SUSTAINABILITY SKILLS SURVEY 2023-24

RESEARCH INTO STUDENTS' EXPERIENCES OF TEACHING AND LEARNING ON SUSTAINABLE DEVELOPMENT

HIGHER EDUCATION REPORT



CONTENTS

<u>Summary</u>	3
Introduction - Objective, methodology and survey details	8
The respondents	11
Expectations for teaching and learning for sustainability	12
Experiences of sustainability in education	24
Sustainability skills beyond education	36

Acknowledgements

Thanks to the universities, colleges and students' unions across the UK for their efforts in publicising the survey to their students. And thanks also to the students who took part in the research, which helps to develop and improve our work in this area.



Summary





Summary

A national online survey was completed by 11397 students in October and November 2023 to build on the data gathered by research carried out since 2010-11. The research continues to track student experiences and expectations around teaching and learning for sustainability. The research includes areas of questioning on student experiences of learning about key topics encompassed by sustainability as well as understanding in better detail their experiences of accumulating skills that can contribute to sustainability. This summary highlights the latest results from this longitudinal study.



88% say they agree their place of study should actively incorporate and promote sustainable development



81% would like to see sustainable development actively incorporated and promoted through all courses



65% say sustainable development is something they would like to learn more about



Looking at specific 'skills' related to sustainable development reveals variation in (recognition of) coverage during their time in higher education so far...



64% say 'considering ethical issues linked to their subject' has been covered during their time in higher education so far



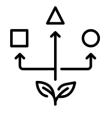
53% say 'planning for the long term as well as the short term' has been covered during their time in higher education so far



53% say 'solving problems by thinking about whole systems' has been covered during their time in higher education so far



36% say 'understanding how human activity is affecting nature' has been covered during their time in higher education so far



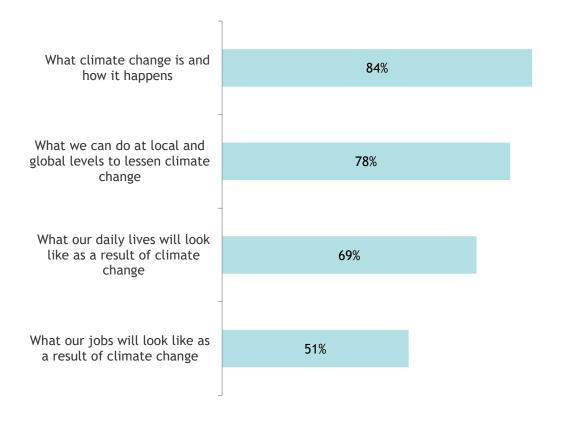
33% say 'using resources efficiently to limit the impact on the environment and other people' has been covered during their time in higher education so far



35% say 'the causes of inequality' have been covered during their time in higher education so far



Most respondents say their time in education so far has covered what climate change is and how it happens (84%) however only half (51%) say they've learnt about what our jobs look like as a result of climate change.



Respondents recognise the action taken by their institution to address negative impacts, and report a positive influence on their own attitudes and behaviours



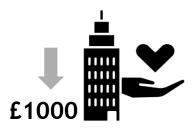
73% agree that 'My place of study takes action to limit the negative impact it has on the environment and society'



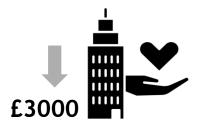
68% agree that 'being a student at my place of study encourages me to think and act to help the environment, and other people'



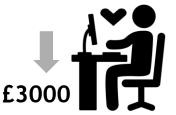
Looking beyond their time in education respondents show a desire to work for companies that perform strongly in relation to sustainable development, and in roles that contribute positively in this area



73% would accept a salary £1000 lower than average to work in a company with a good social and environmental record



54% would accept a salary £3000 lower than average to work in a company with a good social and environmental record



50% would accept a salary £3000 lower than average to work in a job that contributes to positive social and environmental change



Introduction - Objective, methodology and survey details

1



Introduction - Objective, methodology and survey details

This report presents research designed to investigate higher education students' experiences of teaching and learning on sustainable development. The research aimed to assess:

- student attitudes to sustainable development issues;
- student definitions of sustainable development;
- student aspirations towards learning about sustainability and expectations of their place of study;
- student aspirations for sustainability in employment after their time in education.

The data presented in this report builds on the data gathered through ten years of previous research and continues to track changes in demand amongst students across the UK. In 2015-16 (year 6) the research was updated to include new areas of questioning on student experiences of learning about key topics encompassed by sustainability, as well as understanding in better detail their experiences of accumulating skills that can contribute to sustainability. The updated survey has been repeated since 2015-16 and this report focuses on the results since the update.

The 2023-24 online survey was completed in October and November 2023 by students across the UK studying in higher education. 11397 respondents completed the survey, which was promoted on a national basis through the TOTUM student cardholder database and through local promotions by universities and students' unions.

The survey was incentivised with a £500 prize draw and was promoted as a 'skills survey', making no mention of sustainability, to avoid attracting only respondents with a prior interest in the subject. Additionally, the terms 'sustainability' and 'sustainable development' were not used until the penultimate section of the survey to avoid influencing respondent understanding.

The survey results have been weighted according to gender to reflect available statistics for students in Higher Education available through the Higher Education Statistics Agency. A full breakdown of respondent characteristics can be found in section 2. This report presents the findings for student studying higher education courses only.

Throughout the report, where analysis has revealed statistically significant differences between groups of respondents, these have been outlined.

Significant differences are reported at 99% confidence level unless specified otherwise.

This report presents the findings in the following areas:

- Expectations for teaching and learning for sustainability
- · Experiences of teaching and learning for sustainability
- Sustainability skills beyond education



Sustainability 'skills'

To help assess respondent experiences of teaching and learning, the survey includes questions linked to a number of 'skills' that can be associated with achievement of sustainable development. The skills include:

Skills for sustainable development...

Looking at global problems from the perspective of people from around the world

Considering ethical issues linked to your subject

The causes of inequality in the world

Understanding how to create change

Understanding how human activity is affecting nature

Challenging the way we do things now (like business, politics, education) Solving problems by thinking about whole systems - including different connections and interactions

Communicating complex information clearly and effectively to different types of people

Using resources efficiently to limit the impact on the environment and other people

Looking at a problem using information from different subjects or disciplines

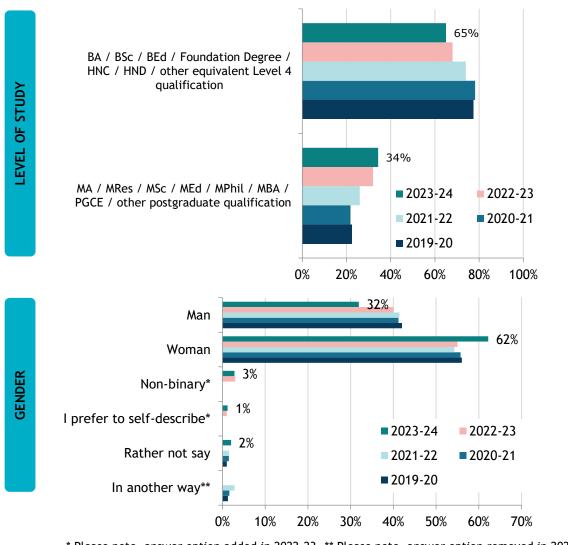
Planning for the long term, as well as the short term

