As addressed above, the visibility and quality of these pockets depend on the depth of understanding of sustainability and LfS/ESD.



“I think there's lots of pockets of really good practice going on that have possibly come from individuals who want to embed that, but I think there's still a cohort of people for who it's just not on the radar” – Lecturer in Supported Learning with responsibility for professional development.

#### **5.4 The three pillars: Indications for the most and least addressed environmental, social, and economic sustainability aspects**

Quantitative survey results from 53 survey participants indicate that across all subject areas, social, environmental, and economic sustainability aspects are addressed to varying degrees. On average, social sustainability aspects are likely to be more prevalent in learning and teaching than environmental or economic sustainability aspects. Overall, biodiversity was the sustainability aspect that was reported as least frequently addressed, while the aspect of physical health, mental health and wellbeing was reported as addressed most often. Respondents asked for more support most often on the economic sustainability aspects of ethics and accountability as well as on globalisation and supply chains, followed closely by the environmental aspect of net zero and decarbonisation.

#### **5.5 The integration of sustainability aspects varies between subject areas**

Comparing how different subject areas address sustainability, our data suggests that subject areas that overlap with net zero sectors appear to integrate environmental sustainability aspects more consistently than social and economic aspects. Other subject areas vary, with pockets of progress mostly driven by passionate individuals (see [full report](#)). Many initiatives focus on siloed sustainability aspects and will benefit from more support to connect issues and evolve further into quality LfS/ESD.

#### **5.6 Sustainability aspects are more likely to be addressed in learning and teaching activities than in assessment**

6% of respondents reported addressing no aspects in **learning and teaching**  
51% reported addressing no aspects in **assessment**

Our survey indicates that the integration of sustainability aspects is often stronger in learning and teaching activities than in assessment. However, integrating LfS/ESD into both is important to increase the impact on student learning, as LfS/ESD guidance and literature highlight. Data also suggests that sustainability is addressed more thoroughly when it becomes part of assessment.

#### **5.7 Teaching methods that support learners' sustainability skills and values development require more support**

Our data suggests that teaching methods that engage head, hands and heart are not yet widely embedded in college learning and teaching. Interviews and previous research indicate there may be a lack of familiarity and confidence around innovative pedagogies that move away from methods that centre the teacher and cognitive aspects. New qualification models such as [NextGen HN](#) with a strong focus on project-based learning could be an important further step towards mainstreaming innovative pedagogies. However, educators need to be adequately supported and trained to achieve this and connect these methods with sustainability.

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“How do we change, because in accounting, a lot of the lecturers are still paper and pen, you know, sit down and write it all out, even reports. (...) NextGen HN is all sort of project based, rather than old fashioned teaching kind of ways. This is scaring a lot of people.” – Accounting Lecturer

#### **5.8 Social sustainability is strong in college operations, but less often explicitly integrated in curricula**

While social sustainability is strong in colleges, there is still much potential to connect this to the curriculum as well as environmental and economic sustainability aspects. This could enhance both student learning as well as institutional effectiveness in tackling social issues, and performance against social key performance indicators.



## 6 Barriers: What stands in the way of LfS/ESD in colleges

### 6.1 Systems level barrier: Competing priorities for colleges

Sustainability in learning and teaching (but also in operations) is frequently pushed down the list of priorities in the face of competing demands - unless it is actively supported through explicit and systemic prioritisation, which includes adequate funding, and/or is part of qualifications and therefore mandatory to address.



“Sustainability is a topic, unfortunately, that’s probably the one near the bottom of the list when things get tight, whether it’s time, whether it’s resources.”

– Head of Computing and Humanities

### 6.2 Systems level barrier: Lack of sustainability in qualifications

When qualifications are not flexible enough and do not include sustainability, this can pose a significant barrier for the integration of quality LfS/ESD across subject areas and curricula. However, requirements in qualifications and policy drivers for sustainability or LfS/ESD must be paired with adequate support for staff.

