#### SUSTAINABILITY SKILLS SURVEY 2019-20

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

HIGHER EDUCATION REPORT



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#### **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 UK online survey was completed by over 9000 students in October 2019 to build on the data gathered through nine years of previous research, funded by the Higher Education Academy. 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.



**91%** say they agree their place of study should actively incorporate and promote sustainable development



**83%** 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...



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



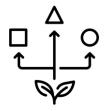
**55**% say 'planning for the long term as well as the short term' has been covered during their time in higher education so far



**52**% 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



35% 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



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



### Most respondents understand sustainable development along the lines of the 1987 Brundtland definition



"Because I understand that climate change is being enhanced by human activity and will result in the destruction of the world in future which means sustainable development will not have occurred unless we are all aware of it and how to be sustainable to preserve this world."

To make a difference to our collective future

"It's really important to understand how as an individual you can make a small difference so that you contribute to a wider change."

To be able to take action personally

"To better understand what role I can take that will lead to a more sustainable future." "I would like to know what other organisations are doing about sustainable development and how my university compares." "It is our duty to ensure future generations have a suitable world to live in. To do this we must be equipped with the correct knowledge and information."

"The biggest problem/threat we face is climate change and pollution. We are rapidly destroying our planet and it's environment. To secure a future for the next generation we must ensure that positive change occurs."

General interest in furthering knowledge

"I would like to progress my career to become an influential person in the construction industry, thus being in the best position to really make a difference. By learning more about sustainability I am able to achieve this."

I want to go into Politics so sustainable development is something to be aware of in this field of work.

Career aspirations
/ relevance

Motivations for learning about sustainable development

Commonly used words for defining sustainable development



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



79% agree that 'My university/college takes action to limit the negative impact it has on the environment and society'



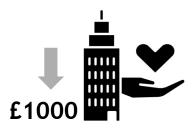
70% agree that 'being a student at my university/college encourages me to think and act to help the environment, and other people'



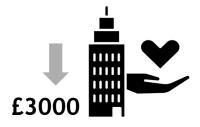
36% say university is the place they've studied that has encouraged them to think and act to help the environment and other people the most



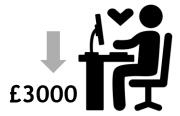
Looking beyond their time in education respondents show a desire to work for companies that perform strongly in relation to sustainable development, and in roles that contribute positively in this area



77% would accept an annual salary £1000 lower than average to work in a company with a good social and environmental record



55% would accept an annual salary £3000 lower than average to work in a company with a good social and environmental record



56% would accept an annual salary £3000 lower than average to work in a job that contributes to positive social and environmental change



#### Notable changes in responses seen in the 2019-20 research include:



How seriously the university takes environmental and global developmental issues is reported to be a factor influencing their choice of place to study by 52%, up from 45% in 2018-19.



**91%** say they agree their place of study should actively incorporate and promote sustainable development compared to **88%** in 2018-19.



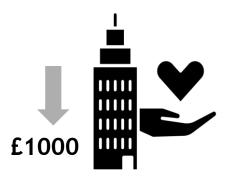
**65%** say sustainable development is something they would like to learn more about compared with **59%** in 2018-19



**79%** recognise the positive action their place of study is taking to address negative impacts on the environment and society compared to **74%** in 2018-19.



**73**% say the chance to work in an organisation / company that makes a difference to environmental and social issues is a factor they'll consider when applying for jobs, compared to **69**% in 2018-19.



77% say they're willing to accept an annual salary sacrifice of £1,000 to work in a company with a positive environmental and social record, compared with 75% in 2018-19



Introduction - Objective, methodology and survey details

1



#### Introduction - Objective, methodology and survey details

This report presents research completed by SOS-UK to investigate 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 six 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. This updated survey was repeated in 2016-17 (Yr7), 2017-18 (Yr8), 2018-19 (Yr9) and now in 2019-20 (Yr10). This report shows the results across the 5 surveys.

The 2019-29 online survey was completed in October 2019 by students across the UK. Whilst in previous years the research has been focused on students in higher education, in recent years (6-8), this latest survey was also distributed to students studying at further education institutions. Over 6000 respondents completed the survey in Yr9, which was promoted on a national basis through NUS' Extra cardholders database and also through local promotions by universities, colleges and students' unions.