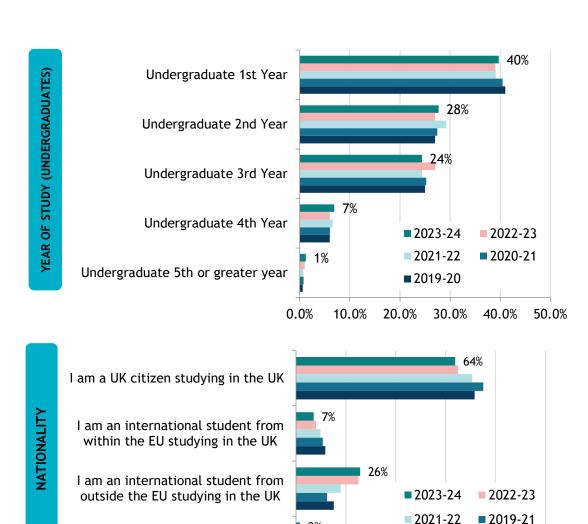


The respondents



Respondent demographics





2%

20%

I would prefer not say





100%

80%

■ 2019-20

60%

40%

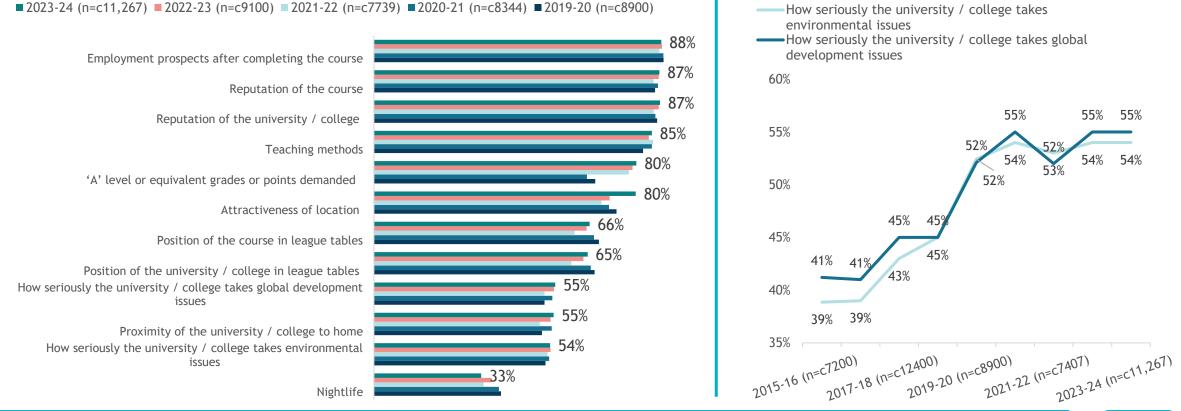
Expectations for teaching and learning for sustainability

3



What factors influence choice over place of study?

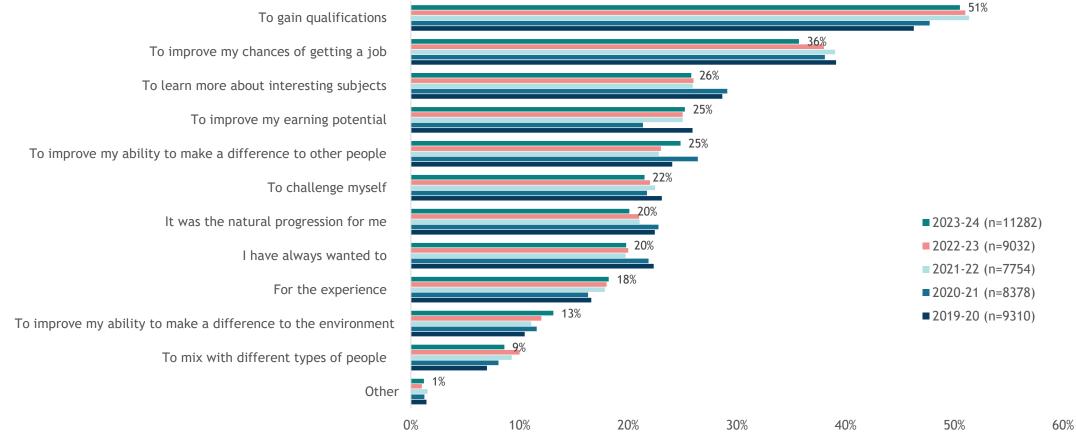
Respondents were asked to identify how important a range of factors were to their decision on where to apply to study. Primary motivations for respondents include, employment prospects on completion of their course reputation of their course and institution and the teaching methods used. However, over half (54%, n=6075) of respondents were influenced by the action their place of study takes on environmental issues. A similar proportion of respondents report they are motivated by how seriously their university or college takes global development issues (55%, n=6233). These motivations have significantly increased over the course of this research. International students from outside the EU are most likely to say how seriously the university / college takes global development issues (75%, n=2180) and environmental issues (70%, n=2014) are most likely to influence their choice.





What influences choice of subject or course?

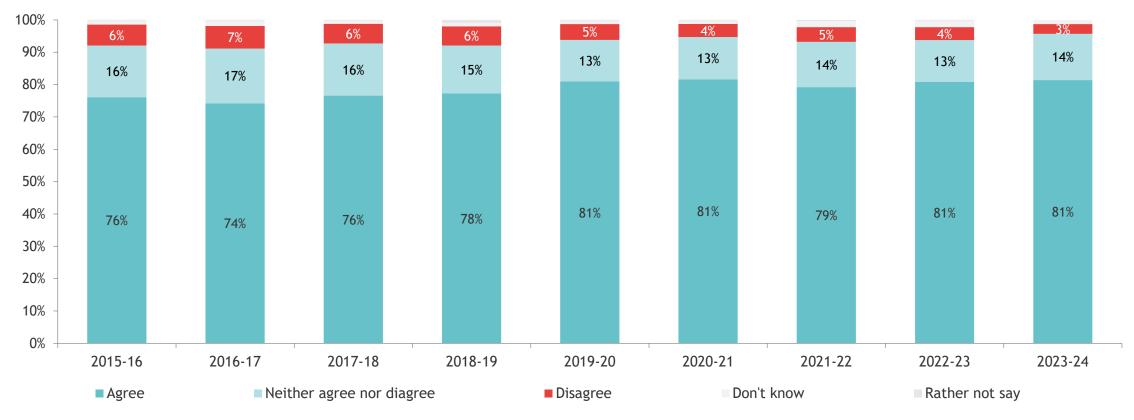
Respondents were asked the main reasons they chose the course they are currently studying. For higher education respondents, the primary motivations are to gain qualifications (51%, n=5698) and to improve their chances of getting a job (36%, n=4024). A relatively lower number of respondents cite improving their ability to make a difference to the environment (13%, n=1476) or to mix with different types of people as a main reason why they chose their course (9%, n=969).





Do students expect places of study to develop students' sustainability skills as part of courses?

