SHAPE SUSTAINABILITY IMPACT PROJECTS

2020-21

OVERVIEW AND OUTCOMES

The British Academy

STUDENTS ORGANISING FOR SUSTAINABILITY UNITED KINGDOM

SHAPE SUSTAINABILITY IMPACT PROJECTS: OVERVIEW AND OUTCOMES

Contents

1. Summary

During a turbulent period for students and universities, SOS-UK and the British Academy successfully launched SHAPE Sustainability Impact Projects with three UK universities. The project adopts the British Academy's use of the term SHAPE, referring to Social Sciences, Humanities & the Arts for People, the Economy and Environment. The project embodied Education for Sustainable Development pedagogies to empower students in the Arts, Humanities, Social Sciences, and related programmes at Manchester Metropolitan University, the University of East Anglia and Bangor University to actively contribute to real-world sustainability challenges through interdisciplinary, collaborative teams.

The project opened recruitment in September 2020, and students were invited to join an online launch event in November 2020, where staff from the three universities posed real sustainability challenges faced by their universities and wider community partners. Following the conference, students assembled into teams to plan, develop, and implement, where possible, projects in which they could apply their academic specialist knowledge and understanding to finding solutions for the sustainability challenges they were set.

Throughout the project, students and academics were engaged in realising the relevance and impact of their disciplines in tackling environmental, social, and economic sustainability through applied learning. Students' own institutions and local community served as the testbed for their work, enabling an understanding of the impact of their disciplines in a local, hands-on context.

The student-led project outputs include surveys & research, online events and creation of resources; project outcomes include increased student engagement with, and awareness of,

sustainability, increased understanding of sustainability within the curriculum, and the potential for reduced energy consumption, increased green space and community building, if student recommendations are implemented by the relevant stakeholders. These outputs and outcomes (outlined in more detail in section 5 of this report) offer examples of how SHAPE-related disciplines can, and are, contributing to sustainability goals, and demonstrate how student perspective and expertise can drive sustainability work within the education sector.

The project concluded with an online conference in February 2021 where students presented nine completed projects, including findings and recommendations, to key stakeholders at their university to enable further work in this area. The project will also be presented at the Advance HE Sustainability Symposium in March 2021 to increase the reach of learnings from the project to the wider sector.

2. Background and rationale

Students from the arts, humanities and social sciences do not always have the opportunity to lead on and learn for sustainability. Whilst science, technology, engineering, and mathematics (STEM subjects) are often seen as the future leaders in the green economy, with a focus on technology and engineering solutions, the role that students from subjects outside of STEM fields will play is not always as clear. This project gave students from a wide range of disciplines an opportunity to consider their role in a sustainable future.

From research conducted by NUS and SOS-UK over the last ten years, we know that 83% of students would like to see sustainable development actively incorporated and promoted through all courses, and 65% say sustainable development is something they would like to learn more about. This is statistically significant across disciplines.

> **"Students graduate knowing what we discuss in the classroom and if we're not drawing out sustainability messages now, we are doing a disservice to our graduates of the future."** ***Staff member, Bangor***

Through our research, students have highlighted that the most relevant ways they want to learn for sustainability are through applied learning opportunities such as placements, projects and work experience. SHAPE Sustainability Impact Projects therefore adopts a living laboratories methodology, and was informed by SOS-UK's previous work on living labs and applied learning, including research published with EAUC and the 'For Good' suite of opportunities and online platform.

The project design has been informed by Education for Sustainable Development pedagogies, such as linking with real-world issues, enquiry-based learning, problem-based learning (PBL) and critical reflection. Workshops and project design supported students to developed key competencies for sustainability (as described in the QAA and Advance HE Education for Sustainable Development Guidance, using UNESCO's key competencies for sustainability), including systems thinking, strategic thinking, collaborative, self-awareness, and integrated problem-solving competencies.

The project links to the British Academy's work in policy, contributing towards a fair and just transition for a more sustainable society. The project links with the Academy's 'Where we live next' series, understanding sustainability from a place-based and community-based policy understanding. The project embodies the ethos of leading sustainability from the bottom up,

and how communities (such as university campuses and student groups) can engage with sustainability, in policy and in practice.

3. Project overview

Three universities were selected to take part: Bangor University, Manchester Metropolitan University and the University of East Anglia. At the three universities, at least **14** academics and professional staff were involved in the project, supporting students throughout.

The timeline for the project is outlined in Figure 1, below.