The survey was incentivised with a £1,000 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 final 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. This weighting has been applied to both Higher Education and Further Education respondents in the absence of available data for Further Education at a national level, to the level of detail required. A full breakdown of respondent characteristics can be found in section 2.

Throughout the report, where analysis has revealed statistically significant differences between groups of respondents, these have been outlined as per the example below. Where significant differences exist between the latest two years of data, these are highlighted in the text or charts.

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:

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

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

Understanding how to create change

Looking at a problem using information from different subjects or disciplines

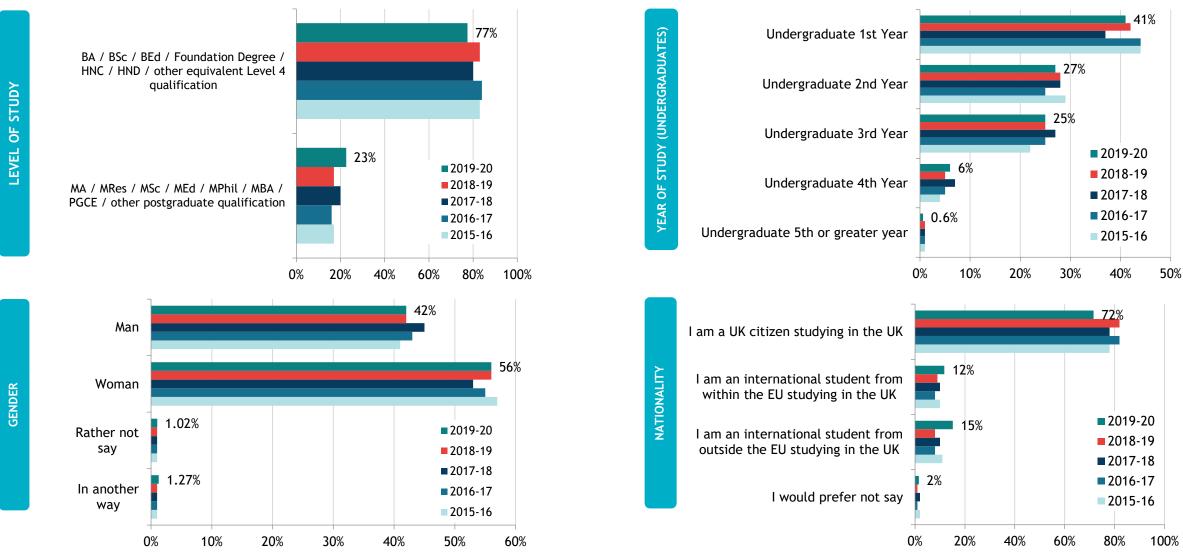
Planning for the long term, as well as the short term



2



#### Respondent demographics





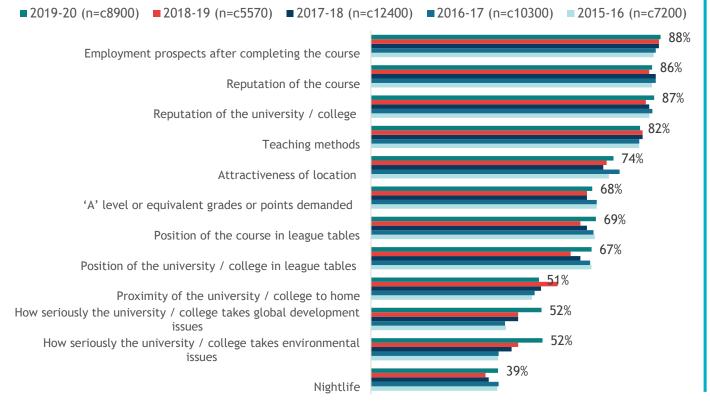
# Expectations for teaching and learning for sustainability

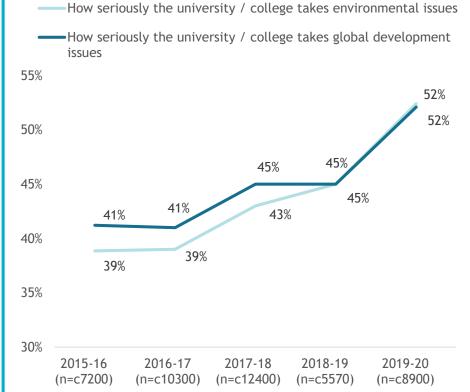
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#### What factors influence choice over place of study?

