



## **Walking the Talk?**

# **Understanding students' expectations of sustainability in their curriculum and experience at the University of Leeds**

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## Background

Sustainability and 'Sustainable Development' as a field of study is rapidly growing, with many interested in further integrating the discipline within the education sector. Universities serve as institutions that educate and prepare students for future careers and foster socio-cultural development, including sustainable development through education, innovation and research (EUA, n.d.). At times, it may be difficult for universities to understand how to implement this growing field into its current systems; however, there is a rising advocacy for 'greater democratisation of the education process' and collaboration between students and staff (Bovill, 2015, p. 196).

'Education for sustainable development' overarches this study and is defined as an 'interdisciplinary approach to learning', covering socio-economic and environmental dimensions to promote improving the world (AdvanceHE, n.d. (a)). As a pedagogical approach, it aids staff in developing graduates' skills, knowledge and experience to contribute to an ethical society and create subject-relevant content and curriculum structures that integrate sustainable development successfully (AdvanceHE, n.d. (a)). Partnership throughout an institution is arguably crucial to improve practices of sustainable development and can be defined as a 'collaborative, reciprocal process' in which all participants can equally contribute to 'curricular or pedagogical conceptualisation, decision-making, implementation, investigation or analysis' (Felten, 2014). 'Students-as-partners' are increasingly recognised in higher education and exploring the benefits in certain areas, such as co-design, could help improve the experiences of sustainability at a university.

This study aims discover what methods are currently in place at the University of Leeds and what aspects of these methods could be improved. There is an objective to gather a current scope of knowledge within the field of partnership, as well as what skills and content students are hoping to gain during their time in higher education. Ultimately, this research intends to identify successful mechanisms of student voice and how these could be implemented whilst creating linkages between sustainable practices and curriculum design.

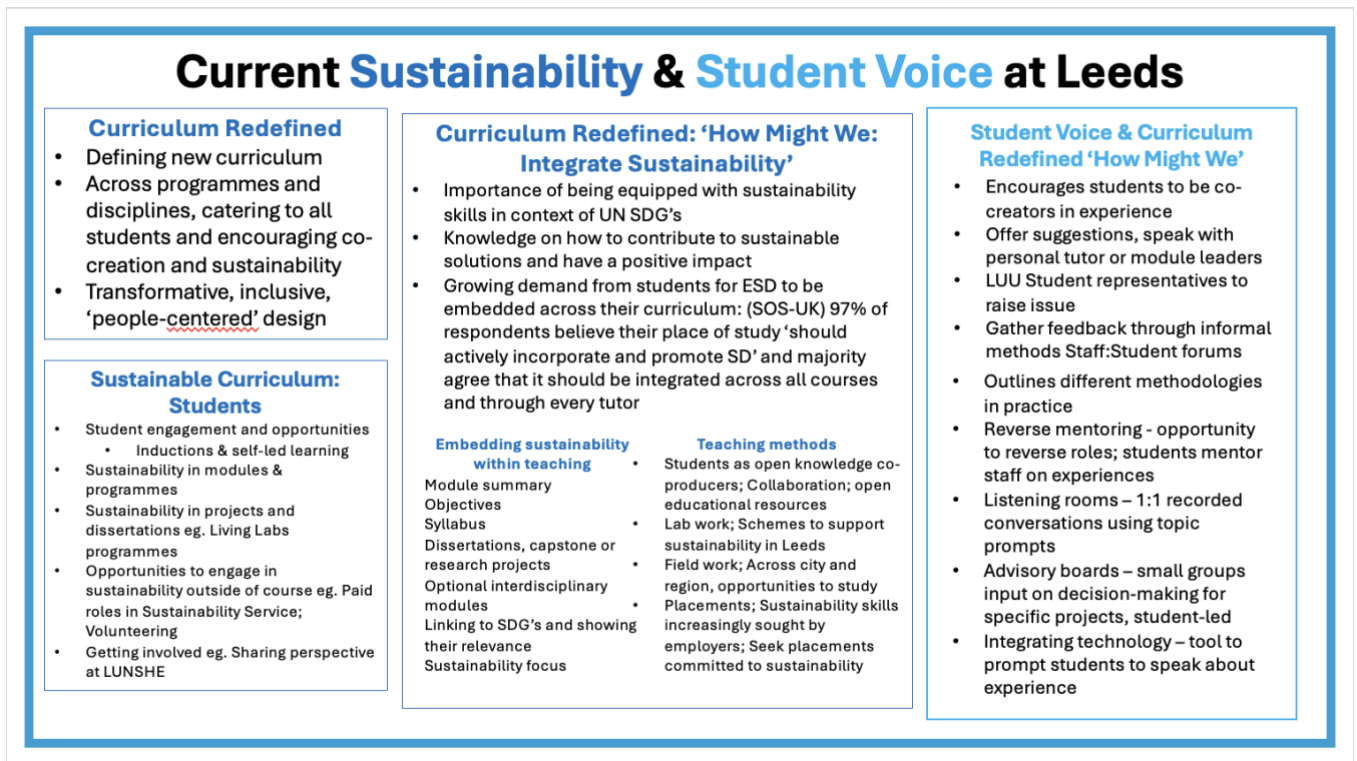


Figure 1: Current Sustainability and Student voice at Leeds

Figure 1 portrays a summary of current methods at the University of Leeds, both for sustainability and student voice (University of Leeds, n.d. (a)-(e)). Each of these methods exemplifies effective work in each field, with students largely being at the centre of the design. However, due to the source of information being the University website, little is known about student opinion and experience of these practices which is important to consider throughout this research.

### Frameworks and models

Multiple frameworks and models aid in gathering the current scope of knowledge within the field. Advance HE, a charity working to improve higher education for all participants (Advance HE, n.d.), have produced frameworks offering advice and recommendations to institutions in differing topic areas and is significant for various parties, including student unions, staff and students (Advance HE, 2020).

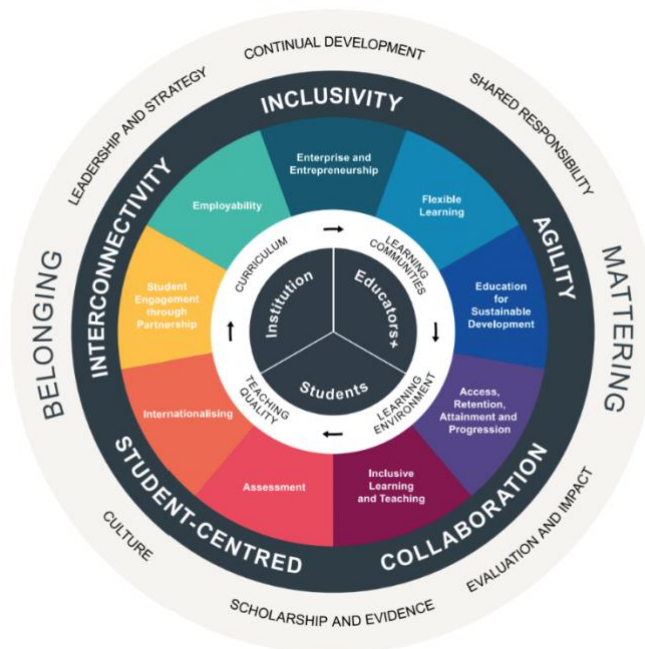


Figure 2: The Framework for Enhancing Student Success in Higher Education, Advance HE

Figure 2 demonstrates the Essential Framework for Enhancing Student Success. This incorporates academic achievement, transitioning out of higher education effectively, deepening understanding and engagement with discipline, acquisition and enhancement of skills and personal growth. Aiming to support institutions, the framework consider six areas of priority for change, all intending to better student success overall. One of these areas is ‘Student Engagement through Partnership’, that encourages development of ‘open, constructive and continuous dialogue between students and staff’, and creating partnerships between institutions and their student associations (Advance HE, 2020).