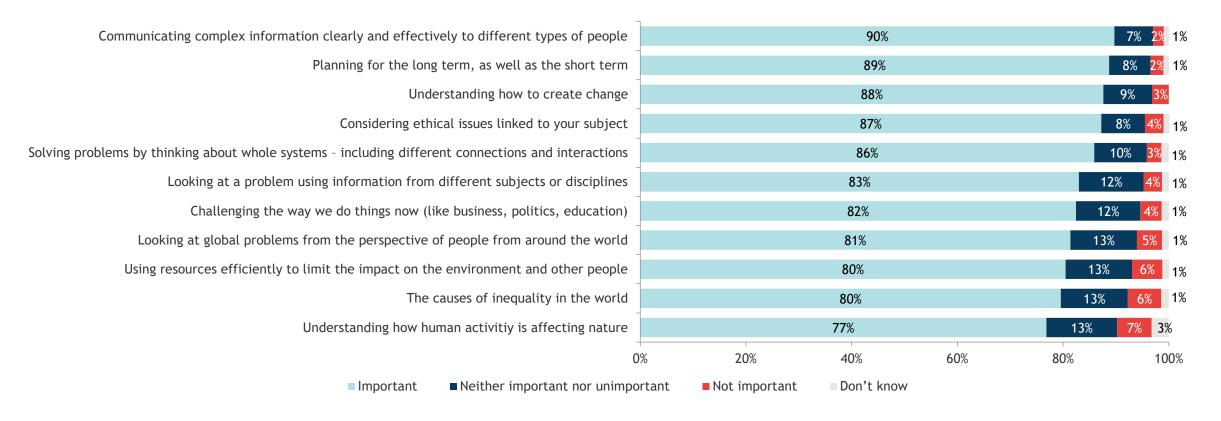
Overall, a majority respondents agree that places of study should be obliged to develop students' social and environmental skills as part of the courses they offer (81%, n=8965).





How important to students is learning skills and knowledge linked to environmental issues?

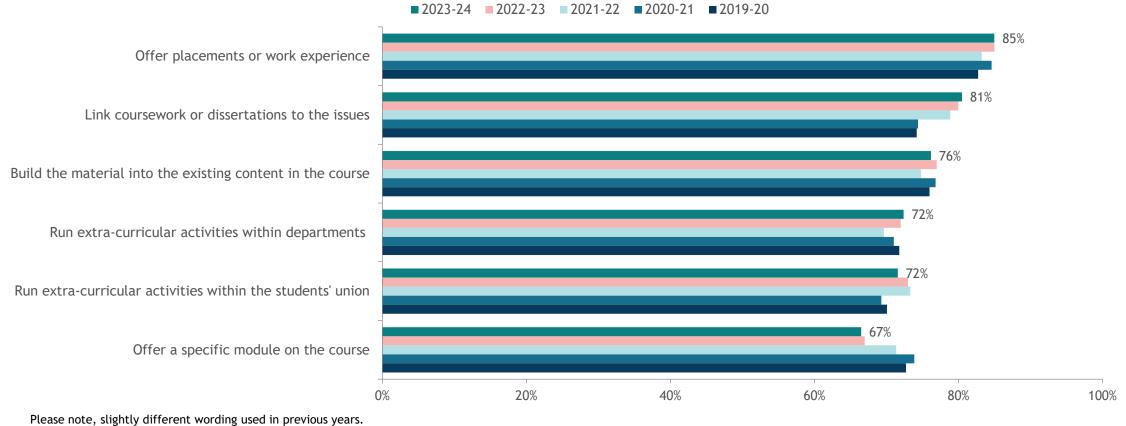
Respondents were asked to reflect on how important learning these skills, attributes and knowledge is at their place of study. Skills and knowledge most important to learn for students is communicating complex information clearly to different types of people (90%, n=10075), planning for the long term as well as the short term (89%, n=9962), understanding how to create change (88%, n=9737) and considering ethical issues linked to their subject (87%, n=9780).





How should sustainability skills be developed and included in courses?

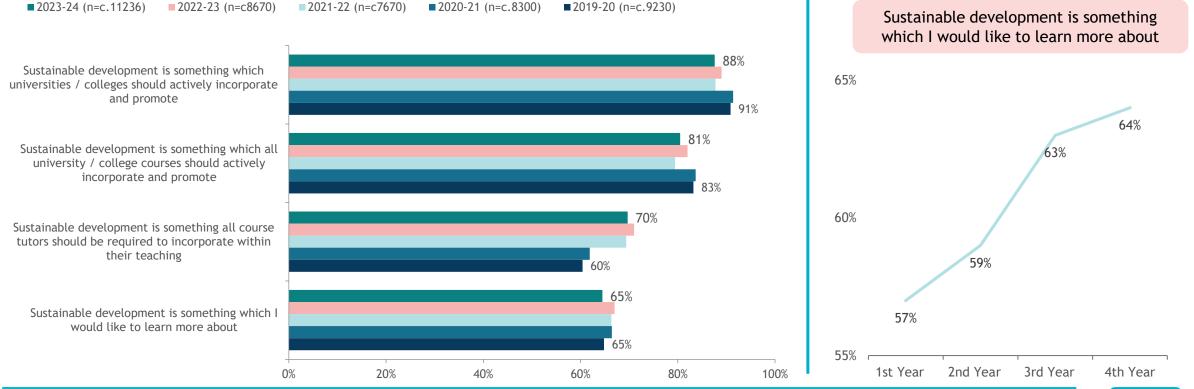
When asked to consider the relevance of different ways of including the development of skills and knowledge to help other people and the environment within their courses, respondents showed a preference for learning through placements or work experience (85%, n=8595). Linking to coursework and dissertations (81%, n=9112) and building material into existing course content (76%, n=8595) were also seen as relevant methods of including skills and knowledge for sustainability.





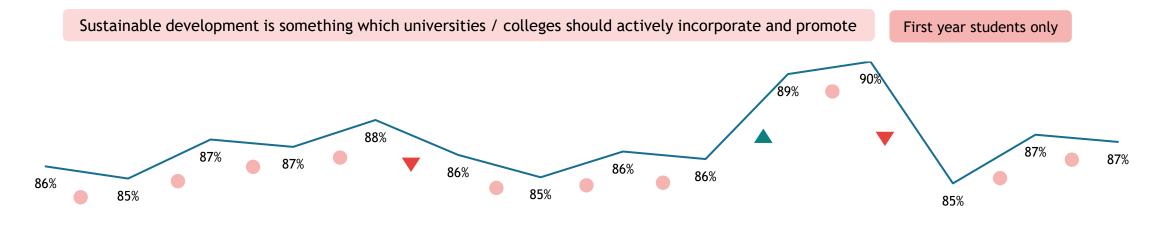
Do students expect universities / colleges to take action on sustainability?

As with previous rounds of research, there is overwhelming agreement that sustainable development is something that universities and colleges should actively incorporate and promote with 88% (n= 9845) saying they agree with this statement. 81% (n= 9045) also agree that sustainability is something all courses should actively incorporate and promote, and 70% (n= 7250) agree that course tutors should be required to incorporate sustainable development within their teaching. Almost two thirds agree that sustainable development is something they would like to learn more about (65%, n=7250). International students from outside of the EU are most likely to agree that sustainable development is something which all universities/college should promote (91%, n=2635) and say that it is something they would like to learn more about (77%, n=2213). As with previous years, demand for learning more about sustainability increases as students progress through university.



What expectations do students have for their university?

The majority of students agree that sustainable development is something they think their university or college should actively incorporate and promote. The chart below focuses specifically on 1st year student responses and has previously shown a consistent and continuing demand for action on sustainable development by their institution throughout the first eleven years of research. This year shows no significant difference from last year's figure.