FIGURE 1: PROJECT TIMELINE	
STAGE ONE: PREPARATION AND STUDENT RECRUITMENT	
Oct 2020	Student recruitment and baseline survey of students participating in the project
STAGE TWO: SHAPE SUSTAINABILITY IMPACT PROJECTS LAUNCH	
Nov 11 and Nov 12 2020	Two-day pitch and launch, including: • University staff pitch sustainability challenges to participating students. • British Academy Academics present how their disciplines respond to sustainability challenges. • SOS-UK training on sustainability, project management, problem solving and systems thinking. • Student teams map out initial plan and agree shared working practices.
STAGE THREE: ONGOING SUPPORT	
Nov – Dec 2020	Student teams work with university leads who set the initial challenge, with support from SOS-UK. Mid-point group Zoom call with all student teams, including an opportunity to check in on progress, share updates from each team with short presentations and problem solving on any barriers or issues experienced to date.
Jan 20 2020	Zoom check-in, and training workshop for students on monitoring project impact, presenting findings, and what does success look like.
STAGE FOUR: PROJECT CONCLUSION AND CONFERENCE	
Feb 10 and Feb 11 2021	SHAPE sustainability impact projects conference: • Online conference where project leaders present their projects and recommendations. • Panel of staff evaluate students' proposals for addressing the sustainability challenges. • University leads provide feedback and discuss possible local implementation.
STAGE FIVE: REPORTING (led by SOS-UK)	
Feb - March 2021	Students receive their digital employability badge. Surveys and feedback collected by SOS-UK, and analysis presented in project report.

To ensure we supported the students fully in their role as project leaders, we asked in the baseline survey what they thought they would find most challenging in the project and what, if

anything, we could do to support them overcome these challenges. Regular communication with project leaders throughout the project presented additional opportunities for students to raise any concerns they had.

Evaluation activities were completed with participating students and universities throughout the duration of the project. These activities included:

- Baseline and follow-up surveys completed at the start and end of the project with students, designed to quantitatively measure changes in skills and knowledge as well as feedback on, and suggestions for the project going forward.
- Students completed a reflective log at three points throughout their involvement in the project, capturing qualitative feedback on their experiences of working on the project, and on their development as a result of their experiences.
- Feedback secured from university staff on an ad hoc basis throughout the project as well as an invitation to provide in-depth feedback at the end of the project.

4. Student demographics

Equality, diversity and inclusion was recognised as an important element of the project. As such, steps were taken to maximise the diversity of student project leaders (both in terms of academic background and personal demographics). Initial outreach to recruit universities to the project targeted universities with a broad range of arts, humanities and social science faculties, as well as high levels of equality, as described in data from HEPI.

Once universities were on board, staff at each university were encouraged to recruit a transdisciplinary cohort of students to the project, and were also given advice to support EDI in the recruitment process (such as links to university EDI committees, liberation officers in the Students' Union, and targeted promotion to Students' Union societies for liberation groups).

From the three participating universities, 47 students were initially recruited and attended the launch event. Of these, 10 were unable to commit to the project long-term, so **37** students formed the **nine** project teams and completed their projects. Figures 2 – 4 below show the subject area, level of study and year of study for the student project leaders.

FIGURE 2: Student project leader subject area (number of students)