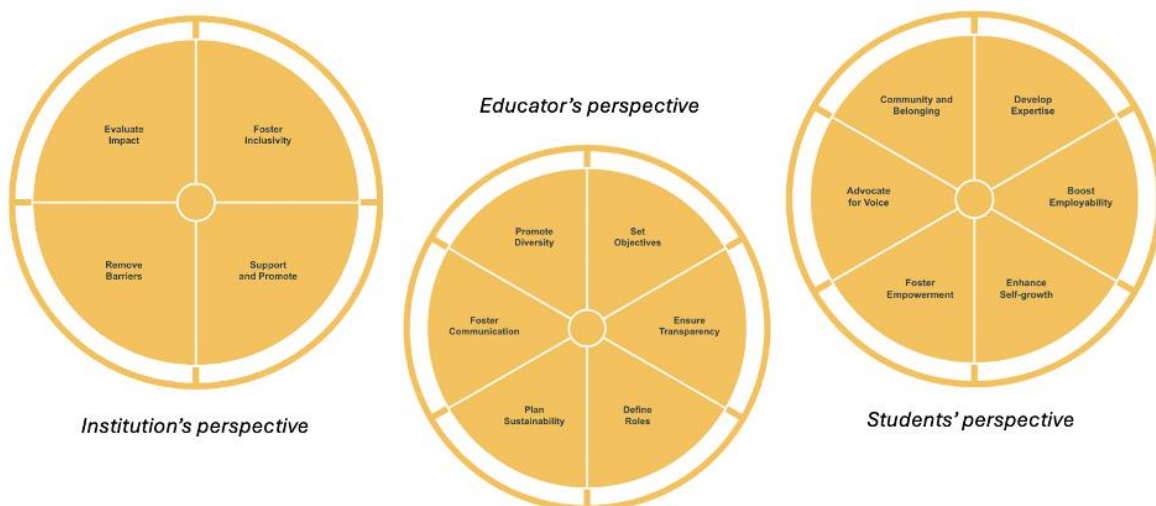


Figure 3: Student Engagement Through Partnership Framework, Advance HE

Figure 3 exemplifies this area and produces a framework that divides recommendations into institutional, educator and student perspective. It supports the idea of ‘students-as-partners’ increasingly receiving recognition that their voices should be part of decision-making processes in education, with guidance on potential changes across a university. Each aspect of the framework specifies considerations and engagement mechanisms for that party, such as removing barriers as an institution, fostering communication as educators and advocating for a voice as students (Advance HE, 2024). Its clarity can aid in encouraging implementation of these processes and is important to consider in reflection on the University of Leeds current practices.

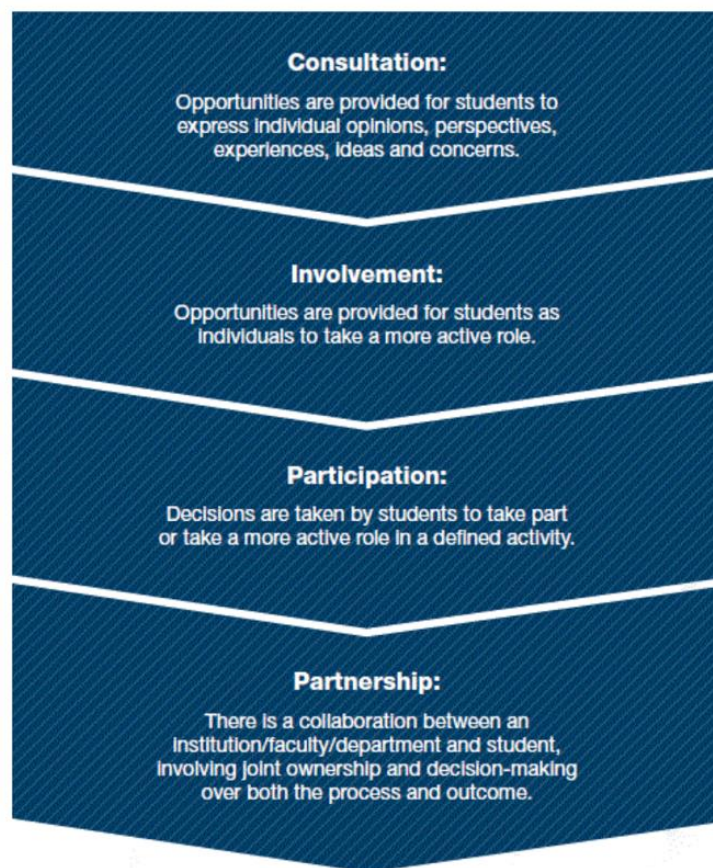


Figure 4: Four stages of student engagement (after HEA and NUS 2011); Healey, 2014

Figure 4 defines four different aspects of student engagement, each with their respective activities. It is known that engagement and partnership are often interchanged despite different implications; for example, student consultation through surveys may be taken as form of partnership but is not enough to constitute as genuine form of partnership work. This model is advantageous for clarifying these differences and how they may complement one another in higher education. Partnership, specifically, involves decision-making between students and their institution and fosters the sustainability skill ‘collaboration’, validating and respecting students’ power and ownership in these experiences (Healey, 2014).

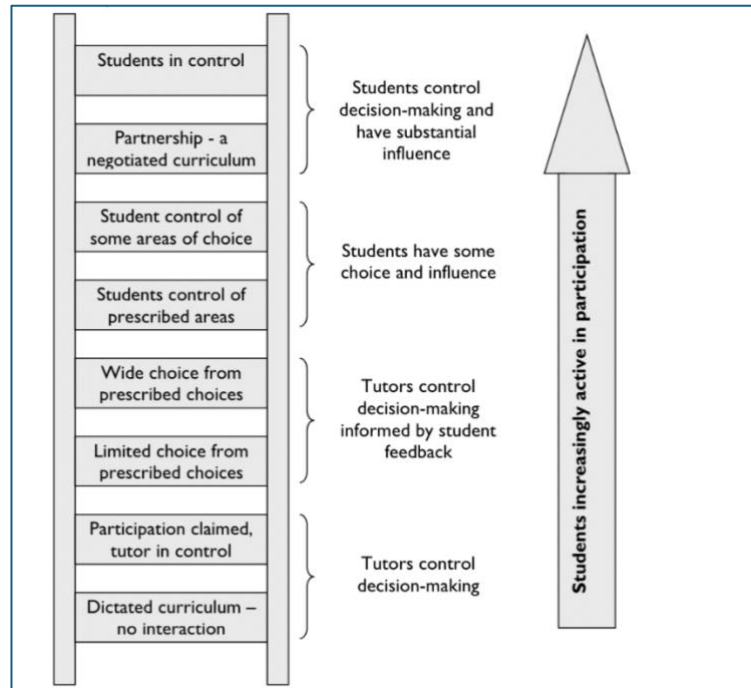


Figure 5: Ladder of student participation in curriculum design (source: Bovill and Bulley 2011; adapted from Arnstein 1969); Healey, 2014

Figure 5 is a more targeted model for curriculum design, with influence of Arnstein’s ladder of citizen participation (Arnstein, 1969). It presents increasing levels of student influence and participation and can prove a very helpful tool for exploring sustainable development in collaboration with students. It is often rare in higher education for students to have the opportunity to be a partner in co-design and giving pedagogic advice, but this model demonstrates different steps involved to achieve increasing levels of partnership. Finding the degree to which students have influence should be altered to fit the purpose of the institution and sustaining attitude is very important and requires teaching and learning from both students and faculty (Healey, 2014).