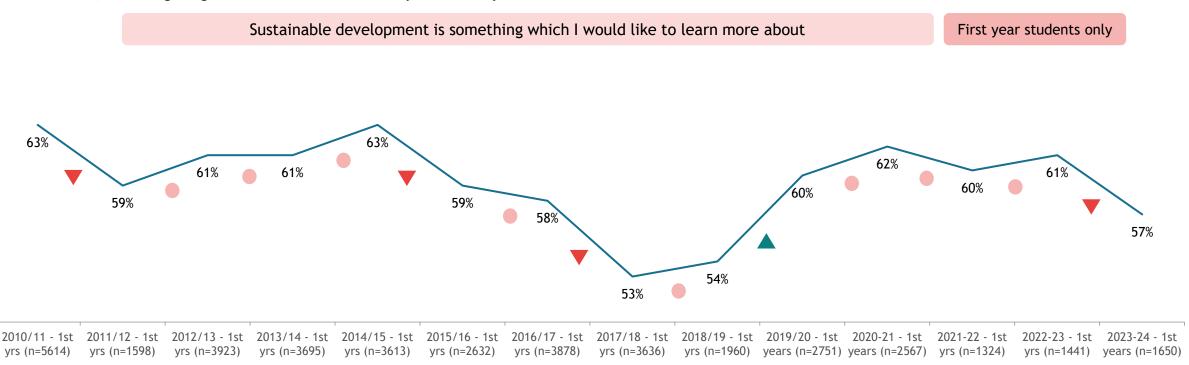
2010/11 - 1st 2011/12 - 1st 2012/13 - 1st 2013/14 - 1st 2014/15 - 1st 2015/16 - 1st 2016/17 - 1st 2017/18 - 1st 2018/19 - 1st 2019/20 - 1st 2020-21 - 1st 2021-22 - 1st 2022-23 - 1st 2023-24 - 1st yrs (n=5649) yrs (n=1596) yrs (n=3967) yrs (n=3733) yrs (n=3648) yrs (n=2643) yrs (n=3763) yrs (n=3553) yrs (n=1966) yrs (n=2753) yrs (n=2565) yrs (n=1882) years (n=2076) years (n=2509)

Each year of study is compared to the preceding year to identify any significant differences with the following symbols identifying any significant change in reported agreement: No change compared to the previous year, Significant increase compared to the previous year, Figure Significant decrease compared to the previous year.



Do students want to learn more about sustainability?

The chart below focuses specifically on 1st year student responses and continues to show a relatively consistent demand for learning about sustainable development throughout the research, with 57% of respondents saying they would like to learn more the topic (n=1650) in 2023-24. There are some small but significant variations in agreement that sustainable development is something that 1st year respondents want to learn more about, as identified for each research year in the chart below, including a significant decrease from last year to this year.



Each year of study is compared to the preceding year to identify any significant differences with the following symbols identifying any significant change in reported agreement:
No change compared to the previous year, Significant increase compared to the previous year, Fignificant decrease compared to the previous year.



Why do students want to learn more about sustainable development?

Respondents were also asked to reflect on why they wanted to learn more about sustainable development. The first 100 completed responses were coded and show that the most common reason respondents reported was due to concern about the future of the planet and the importance of sustainable development for future generations. Also common was broader concerns about the environment and the need for societal changes to be made and also relevance to academic programme or career aspirations. Respondents also expressed a desire to make changes to their personal behaviour or to further their personal impact in other ways.

Concern about the future/importance for future generations	19
Environmental and broader societal concerns	19
Professional/academic interest/aspirations	19
Personal responsibility and impact	16
Lack of knowledge/desire to learn more	12
General interest in sustainability	7

I'm interested in learning more...since I'm driven to find answers for social and environmental problems. It provides a framework for dealing with these problems in an all-encompassing and comprehensive manner. In order to help create a more fair and sustainable world for future generations, I would like to get an understanding of the concepts and practices of sustainable development. ...I want to acquire the knowledge and abilities required to have a positive influence in the field and am interested in investigating prospective job options in this area.

"I would like learn more as I find sustainability a very interesting and topical discussion. I would like to develop my knowledge further."

"I'd like to learn more about how business actually use it, and not in a general context. But how they're actually willing and actually shaping the future to help contribute."

"Protecting the environment is very important, and sustainable development is the way to achieve it"

"As I am currently an MSc student, I have learned the academic perspective of this previously however I would like to learn and understand more on how this impacts my job/role and other real world implication that I have a more direct part in."

"I care about the future and quality of life of future generations"



What actions would students like to see their place of study take for sustainable development?

Respondents were also asked to consider more broadly what actions they would like to see their university take to improve its performance on sustainable development. The first 100 responses were coded and revealed that many students perceive the incorporation of sustainability within formal and informal curricula as an important sustainability action required at their institutions. Many would also like to see more general awareness-raising around sustainability.

Incorporation of sustainability within the formal curriculum	16
General awareness-raising and information provision	13
Waste and recycling improvements including reduction of plastic usage	12
Incorporating sustainability more widely across university and union operations, policies and practices	11
Develop/provide/promote more clearly opportunities for students related to sustainability (extra-curricular)	10
Improve energy / building performance, including transitioning to cleaner energy sources	8
No further suggestions including those who already believing the university is doing enough on sustainability	7
Take action to increase number of trees, plants and green spaces on campus	4
Promote, develop and support more research and innovation opportunities linked to sustainability within the university	4

"I would like to see student engagement in contributing to the course content in relation to sustainable development. I would like to see more quizzes arranged in order to prompt students to think outside the box on the subject."

"Fostering engagement through awareness and campaigns."

"Training programmes for lecturers and other staff."

"Avoid selling plastic water bottles and have more water fountains for students."

"Sustainable Development should be incorporated into the University ethos and charter and among the core objectives."

"Student groups to collect food that is about to be thrown to be distributed, student gardens where things can be grown (teach students about sustainability in an interactive way). Perhaps create a way to standardise oral assignments (less time on tech > less energy usage) invest in problem based learning instead of the classic lecture hall set up."



Experiences of sustainability in education

4



What do students understand the term sustainable development to mean?

When asked to define sustainable development in their own words HE respondents see it as being a long-term process that allows the balancing of future and current needs, in line with the 1987 Brundtland definition of sustainable development. Another key idea mentioned is that economic growth should not be prioritised without taking into consideration social and environmental implications.



"Giving resources to projects that are grass roots and aid creation of self sustaining solutions, not consumable aid that runs out and needs replacing. Giving communities starter packs to develop their economy that the community can take on and evolve and grow with in a tailored and cooperative way"

"The invest, expand, build and grow but at a rate that is quantified and considerate to the effects on environments and communities. To not seek profits and earnings above the outcome or impact on humans and agriculture, not seeking monetary or material gains at the expense of harms to others."

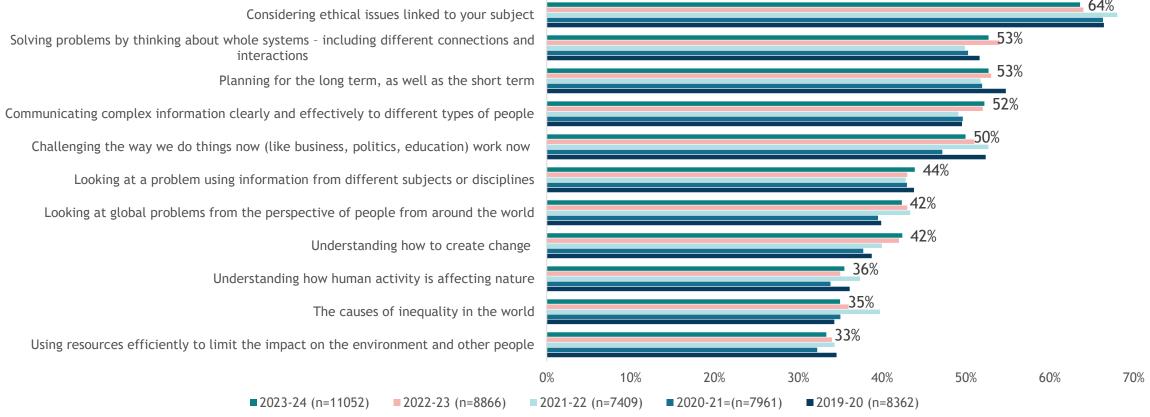
"Development that meets the needs of the present while allowing future generations to continue to meet their needs. "Having learnt about the UN Impact Hub's sustainable development goals at my current university 'sustainable development' to me is a holistic approach towards a better life on earth. For me, it not only tackles sustainable nitty-gritty but also is a hope towards a peaceful and cohesive world."