### 6.3 Institutional level barrier: Need for more coherent institutional support structures and culture for LfS/ESD

Incoherent, inadequate, or inaccessible support from institutions can present a major barrier for the integration of LfS/ESD. To enable a more consistent integration of quality LfS/ESD, staff must be supported through LfS/ESD being a part of institutional values and strategies. Importantly, these must translate into corresponding institutional structures that enable recognition of those already working to integrate sustainability, incentivisation for further efforts, best practice sharing, and access to resources and training. An explicitly supportive institutional culture is essential to support all staff, from LfS/ESD pioneers to those at the start of the journey - [see our recommendations for impactful actions](#).



“I said to the vice principal, I am passionate about sustainability. I want to be involved. Can you involve me? And she was just like, yeah, we'll let you know. So then I'm like, you know, what's the point? (...) It's never been, here's what we're working on as a college around sustainability. (...) It's just not a priority. And then there's no praise for actually doing well, either.” – Business Lecturer

#### **6.4 Practitioner level barrier: Overwhelm, lack of time, and lack of capacity**

Many teaching practitioners are overwhelmed with a highly complex workload, which is mostly driven by factors such as staff cuts and thus higher student numbers per lecturer and increased student support needs. This adds to the already tight timelines for teaching, further stretched by various requirements to meet in addition to teaching hours such as reporting, mandatory CPD, etc. The resulting lack of capacity and time, as well as impacts on mental health and creativity, emerged as a key barrier for many lecturers to integrate LfS/ESD. While we also see that lecturers who are passionate about sustainability still find ways to integrate it in their curriculum, the high levels of overwhelm many lecturers face must be acknowledged to tailor support and enable more teaching staff to integrate sustainability into their teaching.

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“Lectures are so stressed and overwhelmed, overworked at the moment. When I look at my team and you know, you're asking them to do just one, one more thing. Just one more thing, one more thing. And they really don't have any time to do anything and it's really difficult in this landscape” – Head of Applied Arts

#### **6.5 Practitioner level barrier: Lack of knowledge on sustainability and LfS/ESD**

A lack of knowledge on sustainability aspects is a significant barrier for staff. It likely stems from not having received training or resources that support an enhanced understanding. A lack of knowledge can stem from - as well as further reinforce - a lack of capacity and low prioritisation, as addressed previously. Low knowledge on sustainability and LfS/ESD (including its relevance and benefits, and how some aspects may already be addressed) may lead to fear of the unknown and of change. This fear is further heightened by the lack of capacity to imagine things differently.

#### **6.6 Cross-cutting barrier: Understanding of sustainability as environmental-only**

Staff and leadership alike often have a limited understanding of sustainability as only encompassing a few specific environmental aspects. This presents a barrier to practitioners as they may struggle to see how sustainability issues are interlinked and relevant to their practice. Limited understanding also may be a factor in explaining the lack of coherent institutional structures that enable quality LfS/ESD, as those who influence these structures may not see the relevance and benefits of LfS/ESD.

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“I think there's a long way to go before people have any further understanding other than, but they told me not to print stuff on the photocopier, you know.”  
– Lecturer in Supported Learning with responsibility for professional development.

#### **6.7 Cross-cutting barrier: Quality and offer of resources and training**

While a significant amount of resources exists for school teachers and university academics, there is a lack of accessible, high quality training and resources on sustainability and LfS/ESD for college teaching practitioners as well as managers and college leaders. This is hindering progress across all levels of a college. Addressing this lack would simultaneously address multiple other barriers and may unlock support for LfS/ESD.

## 7 Opportunities and Drivers: What enables LfS/ESD in colleges

### **7.1 Staff and leaders can be drivers of sustainability action - especially where institutional culture supports this**

Individual interest and personal commitment often drive innovative integration of sustainability into curricula, while supportive senior leaders can amplify these efforts through advocacy and strategic prioritisation. This is happening across the sector despite the presence of many barriers. Both the interest in sustainability, as well as the impact passionate individuals have, is not to be underestimated. This is further enabled through a supportive institutional culture.