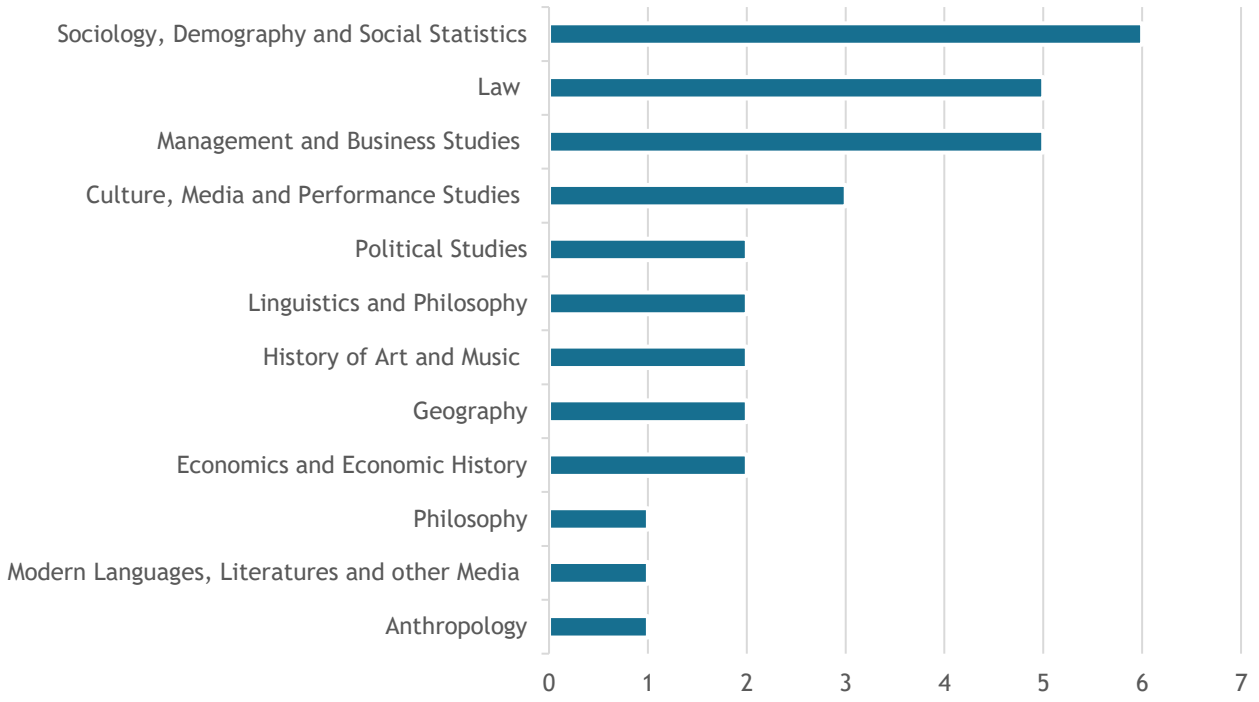


FIGURE 3: Student project leader level of study (number of students)

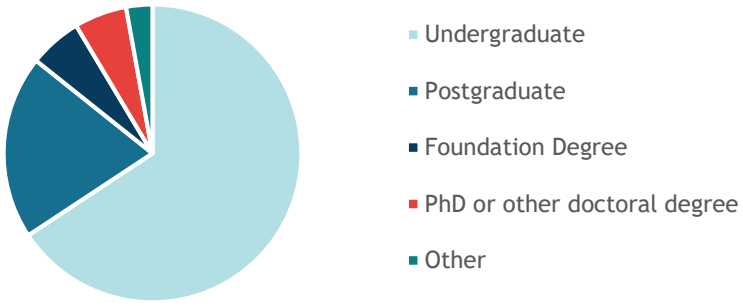
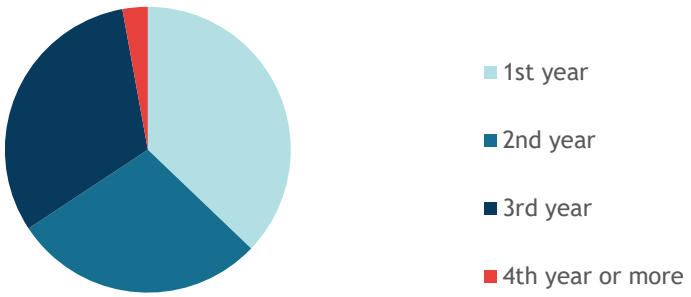


FIGURE 4: Student project leader year of study (number of students)



5. Student projects: outputs and outcomes

Each of the nine projects achieved a different set of outputs and outcomes, detailed in Figure 5, below.

FIGURE 5: PROJECT OUTPUTS AND OUTCOMES

UNIVERSITY	PROJECT	OVERVIEW/AIMS	OUTPUTS	OUTCOMES
Bangor University	1: Sustainable Energy Use at Treborth Botanic Garden	The project seeks to ensure the sustainability and development of Treborth Botanic Garden and highlight the importance and potential for it. The project identified that this will require substantial funding, so focused on launching a fundraising campaign.	• Campaign launch to raise funds for Treborth. • Plan developed for future events and campaign activities, including links with student groups, national groups and university departments.	• Project leaders have been able to develop self-awareness and integrated problem-solving competencies. • Awareness raised on Treborth and the challenges it faces. • Increased engagement with key stakeholders and gathering of allies for the campaign.
	2: Supporting future generations at M-Sparc	This project was designed to assess the sustainability of the Menai Science Park (M-SParc) in regard to their current and potential future work, and evaluate how they contribute towards the Future Generations Act now and in the future.	• Developing relationships with key stakeholders at the university and M-Sparc. • Report produced outlining student suggestions for sustainability improvements (environmental, social and economic) at M-Sparc.	• Project leaders have been able to develop strategic thinking, collaborative and self-awareness competencies. • Improved knowledge of sustainability legislation and how it is applied. Expected outcomes (subject to M-Sparc taking up recommendations): green energy solutions, partnership development, and the building of cohesive communities.