"Changing the world in a way that enables it to continue into the future without the destruction of the environment leading to the inability for humanity to thrive"



To what extent are students experiencing teaching and learning of sustainability skills and knowledge in higher education?

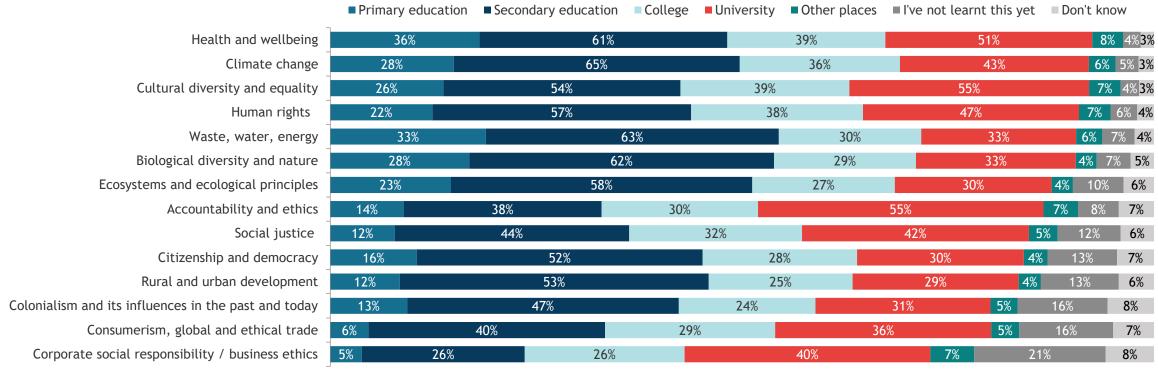
Overall respondents say their teaching covers a wide range of skills and knowledge associated with sustainability. Most commonly, HE respondents report coverage of 'considering the ethical issues linked to their subject' (64%, n=7030) and 'solving problems by thinking about whole systems - including different connections and interactions' (53%, n=5825) HE respondents. Students who are UK citizens are more likely to say their teaching has covered ethical issues linked to their subject (70%, n=4879) than international students.





What teaching and learning on sustainability have students experienced through their time in education so far?

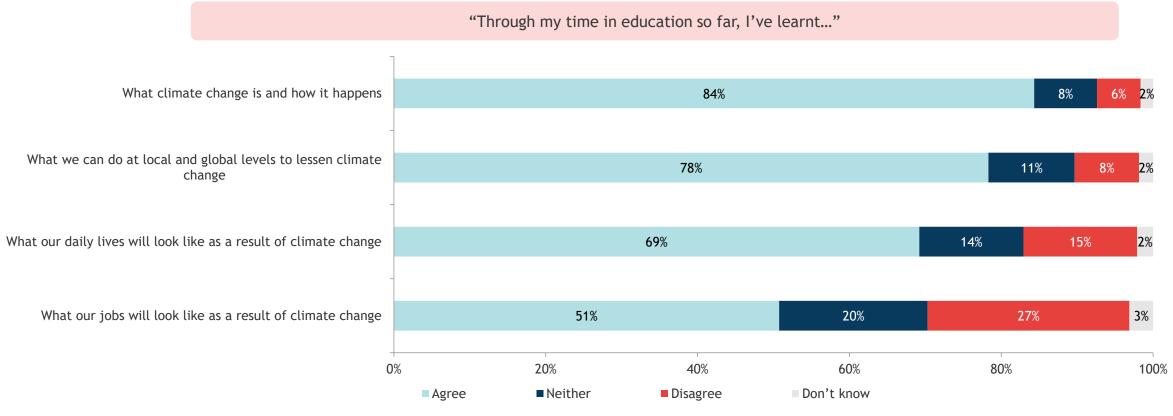
Respondents were also asked to reflect on their journey through education so far and identify at which stage issues relating to sustainability have been covered by the teaching. Higher education respondents report that most of the teaching they have received on sustainability issues occurred during secondary education, for example 65% (n=7088) of respondents say climate change was covered at this point. However, it is worth bearing in mind that 40% of respondents are 1st year undergraduates and therefore will have been exposed to limited teaching at the time of research. Issues which are reported as having the highest level of coverage during their time at university include accountability and ethics (55%, n=5983) and cultural diversity and equality (55%, n=5997).





What experiences do students have of learning linked to climate change?

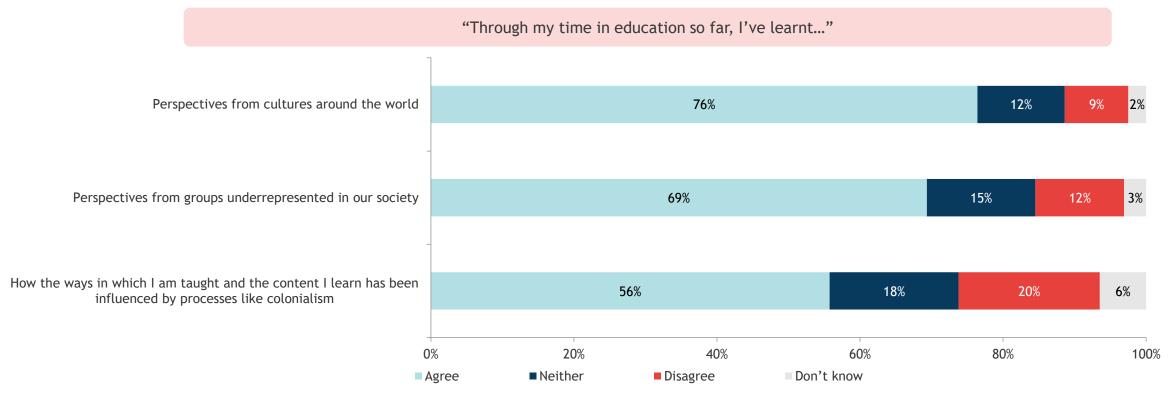
Respondents were asked to reflect on their experiences of learning linked to climate change during their time in education. 84% (n=9312) of students report learning about what climate change is and how it happens and 78% (n=8635) report learning about what we can do at local and global levels to lessen climate change. Over a quarter of students (27%, n=2942) report not learning about what jobs will look like as a result of climate change.





What experiences do students have of learning linked to colonialism?