### **7.2 Awareness of sustainability among the public and college students and staff is increasing**

Our data suggests that interest in sustainability and awareness of its importance are generally increasing across staff and students, as well as among businesses and in employer demand. While more awareness is needed, an important finding from this research is that positive attitudes towards sustainability increased where relevant and engaging learning opportunities on sustainability and LfS/ESD were provided.

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“So I think that's our kind of clientele, that kind of young group that is likely to come to college, they are more aware of [sustainability] and looking out for things like that in businesses, or within the college.” – Head of Care, Education and Maths

### **7.3 Students as current and future drivers**

Our data provides insights on how students' attitudes towards sustainability become more positive when they are engaged in quality LfS/ESD that allows them to connect to sustainability in a meaningful way. While more research is needed on the effect of LfS/ESD on college students, first insights suggest LfS/ESD in the classroom can also lead to an increased motivation for sustainability action if opportunities for this are available. Staff interviewees also shared how there would be much opportunity for students to be drivers of sustainability and LfS/ESD if supportive structures for this are put into place.

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“It was an eye opener, to be honest with you. I mean, all these issues, what's happening, and basically I'm to blame for as well. I'm part of it. (...) I mean, [a unit on sustainable development] should be basically done every single year, since NC five or NC six” – Anna, business student, after participating in a unit on Sustainable Development as part of her course

#### **7.4 Collaboration among various stakeholders is a powerful driver and enabler**

Various examples of partnerships between colleges and with industry, universities, and various organisations show that there are great collaborative efforts and projects underway at colleges (see a list of examples in section 7.4 of the [full report](#)). Sustainability increasingly plays a role in these collaborations. Institutional priorities as well as availability of support and resources are crucial to further enable this.

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“We’ll meet our targets if we work together (...) Collective consciousness, that’s one of the terms that I use where I think educators, awarding bodies, people like that need to come together and look at frameworks and look at how we can integrate sustainability because it’s part of a government objective, a national, a global objective”

– Head of Engineering

#### **7.5 Changes to qualifications and quality processes as (potential) powerful drivers**

LfS/ESD in emerging SQA qualifications, the GTCS standards as well as recent developments on tertiary quality enhancement processes are important current and potential future drivers of LfS/ESD. They can enable explicit integration of LfS/ESD into practice, as well as support the creation of supportive institutional structures and a more formal and joined up approach to progressing and enhancing practice. However, caution must be taken to avoid tokenism - clear communication and standards as well as the provision of training and resources on quality LfS/ESD are crucial.

#### **7.6 Government priorities driving (environmental) sustainability: the example of net zero skills**

Government priorities can unlock funding which can significantly drive normalisation and progress of the integration of (environmental) sustainability, as seen in subjects aligning with net zero sectors. However, while more funding often results in more training being provided and prioritised for lecturers, support appears to still not be equally available to all lecturers teaching in subject areas that are closely connected to net zero targets.