	3: Enhancing Sustainability in the Arts, Humanities and Social Sciences curriculum	The aim of the project was to examine how sustainability features in the College of Arts, Humanities and Business (CAHB) curriculum. Sustainability is a core element of Bangor University's long-term strategy and to begin the journey of becoming more sustainability-oriented in all facets of the university's work, a review of the CAHB curriculum was devised.	• Preliminary mapping of 905 undergraduate modules against the UN 17 SDGs. • Including the data from 47 modules previously mapped in the School of Law, the reviewed modules make up 70% of the total undergraduate modules taught in the CAHB.	• Increased perception of how sustainability is taught in the CAHB, with more than 50% of the mapped modules reflecting strong sustainability themes. • This project should lead to a review with module leaders to provide them an opportunity to expand and address other SDGs that may be applicable to their modules and not identified during the mapping, with a view to delivering more sustainably oriented modules as a long-term strategy.
MMU	1: What role can students in Arts and Humanities play in communicating and understanding sustainability issues, generating debate and forms of creative expression?	This project formulated a series of interdisciplinary panel talks & workshops addressing sustainability challenges from many perspectives and suggesting actionable solutions.	• "What is…?" series created to examine our relationship with sustainability issues through material objects. • Online event in February with more than 70 attendees, 4 panellists, and pre- and post-event surveys. • Instagram account set up to grow the series in the future.	• Survey results suggest that attendees are more likely to consider their everyday material objects from a sustainable angle. • Understanding developed that storytelling is vital to helping .people make sustainable choices • Increased appetite for future talks and workshops.

	2: Developing a strategy for organisations to contribute to zero carbon 2038	This project identified the large carbon footprint and slow change in the adoption of new technologies in the fashion industry and began to think of ideas on how to improve this.	• Survey and interviews conducted to gather background information. • Development of a label to improve business standards and reduce carbon footprints, including a brand and set of standards.	• Project leaders have developed an increased understanding of sustainability impacts and opportunities along the whole life-cycle of garments. • Project leaders have developed systems thinking competencies.
	3: What role can students play in co-creating our university Sustainability Strategy 2030?	This project aimed to inform students of the Manchester Metropolitan's 2030 sustainability strategy, demonstrate how they could be involved and make an impact, and enable students to have a greater awareness of sustainability.	• Engaged with MMU social media team to launch an MMU sustainability strategy takeover. • Created a virtual flower garden on the MMU Instagram stories, which engaged 2,700 students.	• Students encouraged to learn more about sustainability. • Priority areas for the sustainability strategy have initially been identified through the Instagram polls.
UEA	1: What will a sustainable UEA look like in 2050?	This project aimed to outlining the ways in which UEA can achieve its sustainability goals by 2050, through the effective use of Green Spaces and further reduction in emissions from the Campus.	• Removing the social stigma around allotments as they are for "old people" by spreading awareness and encouraging more students to support them • Working with other sustainability projects and teams at UEA. • Survey conducted on green spaces, carbon footprints, allotments and student's awareness of ecological initiatives.	• Project leaders have developed critical thinking and strategic thinking competencies. • An increased understanding that UEA students are aware and supportive of a better and more sustainable campus, be it the allocations for campus-grown food or being cautious about their carbon foot print, along with making campus buildings more carbon neutral. • Opportunities and existing projects identified, and

			• Proposed food hacks to minimise food waste and sustainable consumption • Communicated with teaching staff of the dept. of International Development who has bought 300 trees to be planted around campus in March.	recommendations on communication ideas suggested to relevant stakeholders.
	2: How do we engage shared values to reach sustainability?	This project aimed to bring people together, and create a platform where current UEA students, staff and alumni can pass on sustainability tips to new students.	• Identified existing sustainability initiatives and events across UEA. Expected outputs (in progress): • Design a sustainability guide to be sent out to students. • Create an online collaborative platform to build on the sustainability guide.	• Project leaders have been able to develop integrated problem-solving competencies. Expected outcomes: • Higher levels of engagement for first year and international students with sustainability • An increased sustainability network across UEA.
	3: How do we embed sustainability into the UEA curriculum?	This project aimed to integrate sustainability modules from the School of Environmental Sciences and International Development departments into Norwich Business School courses, and to make sustainability modules an option for Arts, Humanities, Social Sciences Faculty students to study.	• Preparation of content and slides for a pilot lecture on sustainability that can be taught in a Norwich Business School (NBS) class. • Guest teachers identified and conducted. • Pilot lecture unable to take place due to COVID-19 and disruption to teaching.	Expected outcomes (once pilot lecture is able to happen): • NBS students gain knowledge on relevant sustainability issues. • NBS students have an increased understanding of integrating sustainability in business. • NBS students feel comfortable integrating sustainability within their own future enterprises.