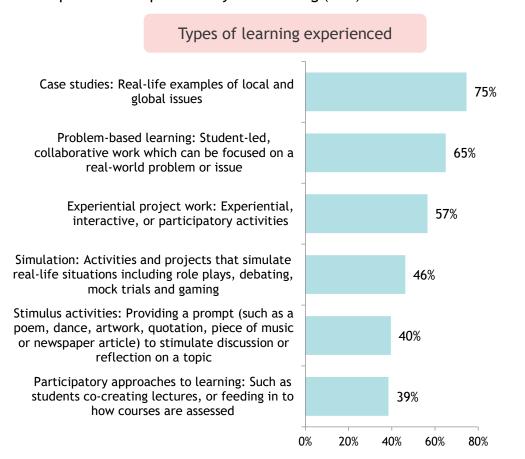
Respondents were asked to reflect on their experiences of learning linked to colonialism during their time in education. The economic and political systems associated with colonialism have contributed great to the climate crisis as they are centered on indefinite resource extraction and growth and carbon-intensive production models*. Over three quarters of respondents (76%, (n=8419) report learning about perspectives from cultures around the world during their time in education so far. Over two thirds of students (69%, n=7619) report learning about perspectives from groups underrepresented in our society. Over half (56%, n=6109) of students report learning how the ways in which they are taught and the content they learn has been influenced by processes like colonialism.

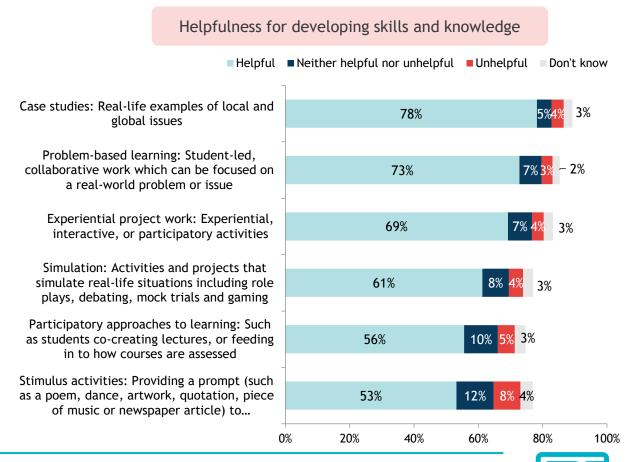




What types of learning for sustainability have students experienced?

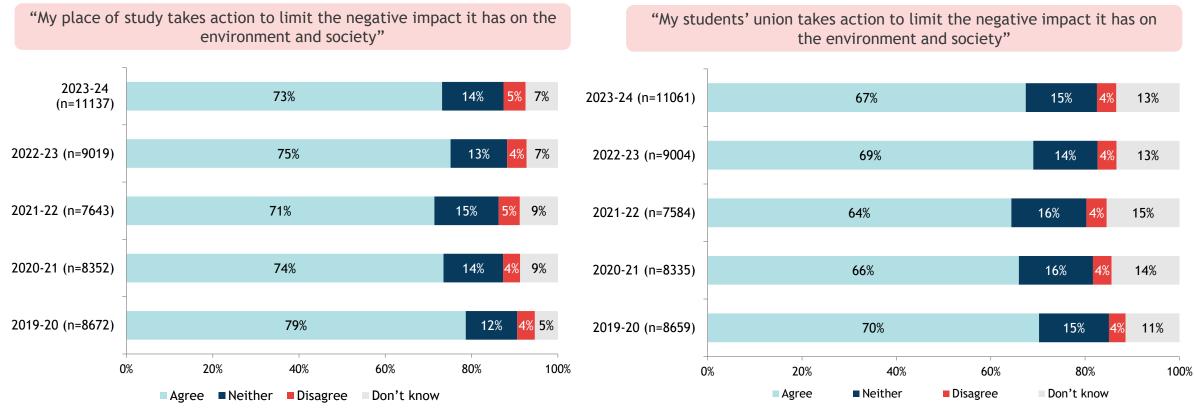
Respondents most commonly report learning about skills and knowledge related to the environment through case studies (75%), problem-based learning (65%) and experiential project work (57%). In terms of how useful these ways of learning are to develop their skills and knowledge on issues related to the environment, the most beneficial methods are reported to be case studies, with 78% (n=8750) reporting case studies to be beneficial, and problem-based learning, with 73% (n=8114) reporting it to be beneficial. Stimulus activities are least reported as being beneficial (53%, n=5919) with it also being one of the least experienced reported ways of learning (40%).





What impression do students have of their place of study in terms of action for sustainability?

Overall, respondents have a positive view of their institutions and students' unions in terms of the action they take to reduce negative impacts on the environment and society. Almost three quarters of HE respondents (73%, n=8148) agree that their university is taking action in this area. Two thirds (67%, n=7456) agree their students' union (SU) is also taking action in this area, however there is also a lack of awareness with 13% (n=1484) saying they don't know if this is something their SU is doing.



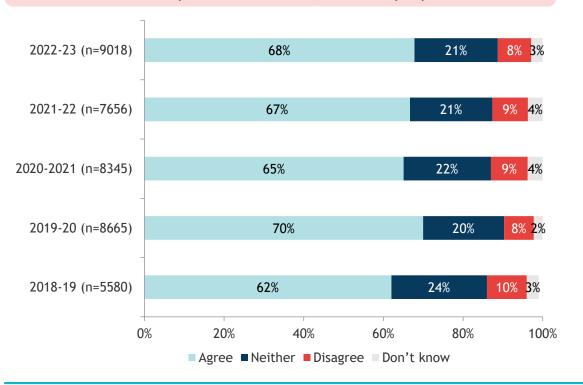


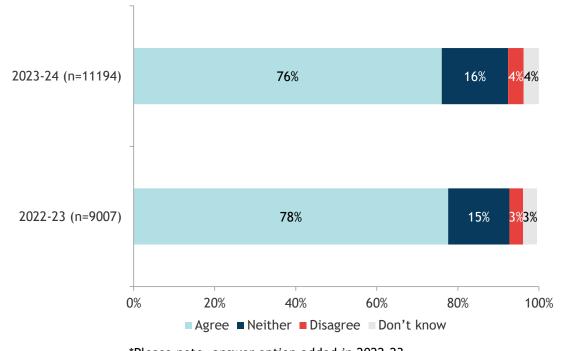
What impression do students have of their place of study in terms of action for sustainability?

Respondents were asked to reflect on the impact their current place of study has had on their personal attitudes and actions to help the environment and other people. Over two thirds in HE (68%, n=7495) agree that being a student at their university or college encourages them to think and act to help the environment and other people. Over three quarters (76%, n=8454) agree that knowing their place of study takes action to limit the negative impact it has on the environment and society would make them proud of being a student there.

"Being a student at my university/college encourages me to think and act to help the environment, and other people"

"Knowing my place of study takes action to limit the negative impact it has on the environment and society would make me proud to be a student there"*





^{*}Please note, answer option added in 2022-23

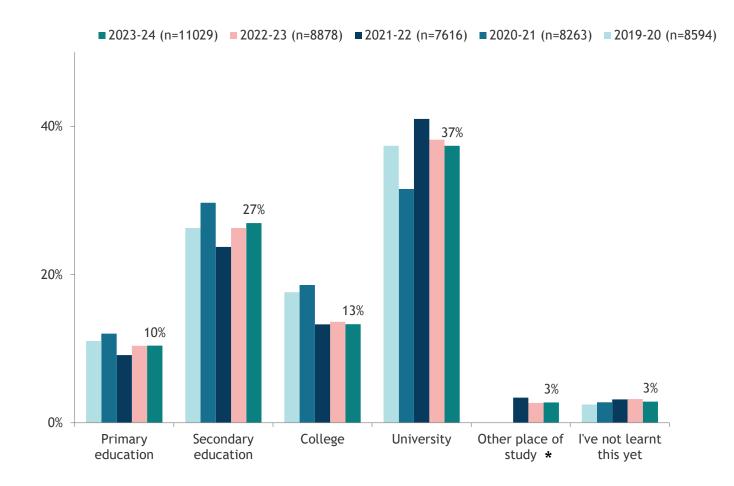


Which place of study is perceived as having the greatest influence on students to take action to help the environment and other people?