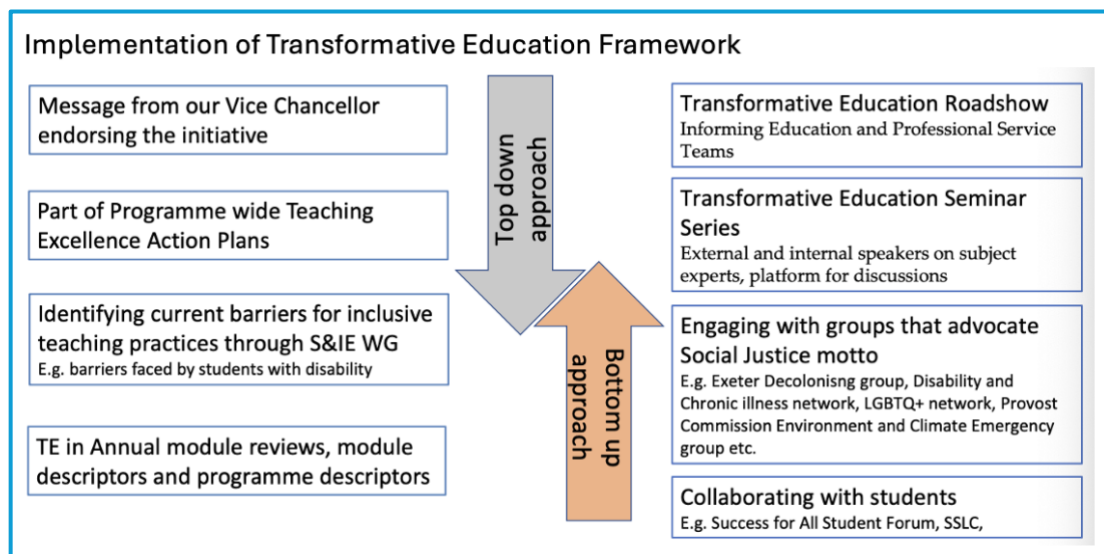


Figure 6: Transformative Education Framework, University of Exeter, Sustainability Symposium 2024

Finally, figure 6 illustrates an example of a submission to the annual Advance HE Sustainability Symposium from the University of Exeter and their Transformative Education Framework (University of Exeter, n.d.). It highlights how implementation of sustainable teachings and student insight from both an institutional level, such as endorsements from the Vice Chancellor, and bottom-up approaches, including engaging with student groups (University of Exeter, n.d.). Creating change can be difficult but it is necessary to understand ways it can be successful and which stages are important.

Motivation for partnership is imperative when creating these changes to traditional autonomous cultures in higher education. Students' experiences with their curriculum are known to improve with partnership, offering various benefits, in turn encouraging motivation.

In terms of students, employability skills, self-awareness and autonomy are all improved with partnership work, pairing with a sense of pride in achieving successful project outcomes (Advance HE, 2024). Enthusiasm enhances in the classroom as students become more active learners and increasingly responsible for their learning, reflecting on their process as opposed to solely focusing on the final result (Felten, 2014). Student empowerment through decision-making and conflict-solving increases with experience and confidence, whilst outcomes improve from creativity and innovation (Zekorn, 2024). Improved learning, sense of belonging, networking, publication and opportunity to research and create change (Mercer-Mapstone, 2017) are further benefits students gain from partnership practices and exemplify why an institution should be motivated to discuss implementing these changes.

Faculty also benefit from participating in collaborative practices. They are known to generate new thinking, understanding and improved methods of teaching (Felten, 2014; Mercer-Mapstone, 2017). Empathy towards students increases and faculty's grasp of students' lived experiences and needs, as well as response to these situations, improves (Felten, 2014). Faculty reflection and growth of awareness towards equity issues and long-term faculty transformation are noted (Marquis, 2021), and despite preconceptions of increased workload, new research and publications have occurred as a result of partnership work, in addition to improved personal career prospects and networking opportunities (Mercer-Mapstone, 2017).

These are only a handful of benefits resulting from participatory approaches and understanding the successes behind certain methods aid in encouraging institutions to review their own methods and select areas of improvement and innovation. The frameworks and models further help picture the processes institutions can implement, providing clear but general advice. To fully grasp students' expectations of their

curriculum and perspectives of sustainability, gaining direct opinions from students at the university is necessary when recommending methods moving forward.

What is not working?

Despite the listed benefits, collaboration between faculty and students does not come without challenges, which are important to recognise when considering changes at the University of Leeds.

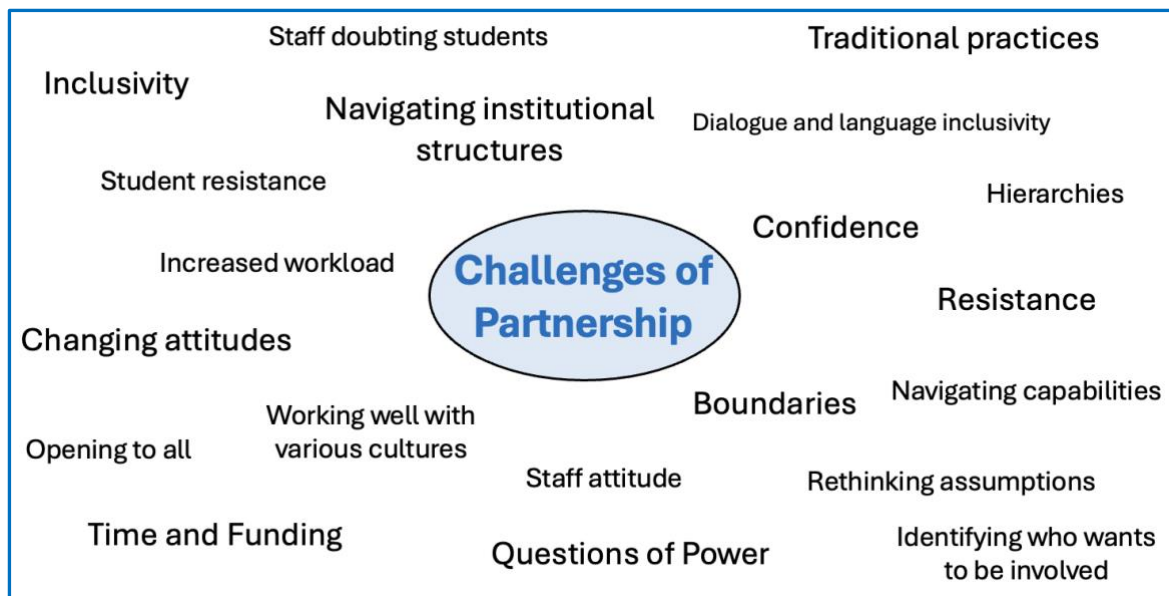


Figure 7: Challenges of Partnership; Primary Source

Figure 7 portrays key constraints throughout partnership literature. Questions of power and boundaries (Bovill, 2014; Mercer-Mapstone, 2017) are hugely critical factors that underlie many doubts in this field, with traditional university hierarchies known to limit the confidence of the student participant (Zekorn, 2024). Inclusivity (Felten et al., 2013) and creating language and dialogue that is effective for partnership work for both parties (Felten, 2014) is necessary to incorporate underrepresented students and enhance pedagogical practices (Bovill, 2015).

Co-design of a course may go beyond a students’ comfort zone, with fears of stepping out the established framework of traditional student activities (Zekorn, 2024). Taking small, steady steps is recommended to allow regular and attentive communication and avoid potential pitfalls (Felten, 2014), yet this can be difficult due to class sizes and resources; finding smaller, manageable co-creation projects would be more beneficial and feasible to create genuine partnerships, despite breaking institutional norms and

practices (Bovill, 2015). Finding who wants to be involved (Felten, 2014) and combatting resistance from parties (Marquis, 2021) is a further limitation as each may encourage increased lack of interest and slow pace of change (Mercer-Mapstone, 2017).

These overall challenges of partnerships are important to recognise, nonetheless it is significant to note which methods are known to be ineffective at engaging students. Many experience difficulties in receiving decent turnouts for focus groups, and there is often minimal student responses online due to survey fatigue and email overload. Given this, other ways are required to have conversations with students about what is important for them on sustainability in their curriculum, and their education more broadly.

### Skills and content students are looking for

To best understand students' expectations of sustainability in their curriculum, it is significant to gather a perspective of specific skills or content students want to explore.

The University of Leeds has developed a list of a sustainability skills under a skills matrix, which exemplify areas students and other participants should aim to improve to best work on sustainability practices. This includes systems thinking, anticipatory thinking, critical thinking, strategic practice, collaboration, integrated problem solving, effective communication, relationship development, ethical and information searching (University of Leeds, n.d. (f)). These skills are valuable at symbolising areas for effective work in sustainability practices, but it is also critical to understand what students note as important to them within 'ESD', as well as an institutional understanding of what should be taught and learnt.