6. Student experience

As outlined in section 3, evaluation activities were embedded throughout project delivery to capture the experiences of students participating in the project. This section summarises the findings of the evaluation research.

Skills and knowledge

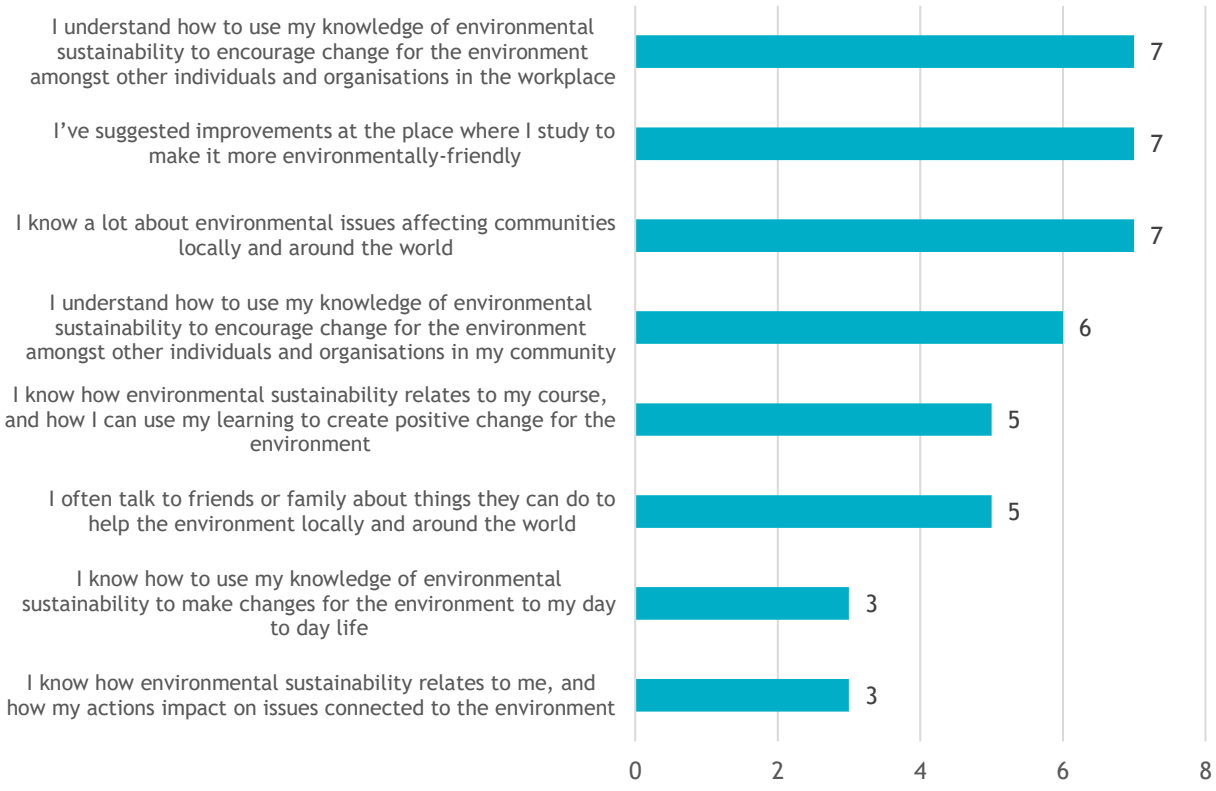
Students participating in the project were asked to complete baseline and follow-up surveys which were designed to track the development of learning and skills. Key ESD competencies were given a particular focus in the research.

Whilst only a small number of students (10) responded to both surveys in a way that enabled this tracking, these responses suggest that respondents developed their skills, understanding and awareness of sustainability and their role in progressing it.

Figure 6 below shows 7 of 10 respondents reported improvements in a self-assessment of:

- their understanding on how to make change in the workplace,
- action to improve environmental performance at their place of study, and
- their knowledge of environmental issues locally and globally.