Respondents were also asked to reflect on their experiences in education so far and identify which place of study has had the greatest influence on them in terms of encouraging them to act to help the environment and other people.

HE respondents most frequently identify their university education as the place of study which encouraged them to act the most (37%, n=4123). The proportion identifying time at university as the strongest influence slightly decreased from 2022-23 but has increased compared to previous years.

Secondary education is reported as being the strongest influence for over a quarter of HE respondents (27%, n=2972).



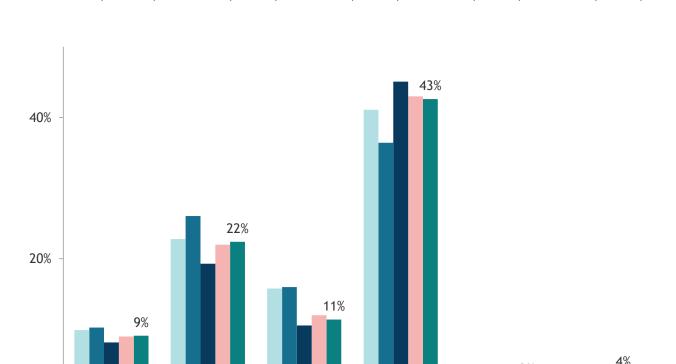


^{*} Please note, answer option added in 2021-22.

Which place of study is perceived as taking the greatest action on sustainability?

Respondents were asked to reflect on their experiences in education so far and identify which place of study took the most action to reduce its negative impact on the environment and society.

HE respondents are most likely to state that their current place of study, university, is taking the most action in comparison to previous places of study (43%, n=4590). This represents no significant change from last year.



■ 2023-24 (n=11027) ■ 2022-23 (n=8882) ■ 2021-22 (n=7618) ■ 2020-21 (n=8261) ■ 2019-20 (n=8600)



Other place of I've not learnt

this vet

study *

College

University

Secondary

education

Primary

education

^{*} Please note, answer option added in 2021-22.

What impact has learning about sustainability issues had?

Respondents were also asked to reflect on how learning about sustainability issues has impacted them personally, in terms of their day-to-day lifestyle, but also considering their values and aims for future careers. The first 100 responses were coded and revealed that for HE respondents, learning about these issues has encouraged them to think about things differently, changed their perspective and improved them as people. Respondents also noted that learning about sustainability issues has increased their awareness of these issues and helped improve their knowledge and understanding, leading them to take action in their daily lives to reduce their impact and their career aspirations. A number of respondents identified that most of their learning on the issues covered by the survey had come through general life experience rather than through formal education, either because it was lacking or insufficient.

Changed values / views / outlook on life	32	
Better understanding/increased awareness of issues and impacts	22	
Prompted more personal action related to sustainability	19	
Influenced career or study aspirations	13	
Lack of these issues taught in education/Impact has come from outside		
education settings	8	
Triggered desire to do or learn more	7	
No impact/Not sure	4	

"Knowing of historical and present injustices, movements and crises has made me a more conscious person - being aware of my impact on people and the world in everything I do."

"I am very passionate about the environment and will continue to encourage my friends and family to try and buy more ecofriendly products and vote for people who will change the systems for better future for us all" "I feel frustrated because these topics aren't emphasised enough when they are taught at school (especially for things like colonialism)." "Learning about these subjects have widened my perspective, made me more aware of different cultures and their significance in business, and emphasized the importance of ethical decision-making and social responsibility in the corporate world. Understanding consumerism and global trade from an ethical standpoint probably helped me see the bigger picture and consider the impact of business practices on society and the environment. Overall, these topics have enriched my educational journey and equipped me with valuable knowledge and skills for my future career."

Learning about climate change, biodiversity, plastic pollution, and other environmental issues has made me a more thoughtful consumer and has made me want to get a career somewhere that solves these problems."



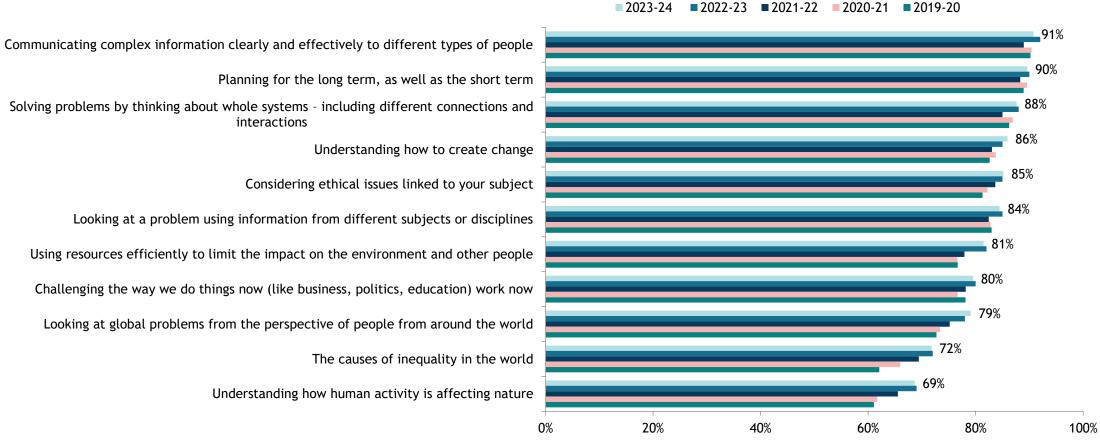
Sustainability skills beyond education

5



How important are sustainability skills to future employers?

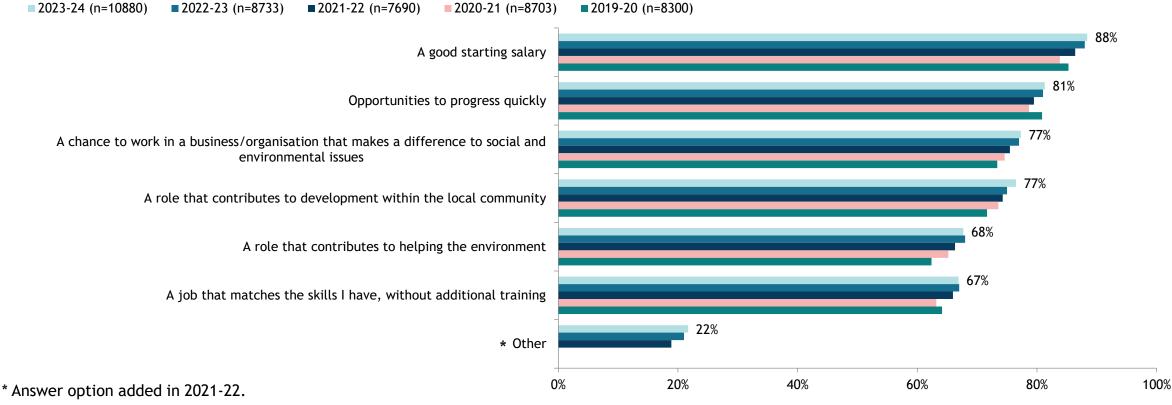
HE respondents were asked to consider how important sustainability related skills and knowledge are to their future employers. The most important skills are perceived as being the ability to communicate complex information clearly and effectively to different types of people (91%, n=10181) and planning for the long term, as well as the short term (90%, n=10040). Having an understanding of how human activity is affecting nature is least likely to be seen as being important for future employers (69%, n=7695), however the proportion who have rated this ability as important is generally increasing year on year.