The opinions of students at the University of Leeds was gathered in primary data collection through a focus group with the Student Sustainability Architects, and from secondary data sources including the SOS-UK annual Sustainability Skills Survey and a focus group's data from a Student Sustainability Architect's previous study. SOS-UK is a student-led educational charity that works across all levels of education and learning to teach and build sustainable practices and its respective issues, including justice, wellbeing and more (SOS-UK, 2024). The organisation fosters many objectives and executes multiple different projects to implement sustainable practices, including research and assessments. This involves the annual 'Sustainability Skills Survey' across institutions in the UK (SOS-UK, 2023 (a)), which aims to track students' expectations and experiences of learning key sustainability topics skills (SOS-UK, 2023 (b)).

Presentation of the key findings from the sources are shown in figures 8 to 11.

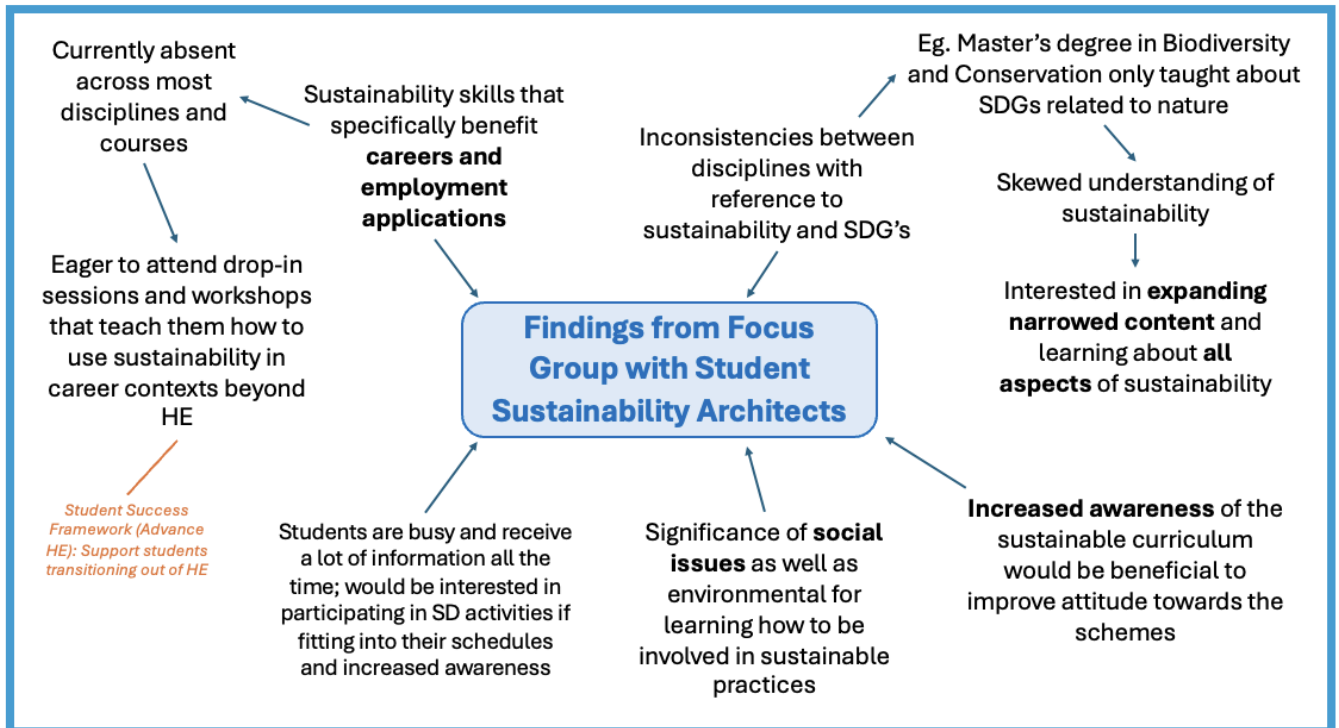


Figure 8: Findings from Focus Group with SSA's; Primary Data



Figure 9: Findings from Focus Group with SSA and Society Leaders; Secondary Data

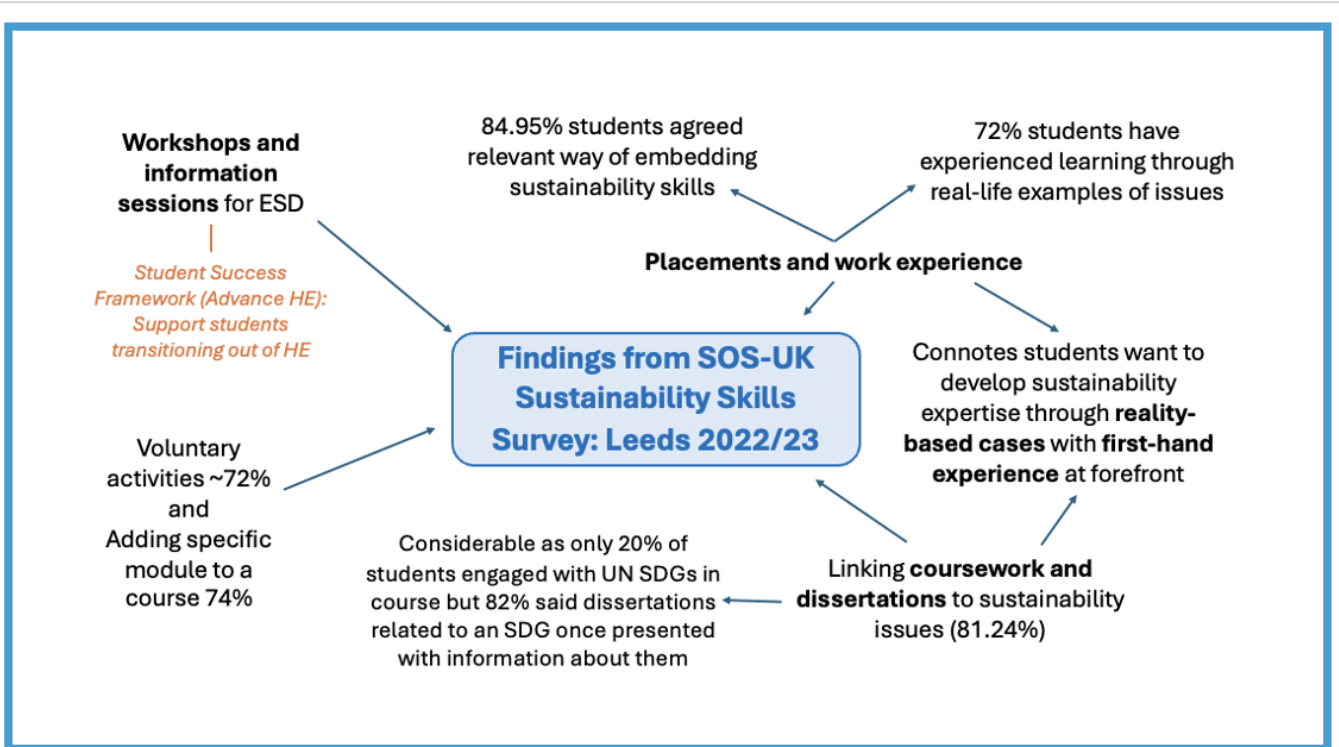


Figure 10: Findings from SOS-UK Skills Survey 2022/23; (University of Leeds, n.d.(a)) (Leeds Sustainable Curriculum, 2023)