FIGURE 6: Number of participants reporting an improvement between the start and end of their involvement in SHAPE Sustainability Impact Projects



The reflective logs completed by participants also demonstrated this:

> **"I have begun to understand more about how organisations, such as universities, can have an impact in designing a more sustainable future and how they could be a vital central co-ordinator of local responses to climate change. In relation to my course this has allowed me to think about the impact of players on local, regional and national scales when tackling global problems."**

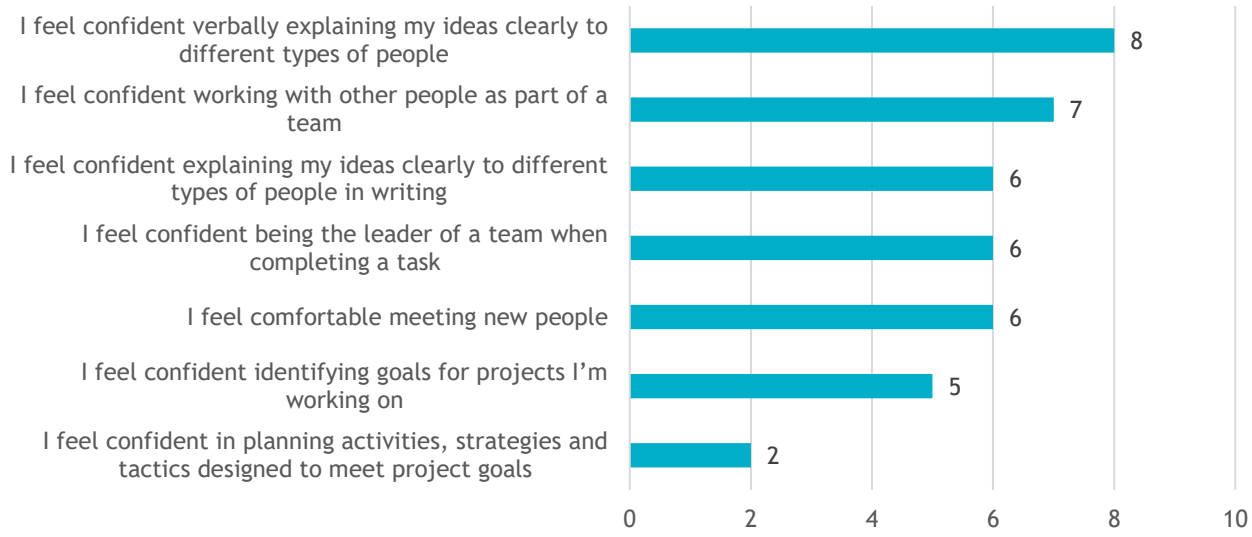
> **"Being part of the SHAPE Sustainability Impact Project has been an eye-opening experience for me. I knew our planet was at risk, but I did not know endangered it really is."**

> **"I've also found that I am being a lot more mindful of how sustainable I can be, as well as engaging in informed conversations about sustainability with my peers."**

The survey research also asked respondents to self-assess themselves against some key employability skills. The main improvements noted by the 10 respondents who completed research fully include:

- Communication verbally and in writing.
- Team work and team leadership.

FIGURE 7: Respondents reporting an improvement in employability skills



Reflective logs revealed qualitative insight into the areas of development amongst participants:

"I think I need to develop by being more open with any doubts that I have. To do this, I need to increase my confidence in communication, which is something I have been developing throughout this project."

"I think public speaking and presenting is always hard, by doing this project and putting myself forward to help present, I am pushing myself out of my comfort zone, hopefully each time I present it will get easier."

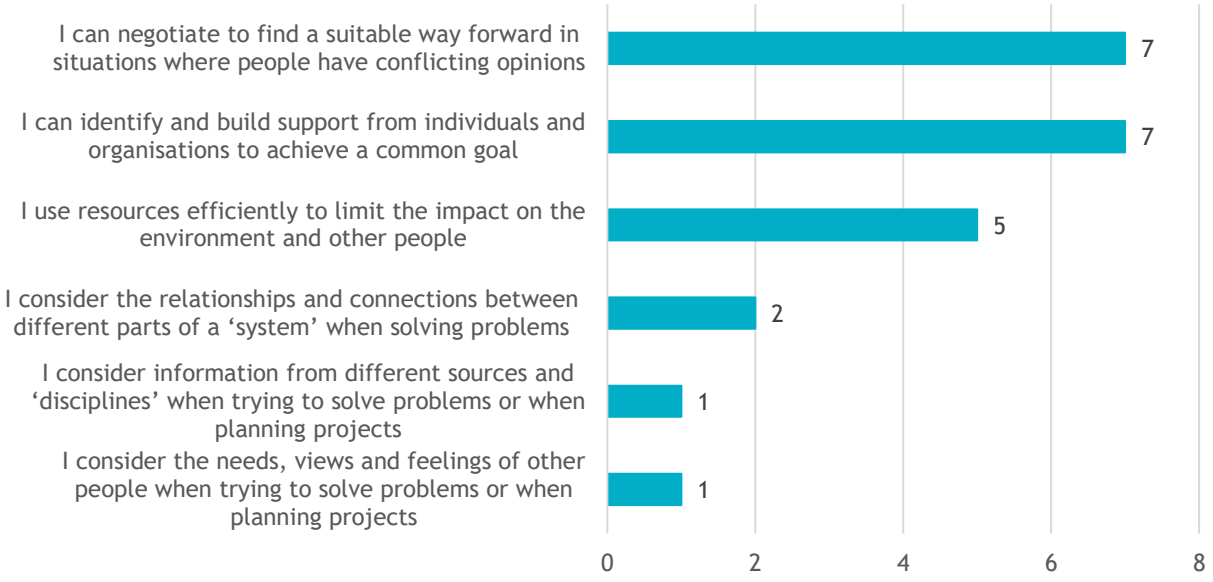
"I feel I have worked effectively, specifically as a leader and I feel like I have been good at organising."