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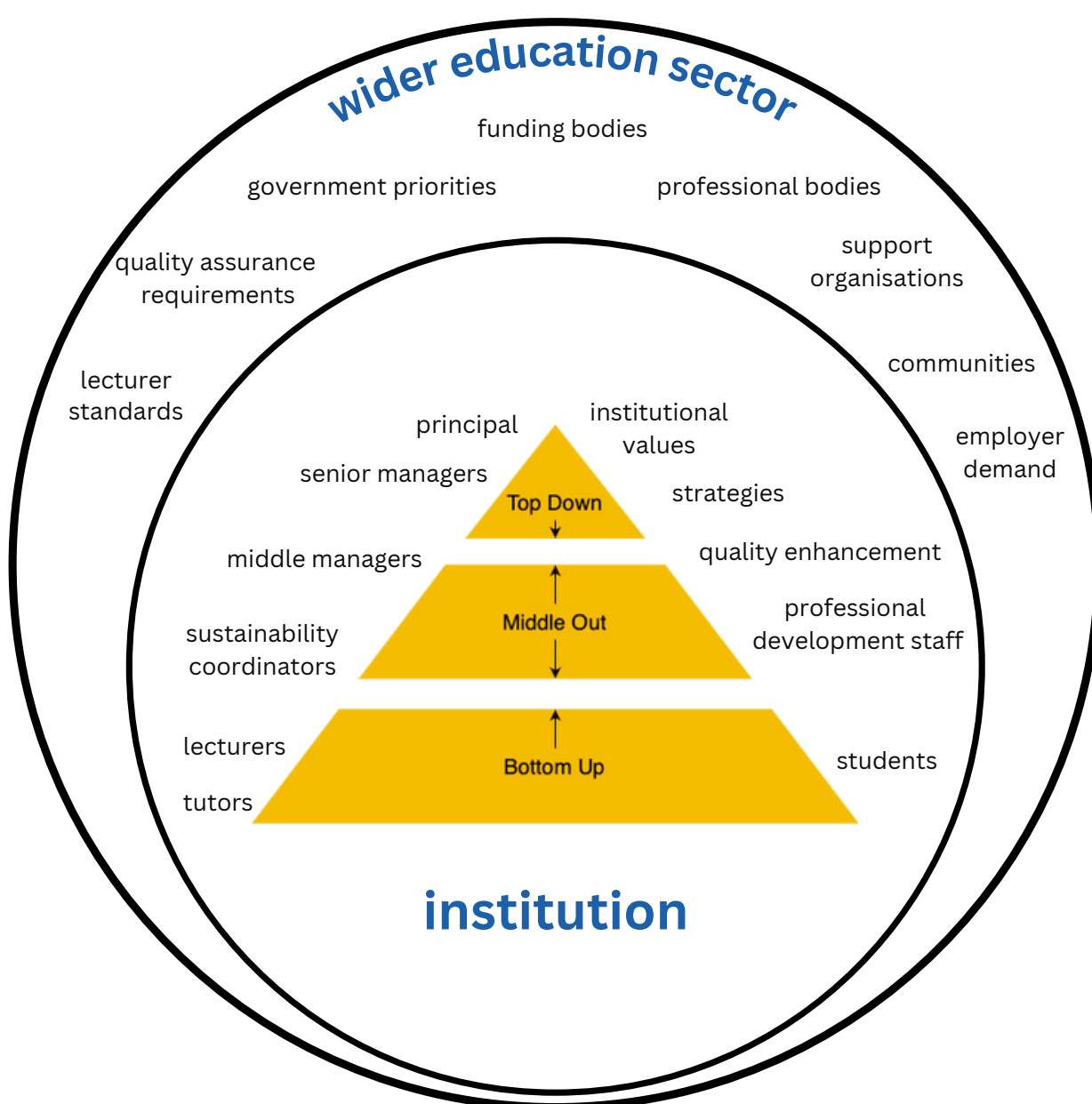
“The government wants our homes to be energy efficient. (...) So we got funding from the shared prosperity fund to upskill a lot of the workforce in retrofits. So, there’s strong emphasis in in areas like that, and there’s strong governmental support in that. The funding is there, although it’s not huge amounts of funding.”

– College Senior Leader

## 8 Breakthrough: Impactful actions to advance LfS/ESD in colleges

Knowing more about the current status, barriers, and opportunities of and to LfS/ESD in colleges, we also explored with participants how LfS/ESD can be further supported in colleges.

The below graphic highlights some key stakeholders, agents and influences in the college landscape. The suggestions for impactful actions are aligned with the different levels found within institutions and the wider educational sector.





## 8.1 General principles of impactful action for LfS/ESD

A variety of general principles for impactful action to progress LfS/ESD emerged from our data. Considering these principles may help to increase impact for sector organisations, awarding bodies, senior leaders, and staff looking to support LfS/ESD in colleges. For more details on these principles, see the [full report](#).