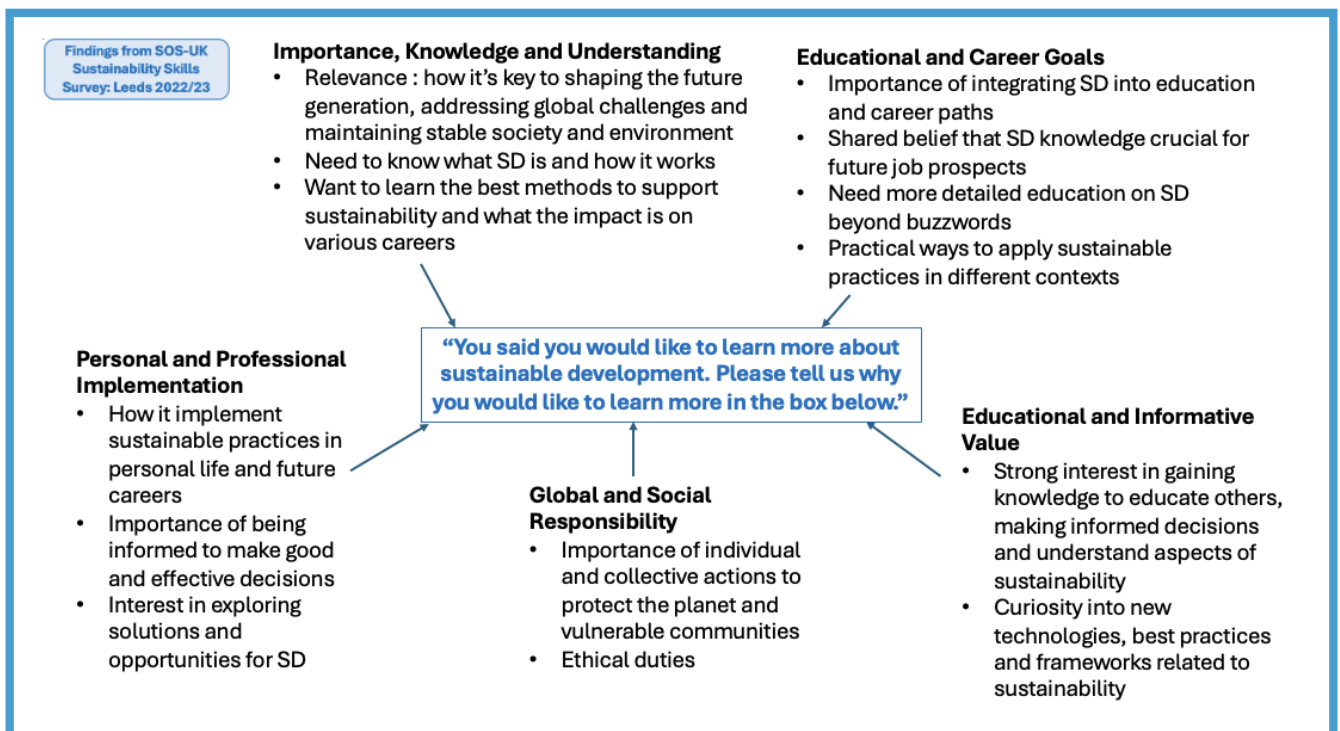


Figure 11: Findings from SOS-UK Skills Survey 2022/23; (University of Leeds, n.d.(a))

Many common themes presented themselves within these data sources regarding what skills and content students are looking for. For instance, students are very focused on careers and transitioning out of higher education, linking to figure 2 and its Student Success Framework (Advance HE, 2020). Students hope to acquire skills in sustainability that benefit career aspirations and employment opportunities. There is a hope that these skills are linking to their discipline but also encompass sustainability as a whole. Additionally, work experience, placements and real-life examples were given as the most effective ways to learn about sustainability practices and for students to engage in them. They want to learn how sustainable development works in reality, using first-hand skills and experience as well as real-life content as a way of learning and acquiring this knowledge.

This is arguably particularly significant to encourage, as some students feel they lack knowledge of sustainability, particularly if it does not traditionally relate to their discipline. There are questions around what sustainable development can involve and how it can work, plus what is new and what is important within this. Students are eager to be knowledgeable and informed, learning new things beyond the 'buzzwords' that often circulate sustainability. For instance, the UN Sustainable Development Goals (United Nations, 2024) were highlighted, with some students feeling that they are uninformed about what specifically these can involve.

In addition to this, students may be somewhat uninterested in the sustainability field, which can be challenging to alter. However, it is arguable this is due to lack of education of how sustainability is relevant and achievable within their current learning and future careers. Social issues, ethicality and global challenges are repeated by students for what they hope to learn for sustainability, primarily from those students with a more scientific background in education.

Throughout the research so far, there is increased awareness of what students hope to learn in regard to sustainability and ideas of partnership from various literature and frameworks. Yet, to best conclude the objectives of this research, understanding how these fields come together and what mechanisms could be implemented to integrate the domains is necessary.

### Mechanisms of student voice

#### **Student Roles**

'Students-as-Partners' is defined as students and academic staff working in collaboration to improve teaching and learning practices in higher education (Mercer-

Mapstone et al., 2017). Utilisation of these positions is largely beneficial, and the University of Leeds offers student roles that may act as partners, including course representatives, student representatives at Leeds University Union and Student Sustainability Architects.

Course representatives are students that act as an ambassador for their programme, participating in forums and communications with staff to express opinions of themselves and their fellow students. A discussion was held during data collection with a course representative in their first year as an undergraduate, offering their perspective of the role.

Overall, it was agreed that it is an “important and good role” that fosters a direct pathway to staff and the institution. In their experience, “smaller meetings with their personal co-ordinator are significantly more helpful and effective” to allow more direct communication, quicker responses and a feeling that students issues were welcomed and being listened to. They followed this by stating that “Course reps almost make staff listen to students’ perspective” as well as explaining that “Staff may be aware of problems but not how students’ really feel about it, or they may be completely unaware of the issue”.

Regarding negative experiences in the role, the course representative spoke of general concerns, including “students are often unaware of who to contact about their issues and opinion” at the university or that students “don’t always feel comfortable speaking to staff in higher education”. Moreover, the ineffectiveness of forms was reiterated due to their overload, with the larger meetings, Student:Staff Forums, also perhaps being unproductive given that in their experience, “you would say your issues, the head co-ordinator would respond then it would swiftly move on to the next concern without feeling like the feedback was truly listened to”. Finally, the course representative stated that “course reps are not vocal enough or obvious to students”, which they believed needs to be changed for the role to be best utilised as a mechanism for student voice.

Student Sustainability Architects is a part-time position that further exemplifies ‘students-as-partners’, working in research with the institution to benefits its teaching and learning practices for sustainability (University of Leeds, n.d. (g)). A focus group was held with three of the SSA’s in primary data collection to gather their perspective on sustainability and partnership.

On the whole, the students were attracted to the role for the work experience in a targeted, interested field to gain more experience. The part-time position and its flexibility was important as it suited the student lifestyle, and the supervisors were very respectful to the various priorities. The position aided their personal growth and

knowledge and allowed for a successful working relationship, despite wishes that it began earlier in the academic year. Experiences of partnership differed between schools and personal accounts, but there was a general consensus that they felt comfortable to speak to staff. Incentives for personal gain are significant and should be part of the conversation to encourage students to participate despite their lifestyles. However, the students agreed that staff can often appear uninterested, and faculty are largely responsible for any partnerships with students.

When considering future initiatives, it is significant to consider the results of these current examples. Smaller-scale partnerships enable better communication and for students to feel more valued and heard; for instance, the course representative preferred direct communication with their coordinator to the larger scale forums and an SSA mentioned that they felt comfortable talking to staff one-to-one about issues, ideas and feedback. It takes time to build up a genuine partnership of trust and staff involvement and perception of partnership is important to the success of student positions. Incentives should be part of the conversation but not always necessary to success, for example course reps are unpaid, but gain real-life experience and career skills which is content students are looking to gain. Overall, these roles appear to benefit students through work experience and personal development but neither position specifically regard course design, which potentially could be explored.