"The group has also worked really well together, and has helped me develop my teamwork skills as I usually like to take a leading role, however for this project it suited me better to follow the instructions of the others as they were more knowledgeable about the subject at hand."

The self-assessment task conducted through the surveys at the start and end of their involvement in the project covered specific skills that are seen as important to ways of working that support the achievement of sustainable development. Key improvements noted by respondents include:

- Negotiation where conflicting opinions arise.
- Building support to achieve a common goal.
- Using resources efficiently.

FIGURE 8: Respondents reporting an improvement in skills for sustainable development



Finally, the surveys also asked for the respondents' perspectives on their involvement in sustainability outside their studies. Aspects that saw a change in the level of agreement with the statements listed below include:

- Perceptions of their ability to take on a volunteer position related to environmental sustainability.
- Perceptions of their ability to get a job working on environmental issues.
- Perceptions of their ability to take on a volunteering position related to social responsibility.

FIGURE 9: Changes in respondent aspirations beyond their studies

[n.b. ** indicates reverse scale, where strength of disagreement increased]

Other benefits highlighted during evaluation by participants include, an appreciation of the relevance of sustainability to subjects beyond the usual silo, including their own courses:

> **"As a result of this project, the first question I ask in dealing with everything from academics to daily life is; 'what impact will this have on the environment and people?' On my Doctoral research which deals on women in conflict, I have identified those SDG Goals existing in the research which prior to this project I never knew were SDG Goals. Consequently, the rest of the research is poised to incorporate as many SDG Goals as can be realistically highlighted in the thesis."**

> **"I have understood more about the need for an interdisciplinary approach to tackling sustainability issues, and how there needs to be more action from everyone at all levels. I have also seen how little sustainability is involved in the curriculum, meaning that many people, including myself, don't fully understand**

the issues the world currently faces. This relates to my course as sustainability issues could easily be brought into many of the issues that we discuss, and by exploring these it could help me to understand sustainability better."

"My research is on women, peace and security in warfare. I knew there was an environmental part of armed conflict…but I never knew there was an SDG relating to gender and peace, so it has kind of changed my perception of my research. It has done a lot for me personally, and it's a wonderful thing."

Also highlighted was an appreciation for the opportunity to make connections with like-minded people:

"I have really enjoyed the project overall. It has been great to meet likeminded people from different disciplines and has been really interesting to see all groups inventive ways to tackle climate change."

"I have really enjoyed being involved in the project. I enjoy being able to work with those with those who feel as passionate about the environment as I do, and sharing ideas on how to improve societies way of living to try to do all we can to improve."

The 'real world' nature of the projects they were delivering also gave respondents to the reflective log satisfaction:

"New learning experience in a new place as well as the practical application of my knowledge."

"I really like the fact I feel I may be able to contribute and participate in a project, involving our own ideas, and those ideas could actually be taken further and be used for the university and make a real difference."

Strengthened interdisciplinary research communities focused on tackling environmental and social issues.

"I have found it really interesting being able to work interdisciplinary on a task that is relevant to all of our degrees as well as our future lifestyles and careers."

"I found out how many factors contribute, in fact, to the overall environment problem. I have also found out about the breadth of sustainability and each of its categories. In that, there were mentioned sustainable cities and communities and I believe that, through my current course I can help with that area of the environmental sustainability. In our group, particularly, I found out about the use of architectural structures that are used in fashion and that opened my mind with regards to how versatile my course really is."