- **Consider different audiences and impact:** Interventions need to have a clear idea of what audience they are targeting and with what objective. Tailor interventions to specific groups such as senior leaders, managers, LfS/ESD pioneers, or lecturers with a neutral stance or low knowledge on sustainability.
- **Be clear on goals and quality LfS/ESD:** Define and communicate clear goals and benchmarks for LfS/ESD to leadership and staff, allowing for flexibility while avoiding vague principles that risk tokenism.
- **Build on existing drivers and agendas:** Link to existing 'channels' for LfS/ESD - for example within the [GTCS standards](#), [NextGen HN](#), institutional strategies, [meta skills](#), etc
- **Provide an accessible starting point to sustainability:** Use local examples and global frameworks to introduce sustainability, ensuring a holistic understanding of interconnectedness and distinguishing between learning about sustainability (limited to content and knowledge) and learning for sustainability (including teaching methods, skills, values, and behaviours)
- **Celebrate and motivate:** Recognise achievements around LfS/ESD, both big and small steps. Importantly, don't stop there - use celebrations as a springboard to build motivation, reflect on lessons learned, and encourage further actions.
- **Provide long-term opportunities for engagement and support:** One-off trainings often lose momentum quickly and often have little to no impact in the long run.
- **Collaborate across various stakeholders:** Include students, campus operations, community engagement, trade unions, other colleges, external organisations, as well as employer and industry relationships in plans and actions for LfS/ESD.
- **Enable both bottom-up action and top-down support:** Students, staff in teaching and operations and leaders, institutional strategies and values need to coordinate work together towards shared goals.

## 8.2 Supporting bottom-up & middle out action

### 8.2.1 Increase availability and quality of resources and training

Participants in interviews and workshops highlighted the need for more resources and training on LfS/ESD – but also of the need for those to be of good quality and add value.



**Resources** should be subject-specific, practical, and engaging, offering clear guidance, case studies, and multimedia elements to connect sustainability with teaching content and methods.



**Training** should be synchronous, non-judgemental, and solutions-oriented, helping staff understand the interconnectedness of sustainability issues and providing concrete examples for implementation. It should also be interactive, fostering peer-learning and include sufficient time for reflection and planning of next steps. Finally, training should offer long-term support and follow-up to ensure lasting impact, rather than relying on one-off sessions.

### 8.2.2 Integrate LfS/ESD in professional development processes and existing networks.

Making LfS/ESD part of internal and context-specific processes can help to increase awareness and uptake of resources and training in an integrated way, rather than positioning LfS/ESD as an add on. Options for this include:

- **Professional development structures and networks** integrate LfS/ESD to address barriers such as capacity and knowledge gaps.
- **Curriculum managers** are trained to integrate sustainability into processes like professional development plans, offering regular support to teaching practitioners.
- **Train-the-trainer approaches for professional development staff** to provide consistent, long-term support, enhancing sustainability awareness among lecturers.
- **Embedding sustainability into mandatory training sessions**, such as those on Equality, Diversity and Inclusion or health and safety, can ensure broader staff engagement.
- **Explicitly incorporating LfS/ESD into teacher training programs**, including the Professional Development Award (PDA) and Teacher Qualification for Further Education (TQFE) so new lecturers are equipped with knowledge and skills for LfS/ESD.



### 8.2.3 Empower and engage with students

Engaging students in sustainability holds largely untapped potential to drive significant change within colleges, but requires tailored support structures. Structural differences between colleges and universities – such as a more structured curriculum and different demographics – mean that student engagement in colleges needs distinct approaches. Empowering students requires providing opportunities for connection to relevant sustainability issues, encouraging them through activities that form part of their course, and ensuring their involvement is meaningful. Successful engagement could include rewarding sustainability actions, integrating sustainability projects into coursework, involving students in sustainability committees, and promoting external sustainability programs that enhance employability. Additionally, colleges should gather data on students' sustainability attitudes and knowledge to improve future engagement and support.