Examples from other institutions offer this insight into potential positions relating to course design. For example, Sheffield Hallam University have 'Course Enhancement Officers', which grants students' a position as 'active agents' in course design consultancy; it involves executing a workshop with students before delivering findings as evidence for alterations to the curriculum. It has been an ongoing project since 2013 and has been embedded into the university's existing structures (Healey, 2014). Another example for students as 'change agents' is at Queen Margaret institution in Edinburgh, which supplies an undergraduate programme in which students devise specific content they want to learn in accordance with the curriculum framework designed by staff (Bovill, 2011); this encourages students to take responsibility for their learning and allocates students with a position of power. The University of Gloucestershire works similarly by encouraging students to be co-producers and be 'quality assessors in their course'. Students challenge and rate current content on sustainability in their course, providing feedback on what matters most from their perspective (University of Gloucestershire, 2024).

The establishment of student roles provide numerous advantages. Student roles grant a focused audience and clear objectives, whilst supplying real-life work experience. There is a simple pathway between students and staff, giving the student a position of respect and value whilst faculty can continue to support them. Personal growth and confidence

is noted and allowing students to contribute and give evidence for change increases the efficiency of said adjustment. Alternatively, however, not all students can have a role which may limit voice and create bias. Other limitations include time and funding, such as availability of incentives and the workloads of staff and students. Furthermore, there can be difficulties in embedding a position of power for students in traditional structures, as noted in the Student Engagement Through Partnership Framework where there is encouragement for a systemic approach to form partnership culture (Advance HE, 2024).

## **Team Partnerships**

Singular student roles can execute influential work for student voice and sustainability, but they do not come without constraints. It may be arguable that these limitations could be combatted with team partnership schemes.

The University of Leeds currently offers a few examples of teamwork between faculty, staff and students. Leeds Living Labs is a programme developed as part of the Sustainable Curriculum which intends to bring together students, staff and city partners by researching and testing sustainable solutions (University of Leeds, 2024). It offers an excellent example of collaborative work and real-world experience for students by funding both independent student research projects and pre-defined studies that centre change to practices to improve sustainability, such as Net-Zero initiatives and advance biodiversity (University of Leeds, 2024).

Another example from 'Curriculum Redefined' are the Learning Design Teams. Experts are invited to enable ambitious curriculum design by supporting and guiding the teams to use people-centred design and co-creation methods with students. Workshops are held which designate a space to focus on specific topics and have 'design sprints' to facilitate quick idea generation and prototyping for different programmes. This collaboration between students, colleagues, experts, alumni, staff and industry figures indicated amplified teaching and learning, improved sense of value and respect and encouragement of more equal partnerships in institutional environments (University of Leeds, n.d. (h)).

It is clearly demonstrated from these examples that such innovative methods can be very effective for sustainability research and curriculum design, particularly when experts in the field are involved. The involvement of external personnel assists in delegating workload for both staff and students, whilst specialising the teaching and learning to best suit said institution. Both provide real-life work experience, a skill that students are eager to gain throughout higher education, as seen from the SOS-UK survey and SSA focus group. However, funding and clear time delegation requires

consideration and may be a limitation, but it can be achieved if such practices become an institutional priority. Students feel more confident and empowered to share their opinion when supported by fellow students, which permits the inclusion of various perspectives.

In spite of these benefits, examples of different institutions can facilitate further inspiration for mechanisms of student voice. Elon University operate 'Course Design Teams' that co-create and re-create a course's syllabus. Teams comprise of 1-2 faculty members, 2-6 students and 1 academic developer and execute a 'backward design' approach, where goals are developed prior to building strategies and assessments. Regular meetings allow time to accomplish practical purpose and develop language and confidence for students, who, in turn, claim power and passion whilst faculty cede significant authority (Healey, 2014). Other projects include the national initiative in the UK with 'Department Curriculum Teams'. This 1-year initiative housed teams of students, faculty and discipline-based experts who planned changes to their curricula, working on both their own projects and others simultaneously. This encouraged divergent, creative thinking, the breaking down of status and important contributions from students, allowing successful operation (Healey, 2014). Zekorn further urges co-creation of the curriculum by working beyond the classroom and using a student club and faculty involvement to design a collective syllabus. A deliberate web of partnerships is vital to ensure equal contributions and development of critical roles, allowing mutual satisfaction for all parties (Zekorn, 2024).

Ultimately, team partnerships are constructive as students can gain valuable real-world experience by holding positions that empower and respect their ideas, giving them a form of decision-making authority. In these roles, they contribute to defining shared goals and mutual satisfaction, fostering collaboration and collective success. The exchange of ideas and perspectives enhances overall functioning and effectiveness, leading to quicker rate of change from the creative thinking process. Additionally, working beyond the classroom is known to influence change within the classroom, further enriching the learning environment.

However, similar to previous examples, timing allocation and funding can be difficult, as well as organising consistent arrangements can cause difficulties. Breaking traditional hierarchies, which is noted amongst many literature sources and frameworks, to provide students with a space where they feel confident and valued can further take time and setbacks. Furthermore, finding students who want to be involved can be difficult and result in lacking diversity.

### **Access to current methods**

Mechanisms of accessing student voice also involve smaller scale, more informal initiatives that can be executed differently by different areas of the institution. For example, a conversation was held during the data collection for this project with an educator at the University of Leeds that has executed their own individual methods to gain access to student perspectives.

One of these experiences was labelled 'Town Hall' initiatives, acting as a 'dummy national student survey' with students in the educator's programme. Students were invited to share their opinions and feedback on their course and modules by adding a slot to their timetable under a different name to encourage attendance and hear from various students. The initiative has been successful and received positive feedback, resulting in the approval and creation of a new module for the course that met the content expectations of current students, centering students in the decision-making process. Despite this achievement, it should be considered, according to the educator, that faculty "should not ask too much from students" in terms of time and feedback as it may dishearten their interest by creating a feeling of being "pestered for their time".

Another scheme completed by this educator was through module re-adjustment. This involved updating a current module's content by running surveys in lectures mid-way through the academic year to question students on what they wanted to learn by the end of the module. According to this feedback and listening to student perspective, the final topics of the module were refreshed, and new topics were taught. This, again, received a lot of positive feedback and enthusiasm, with the educator stating that they "learnt new things" in the process and were inspired to continue to change the curriculum with students at the centre. Alternatively, the educator did note a large increase in workload; however, they felt their passion and achievements were rewards for this effort. "The best evidence for change is student feedback" was a statement reiterated by the educator, hoping that student voice is increasingly encouraged despite difficulties in altering traditional university structures and getting staff on board.

This educator exemplifies successful outcomes from implementing current student voice if executed correctly. Their work arguably contains similarities with the 'Advisory boards' idea from Curriculum Redefined's 'How might we' guide for engaging with student voice (University of Leeds, n.d. (d)), connoting the effectiveness of these current practices. However, the educator noted that they had very minimal awareness about such schemes and the Sustainable Curriculum as a whole at the university, perhaps exemplifying a need for increased awareness of these methods to fully achieve successful outcomes across disciplines and boost staff involvement. This may also translate into other areas of practice at the university, such as course representatives and societies, which arguably have potential to be utilised as an effective tool for

sustainability by increasing student opportunities or widening the scope of voice reached by faculty.

### Final considerations

On reflection of these various methods, it is important to consider which of these mechanisms could start to integrate student voice and sustainable practices and potential next steps.

### **Ongoing dialogue**

An essential theme identified across this study is maintaining ongoing dialogue with students. This aims to overcome the experienced difficulties in response numbers by encouraging in-person active engagement and communication, which will further enhance relationships between faculty and students. Accessing students' opinion frequently is very beneficial and allows their input into the approval process within higher education, whilst also increasing learning of sustainability and understanding of how it can work in different contexts and conversations. This both answers students' wishes for real-life examples as a method of learning (University of Leeds, 2024 (a)) and helps to encourage more equal power footings in such higher education contexts.

With reference to the models, ongoing dialogue fits well with the 'Student Engagement through Partnership' Framework, upholding institution's fostering inclusivity and removing barriers as well as students' advocating for voice and ensuring a community and belonging (Advance HE, 2024). Additionally, this mechanism validates the 'Participation' aspect of the 'Engagement stages' model by encouraging a more active role from students (Healey, 2014) and providing them with some choice and influence on the ladder of participation (Healey, 2014). This dialogue could be implemented through both approaches in the Transformative Education Framework, with module reviews from top-down and collaborating with students as bottom-up (University of Exeter, n.d.); all of which demonstrates the capabilities and suitability of continuing to hear feedback from students.