"Throughout this course I have learnt that environmental sustainability needs a lot more of a diverse and inclusive approach - that it can't be achieved without social equality and inclusion of various departments. As an architect, this thought me that I need to branch out and reach out to those in other fields to create truly sustainable designs."

All project leaders were issued with a digital badge, issued by Badge Nation, to demonstrate their participation in the project, and the skills they have been able to develop. To date, 26 project leaders have shared their digital badge via LinkedIn or email.

FIGURE 10: THE DIGITAL BADGE AWARDED TO PROJECT LEADERS

7. Challenges and improvements

Despite adapting well to running the project entirely online, students participating identified some barriers and challenges. These challenges mainly related to online working, or direct experience of the COVID-19 virus:

"Working over the internet was especially difficult but we worked creatively to find a solution."

"COVID-19 and trying to formulate teamwork over Zoom."

"Mostly the online thing. But we managed as a team."

"As I was ill for 10 days with coronavirus, I think in terms of my situation and the work I have given to the group I am quite proud of how much I was able to contribute."

Feedback on the delivery of the project was in general extremely positive, however some respondents noted suggestions for improvements to the project approach which fall into two categories:

- More opportunities to secure feedback from university staff and the project delivery team on project progress and direction

- Specific support on project-related tasks for example, delivery of focus groups, social media management.

8. Local project legacy and staff feedback

Through discussions at the final conference, and staff follow-up surveys, feedback from the three participating universities was very positive, as shown by the quotes below:

> **"[We have achieved] greater engagement with students and academic staff during a really difficult year for engagement activities. A fantastic opportunity for us to get student engagement on our sustainability strategy and plan. We'd love to participate in the future."** ***Staff member, UEA***

> **"Some really brilliant ideas [came out of the projects], some of which we had thought of, but a lot we hadn't, which is why we wanted to go to the students. And particularly engaging with those non-STEM subjects: if we are embedding sustainability in what we do as an institution, we can't just concentrate on the STEM subjects, we have to concentrate on the arts, humanities and social sciences."** ***Staff member, UEA***

As well as feedback on the project as a whole, staff from each university provided feedback on how they might use the results and findings from each student group, as well as opportunities to support the continuation of the projects. This included:

- Increasing student voice in the development of curricula (MMU)
- In the future, offering all students the opportunity to complete credit-bearing projects in this area (MMU)
- Looking for opportunities for students to practice the insights they gain through projects like these (MMU)
- Staff support time to continue projects, including further use of the Special Collections (MMU)
- Use the information from the projects in the Sustainability Strategy consultation (MMU & UEA)
- M-Sparc intends to use the research and recommendations that came out of the project to inform their sustainability work (Bangor)
- Regarding the Treborth project, the campaign that has been started by the students will hopefully lead the university to see the immense value of the botanic garden, and see it as something worth investing in (Bangor)
- The college of arts, humanities and business is now interested in enhancing sustainability across all of the schools in the college, and would like the student project leaders to make a further presentation and recommendation to the Dean of the college (Bangor)

FIGURE 11: STUDENT PROJECT LEADERS WITH M-SPARC STAFF AT M-SPARC IN BANGOR

The feedback from staff also had a positive impact on the students, as demonstrated by the quote below:

> **"The sustainability team seem thrilled with the work that we have done and I am happy that we have boosted student involvement in the new sustainable development strategy. We interacted with the social media team and have left a lasting legacy in the form of a story highlight."** ***Student project leader, MMU***

9. Dissemination and next steps

SOS-UK and some of the student project leaders presented the project to the sector at the Advance HE Sustainability Symposium in March 2021, alongside staff from the British Academy, and we will continue to seek further dissemination opportunities. Through this dissemination, the intention is to build recognition and increase appetite for this type of work within the education sector.

Given the success of the project, SOS-UK hopes to replicate and build upon it in the future. Some potential options for development include:

- Engage more students at more universities
- Engaging a wider range of community-led organisations within the locality of the universities
- Widening participation: Integrating more into students' formal courses, or small bursaries could be offered, to encourage greater participation from those who aren't able to dedicate time to extra-curricular activities.
- Supporting students in areas that this cohort have found challenging, and build in more individual team check-ins to allow for project-specific questions.

The project was oversubscribed at two of the three participating universities, and a number of other universities expressed interest in taking part but were not able to commit the time in Autumn 2020 due to the impact of COVID-19 on their campuses. There is demand for this type of project within the sector, and SOS-UK is keen to develop and expanding this project with the British Academy in the future.