## 8.3 Enabling top-down support

### 8.3.1 Within institutions: Create supportive structures and culture at colleges

There are great LfS/ESD initiatives driven by passionate individuals. But we cannot put the responsibility to progress sustainability on these individuals if we want colleges to be an enabler for Scotland to meet specifically its social and environmental goals. Joined up, structural institutional support is vital and includes:

- **Structures that alleviate pressures on staff time.** Introducing roles such as course tutors can free up some time for lecturers, enabling professional development opportunities, including on LfS/ESD.
- **Structures that put in place staff with explicit responsibility and capacity for LfS/ESD:** Dedicated staff or shared service coordinators with a remit on LfS/ESD ensures it is not an unremunerated add-on to existing roles.
- **Structures that incentivise and recognise progress on LfS/ESD,** such as internal awards and platforms like newsletters or social media to celebrate and promote achievements as well as further plans in LfS/ESD.
- **Structures that allow for peer learning and sharing practice:** Create diverse sustainability groups, integrate LfS/ESD into team activities, and implement peer class visits to foster collaborative learning and support.
- **Structures that allow for the inclusion of student voice.** Engage and empower students in discussions and decision-making on sustainability in both the campus and curriculum.
- **Structures that enable collaboration.** Foster partnerships within colleges and with external organisations, such as employers, other institutions, similar to programs like the [Climate Ambassador initiative](#) and [LfS peer mentor networks](#) in schools.



### 8.3.2 Across institutions: Unlock sustainability in quality processes

The integration of LfS/ESD into quality enhancement and assurance processes and qualification frameworks is critical for its prioritisation. Despite existing references to LfS/ESD in some frameworks, our data indicates a significant lack of understanding regarding quality LfS/ESD, indicating the need for targeted training and guidance for both quality assurance bodies and college staff contributing to quality processes. Key actions to support this integration include:

- **Provide clear guidance on quality LfS/ESD in colleges.** Co-develop resources with practitioners, students, and relevant sector bodies.
- **Support internal quality processes:** Deliver training, advice, and resources for institutions to evaluate their LfS/ESD progress as part of their internal quality assurance processes.
- **Support cross-institutional quality processes:** Offer LfS/ESD training and guidance to individuals and groups that are involved in cross-institutional quality assurance and enhancement processes, such as the Tertiary Quality Enhancement Review (TQER) and the Scottish Tertiary Enhancement Programme (STEP).
- **Collaborate with SQA** to provide guidance and support to institutions embedding LfS as part of the NextGen HN pilot programme.



## 8.4 System-wide approaches

### 8.4.1 Provide adequate funding

Adequate funding for colleges is key to enable prioritisation of and support for sustainability. Funding is needed to increase teaching staff capacity and job stability; enable institutions to hire staff with responsibility for LfS/ESD (e.g. via [EAUC's Shared Services Model](#)); and incentivise sustainability initiatives through specific or flexible funding. Funding can spark innovative projects, for example [Dundee and Angus College's new initiative](#), supported by the Climate Engagement Fund. Importantly, funding needs to be sustained to allow for long term progress.

### 8.4.2 Increase cross-sector and multi-stakeholder collaboration

While strong collective initiatives are already ongoing, increasing strategic and practical partnerships are vital to drive progress. Aligning strategic approaches among sector organisations, colleges, industry, and government ensures cohesive frameworks that unlock the potential of LfS/ESD and help meet national and global sustainability goals. Practical collaboration among multiple stakeholders is equally vital, such as sharing best practices, and co-developing CPD opportunities. Building on the diverse expertise of sector organisations by bringing them together with industry and LfS/ESD pioneers in colleges can amplify efforts and create impactful, unified progress toward a sustainable future.

### 8.4.3 Conduct and enable further research

This report offers an initial exploration of sustainability in college learning and teaching, highlighting the need for more research to better support the sector. Quantitative methods are crucial for monitoring and expanding knowledge, but qualitative approaches are equally vital to contextualize findings and reveal causal links. Yet qualitative research is often overlooked and underfunded (see e.g. [Royston and Foulds, 2021](#)). Increased investment in mixed-method, collaborative research is essential to advance sustainability in education and beyond. A list of areas for further research can be found in the [full report](#).

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Any questions? Any feedback? Want to join the EAUC networks for sustainability practitioners in further and higher education?

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