Implementing an ongoing dialogue with students can be simple and is suitable to use across programmes. This can be seen from the 'Town Hall' initiatives and 'Advisory boards' (University of Leeds, n.d. (d)), where course approval can occur, and staff and students can interact and share ideas relating to their discipline as well as wider concerns. It provides a comfortable opportunity to share opinions and feel heard by staff, whilst also allowing specific discussions of sustainability to be held through topic prompts. Opening up the conversation and workshopping ideas from both perspectives

increases inclusivity, and conflict-solving and sparks reflection and alteration, allowing content to be expanded. Furthermore, using technologies, as suggested by Curriculum Redefined (University of Leeds, n.d. (d)), to encourage students to speak freely will only further maintain this dialogue.

However, certain constraints should be considered. For instance, defining a scale at which these conversations occur is important as smaller-scale partnerships are preferred and the Student: Staff forums mentioned by the course representative can feel unproductive due to the large scale. Ensuring the communication occurs more directly is key to allowing both parties to contribute effectively. Moreover, finding time within both faculty and students' busy schedules can be challenging, particularly due to the ineffective performances from remote communications, alongside navigating institutional structures to embed this ongoing dialogue into education structures.

Overall, ongoing dialogue can be executed in many different ways and can be adapted depending on the discipline, time available and other factors, making it very accessible across education. This will hopefully encourage implementation and improve experiences for both parties regarding sustainability practices and collaboration.

## **Co-production**

Engaging with students in the co-production of the curriculum was another important method mentioned throughout this research. Either in individual roles, teamwork or other methods, a working partnership between faculty and students allows for effective change, and being open to this conversation and recognising how it may be used as a tool for sustainability is important.

These working experiences aid students in transitioning out of higher education (Advance HE, 2020) by expanding their career skills. The institution removes barriers whilst supporting and promoting engagement, educators define roles and foster communication, and students advocate for a voice and boost employability (Advance HE, 2024), clearly demonstrating the successes of such projects. This can be seen in current examples at Leeds such as course representatives, Student Sustainability Architects and Learning Design Teams, and at other institutions including Course Enhancement Officers at Sheffield Hallam (Healey, 2014), student co-producers at the University of Gloucestershire (University of Gloucestershire, 2024) and 'Course design teams' at Elon university (Healey, 2014).

Co-production, both of curricula and other practices in education, upholds the 'partnership' aspect of the engagement model (Healey, 2014), where clear collaboration is noted, fostering improved levels of engagement, knowledge and performance.

Students also have control in decision-making with substantial influence on the ladder of participation (Healey, 2014). The alignment of this method with many different frameworks and examples throughout the literature only highlights the possible assets and could be adapted to many different methods of execution.

Students benefit from co-production by gaining work experience and real-life examples as a way of learning. This further helps career prospects and autonomy; aiding students transition out of higher education. Executing this in the smaller scale teams can be more effective for improved engagement, as well as enthusiasm for the direct pathway to educators and the institution. Yet, adding an additional party by working with experts can help relieve workloads and provide specified advice to make correct improvements and help navigate hierarchies and boundaries. Also, innovation, creativity and empowerment are all noted as benefits of co-production.

Alternatively, navigating these boundaries even with expert advice can be challenging. Identifying who wants to be involved within the projects as well as respecting that not everyone can be involved can create further barriers, particularly as the intention is to include a wide scope of student perspective. Workload can increase and questions of power are significant but overall, it is arguable that co-production is a very beneficial practice and can be an effective link between sustainability and student participation.

### **Key points to consider throughout**

In addition, other repeated variables noted throughout this study are essential to consider when concluding how the University of Leeds may take practices further.

Initially, it is not feasible for everyone to have a role, but learning from the interaction and calculating an effective scale of implementation is crucial. Attitudes to sustainability and partnership are also important, particularly when it is a more negative opinion that is difficult to change. Listening to and working with experts has shown to be very effective from the relief in workload and aid in working through challenges for both parties. Facilitating these inputs regularly or routinely and defining objectives needs to be known prior to executing this, however.

Trusting and genuine partnerships produce the most effective outcomes but require consistency. Students may need a push to be involved; this could include incentives, adding a designated time to the course timetable or other mechanisms. Nevertheless, it cannot be expected that everyone wants to be involved but it is essential that underrepresented voices and the majority of student opinions are still heard. Creating change can be difficult from traditional institutional systems in place but students have proved to be the best evidence to create such change. Students believe that

sustainable development should be integrated at their place of study (SOS-UK, 2023 (b)), although they may just lack the knowledge needed to help make this occur.

The sustainable curriculum is greatly beneficial at the university and would only improve from increased awareness to both staff and students. This would aid in answering questions regarding how sustainable practices could be embedded but it is undoubtable this will be a slow process. Finally, smaller initiatives tend to be largely more successful. The increased contact time and routine meetings allow for genuine partnerships to develop, as well as improved practices, clearly defined objectives and effective listening.

### Next steps

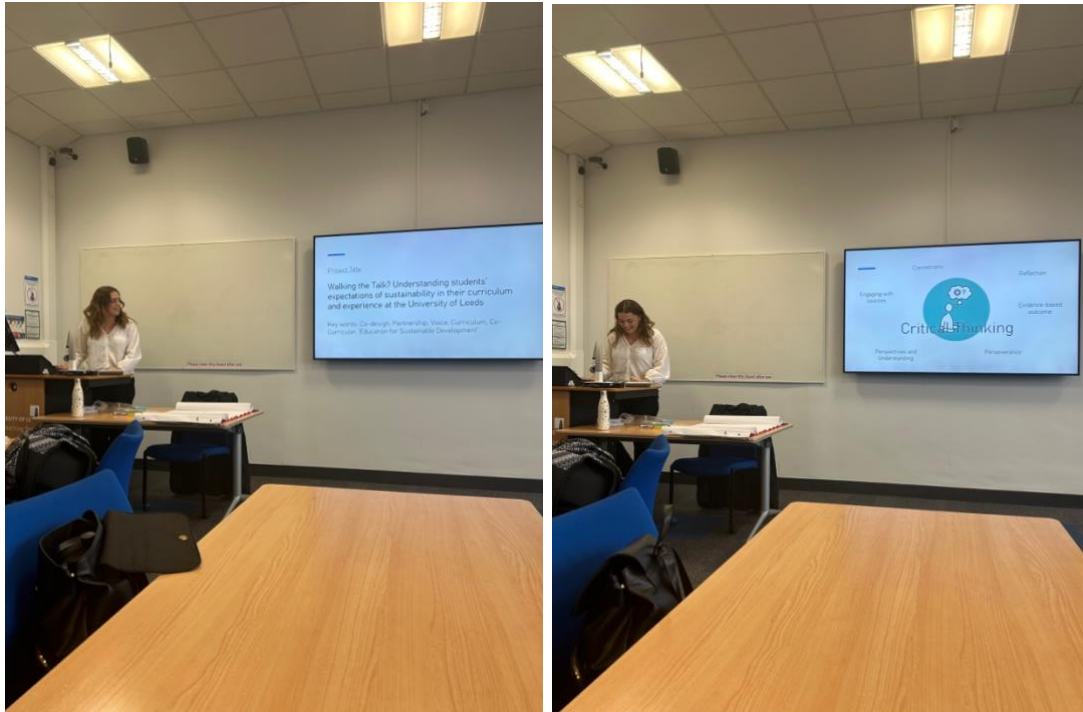
Moving forward, different pathways could be taken to utilisation these findings in practice, beginning with conclusive workshopping of what this could exactly look like at the University of Leeds. Integrating partnership and sustainability into a curriculum requires two domains which are typically not seen in higher education, but growing interest will only accelerate the rate at which they are achieved. The institution and educators should consider which are the most important takeaways, how change can happen and what processes can be the most efficient at creating such change. Overall, it is undoubtable that both these areas are important to students and higher education environments and research should continue to widen understanding and awareness of these topics.