What factors are important when considering what jobs to apply for?

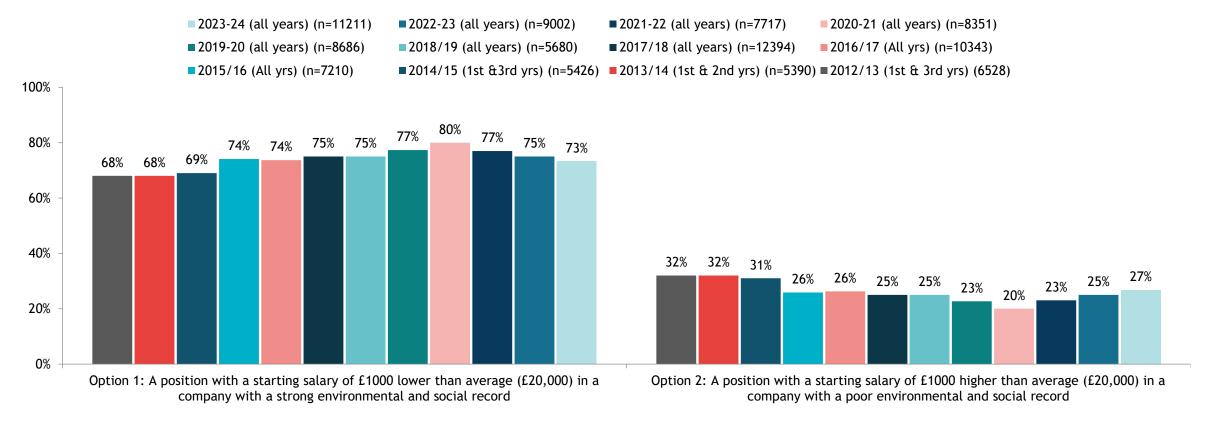
Respondents to the survey reported that a good starting salary (88% respondents (n=9888) and opportunities to progress quickly (81%, n=9078) are important factors when considering what jobs to apply for. Over three quarters of respondents in HE, 77% (n=8635) said the chance to work in business or organisation that makes a difference to social and environmental issues would be an important factor to consider when applying for jobs. A similar proportion also reported that the chance to work in a role that contributes to development in the local community would be an important consideration (77%, n=8548). The stated preference for working in a role that contributes to helping the environment has shown no significant change since 2021-22.





What desire do students have to work for employers with positive social and environmental credentials?

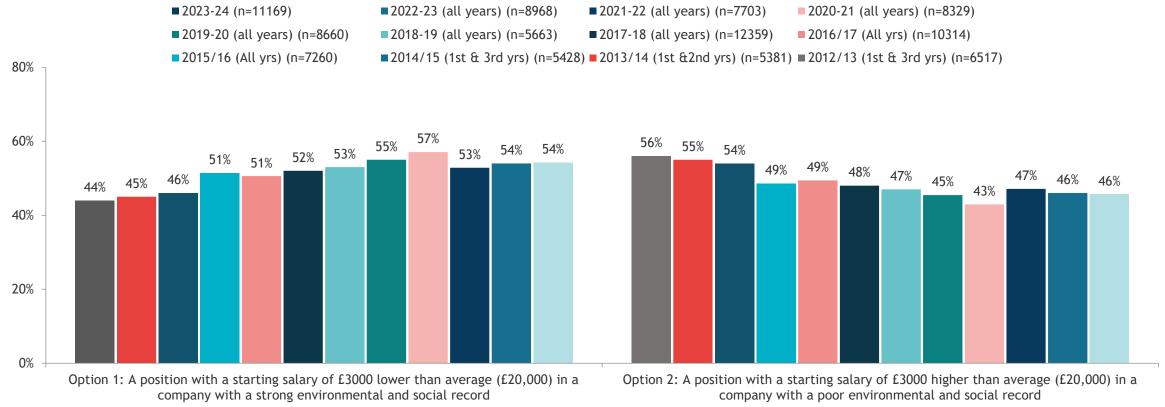
Just under three quarters of HE respondents completing the survey in 2023-24 say they would opt for a reduction in starting salary of £1000 in order to work for a company with a strong social and environmental record (73%, n=8212), which is a decrease in the proportion of respondents compared to results from last year but similar to previous years. Respondents identifying as women are significantly more likely to say they're willing to make this sacrifice (76%, n=5340) compared to respondents identifying as men (67%, n=2395).





What desire do students have to work for employers with positive social and environmental credentials?

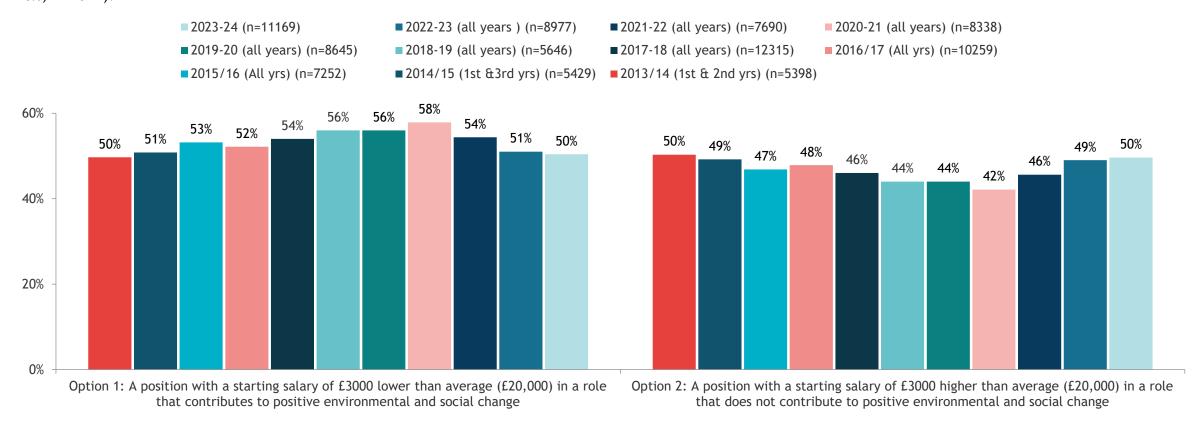
When asked to consider a salary sacrifice of £3000 from an average starting salary, over half of HE respondents (54%, n= 6067) in 2023-24 indicated they would be willing to make this sacrifice for a position in a company with a strong environmental and social record. This is similar to responses seen in previous years and slightly higher than 2020-21. Respondents identifying as women are also more likely to make this £3000 sacrifice for a position in a company with a strong environmental and social record compared to men respondents (56%, n=3929 compared to 50%, n=1782).





What desire do students have to work in roles that contribute to positive social and environmental credentials?

Half of HE respondents report that they would be willing to make a sacrifice of £3000 from their starting salary for a specific role that contributes to positive environmental and social change (50%, n=6067). As with the other choice options presented to respondents, women respondents are significantly more likely to state a willingness to accept a salary sacrifice of £3000 for a role that makes a positive contribution compared to men respondents (53%, n=3684 compared to 46%, n=1641).





For further research on sustainability and students by SOS-UK, visit: https://www.sos-uk.org/research

Images sourced from the nounproject.com, including:

Clustering by sahua d, RU
ethics by monkik
Planning by tezar tantular
inequality by Magicon
deployment of resources by Maxicons
environment by Adrien Coquet
world by anggun
choose by Adrien Coquet
tick by Lars Meiertoberens
Green economy by Attilio Baghino