### Reflecting on this research

## Activities for disseminating this research

A mixed-method approach was elected for this study to provide breadth and depth of understanding and to best achieve the research objectives. Initial discussions were held to define shared goals with my supervisor, before beginning a literature review. During this information searching, I particularly focused on ideas of partnership in higher education and current methods of sustainability and student voice, both at the University of Leeds and other institutions. Following this, I completed primary data collection. This consisted of two conversations with both a student and educator at the University of Leeds regarding student voice, as well as a focus group in partnership with one of the Student Sustainability Architects at Leeds, where we discussed ideas of sustainability and collaboration with other SSA's.

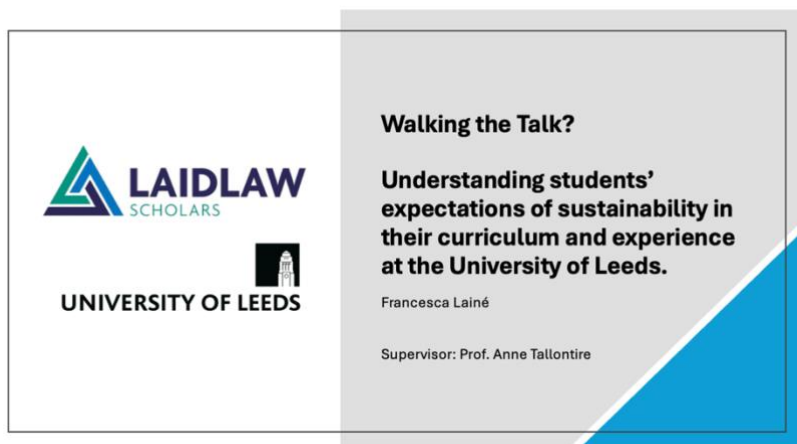
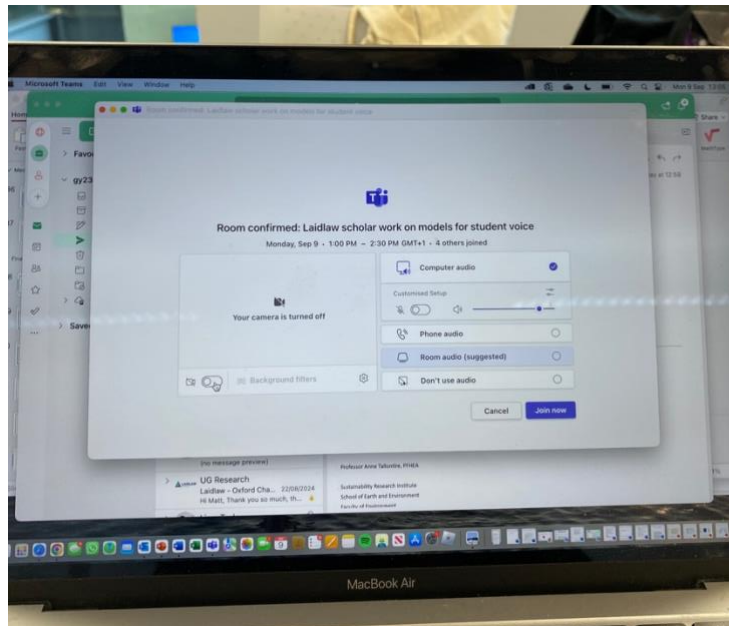
Since analysing and concluding my study, I have produced multiple written outputs. This includes two reports, an annotated bibliography, academic posters and presentations. One of these presentations was for my student contribution at the Skills@Leeds conference 2024.



In my contribution, I discussed two key sustainability skills I had gained throughout my experience working in research over this summer: Critical thinking and collaboration. I considered different challenges I had overcome and how these skills aided in my

perseverance and completion of the study, for instance, evaluating different sources and perspectives and working with and learning from my supervisor.

My second presentation was to deliver my findings to the members of the Sustainability Service at the University, as well as a Leeds University Union Officer.



Having had previous meetings with the programme director of the service, there was interest in learning about my outcomes and discussing possible ways that this could be taken forward into practice. The presentation received positive feedback and ended with workshopping useful mechanisms that could further engage students with sustainability and student voice practices. Moreover, I further communicated with the LUU officer, passing over key statistics utilised in the study to assist the union in the promotion and encouragement of sustainability to students.

The impact of this research on me

Throughout this experience, I have gained insight and understanding into what it means to work and communicate in an academic environment. This includes collaborating with people of different ranks at an institution and calculating shared goals through effective communication. This has encouraged me to consider various perspectives, moulding my values and methods towards sustainability and its respective environmental and social issues.

My interest in the research field has grown, particularly as my only full experience prior to this study was during my A-level geography qualification and its coursework. This investigation has expanded my insight into how significant research can be and how it create real, effective change across multiple communities, especially within the sustainability domain. Furthermore, participating in this research has encouraged me to start to build career ideas and further explore my interests in sustainability. I am eager to see what it can look like beyond my discipline of study through further opportunities and understanding how I can adapt my knowledge to different contexts.

The research has further impacted me by expanding my written skills and increasing my capability to network and meeting different people. My comfort zone has undoubtedly been pushed, but overall, the encouragement to find common ground and work with different people will hopefully translate positively into my later-life experiences and help guide me through new and potentially uncomfortable situations throughout my education and career. Furthermore, I believe it has encouraged me to be braver and more confident in my abilities, as well as continue to improve on my weaknesses and not be fearful to work with others.

#### Leadership skills I have gained

As mentioned in my contribution at the conference, two key skills I have developed throughout this research are critical thinking and collaboration. Critical thinking was essential to identifying key themes and drawing connections between the literature and the primary data, as well as distinguishing credible, useful sources that could help determine my specific objectives. This pushed me to advance my critical thinking and engage with and evaluate sources in a much more reliable and conclusive way. Furthermore, addressing different perspectives, such as students' opinion versus staff attitude, encouraged me to reconsider my research process and think critically about the bigger pictures and its various points of view before finalising my outcomes.

Working collaboratively with my supervisor and the student sustainability architect pushed me to improve my communication skills and work effectively to incorporate all participants when defining shared goals. Working and learning closely with faculty has

allowed me to deepen my understanding of workplace environments and relationships, as well as how to articulate successfully any queries or concerns I may have when working on a project.

Throughout the activities I executed to disseminate this work, such as working in focus groups and presenting my findings, my confidence has undoubtedly grown. Though still nerve-racking, I am becoming more comfortable in sharing my point of view and trusting my capabilities as well as persevering through challenges and remaining determined. I also feel my time management has improved, allowing me to more effectively problem solve, communicate and execute future thinking.

### Future career, educational and research plans

On completing this study, I hope to continue working within this area of research in different ways by gaining experience. Given that I share the opinion of my fellow students in that I want to gain career and employment experience, I intend to apply to be a Student Sustainability Architect in my second year at the University. This involves a part-time position working with the Sustainability Service, researching different areas of sustainability and hopefully putting these discoveries into practice. This could potentially include taking this research further or entering a new field of sustainability research and collaborating with different students and faculty.

Furthermore, I am now interested in a year in industry during my degree, with intentions of working within the sustainability field or academic professions. I also intend to explore further internship opportunities that could expand my skills in different ways and gain new knowledge, for instance, I would be interested to experience how sustainable practices can work in businesses or companies, as opposed to academic environments. However, despite that, whilst I am in higher education, I hope to continue to engage with the university and explore any opportunities that help to further develop my research and leadership skills.

Studies like these that focus on centring sustainability across all disciplines to all people are massively significant and are necessary both now and into the future. Disseminating sustainability practices will only further encourage action to be taken, and spreading knowledge will inspire change and help inform future decisions. Listening to students should always be centred at any level of education, taking on their feedback and using it to create change will strengthen initiatives and improve society through collaboration and future thinking. Overall, this research intends to contribute to this movement and encourage partnerships and sustainable learning for all.

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