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 reputation of their course and institution, employment prospects on completion of their course, and the teaching methods used. However, over half (52%, n=4558) of respondents were influenced by the action their place of study takes on environmental issues. The same proportion of respondents report they are motivated by how seriously their university or college takes global development issues (52%, n=4531). These motivations represent a significant increase compared to 2018-19 responses, and have been increasing over the course of this research. International students from outside the EU are most likely to say action on environmental issues (64%, n=837) and global development issues (73%, n=955) is important to their choice of place of study.

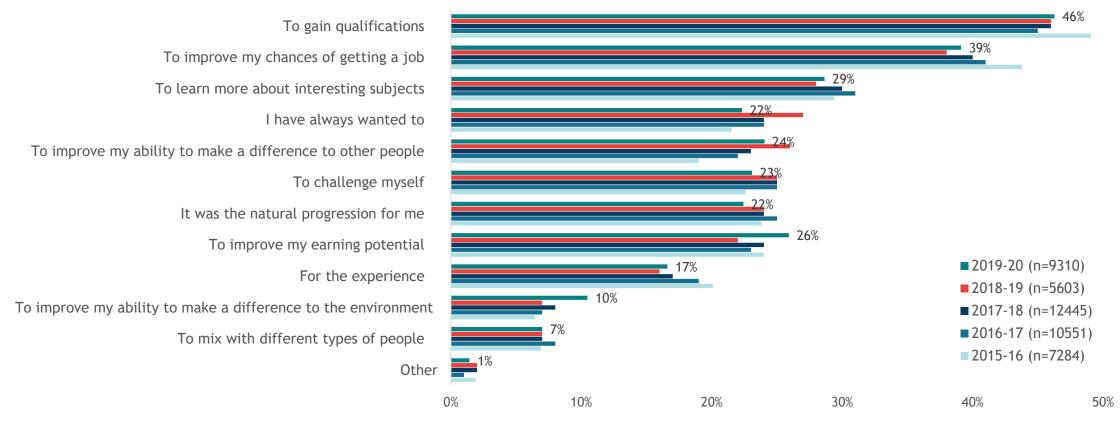






#### What influences choice of subject or course?

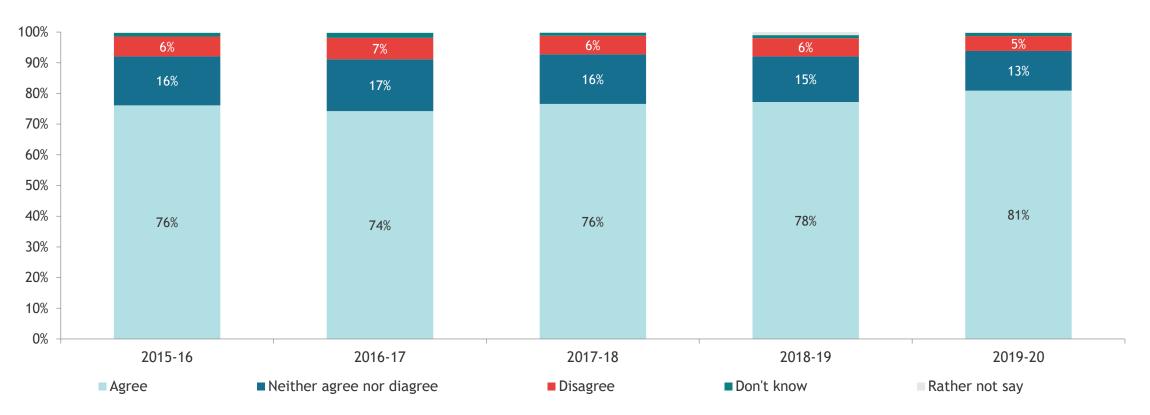
Respondents were asked the main reasons they chose the course they are currently studying. For higher education respondents, the primary motivations are to gain qualifications (46%, n=4036) and to improve their chances of getting a job (39%, n=3411). A relatively lower number of respondents cite improving their ability to make a difference to other people or the environment as a main reason why they chose their course (26%, n=1469 and 10%, n=910 respectively). International students from outside the EU are most likely to say their reasons for choosing their course relate to a desire to make a difference to the environment (16%, n=217).





### Do students expect universities / colleges to develop students' sustainability skills as part of courses?

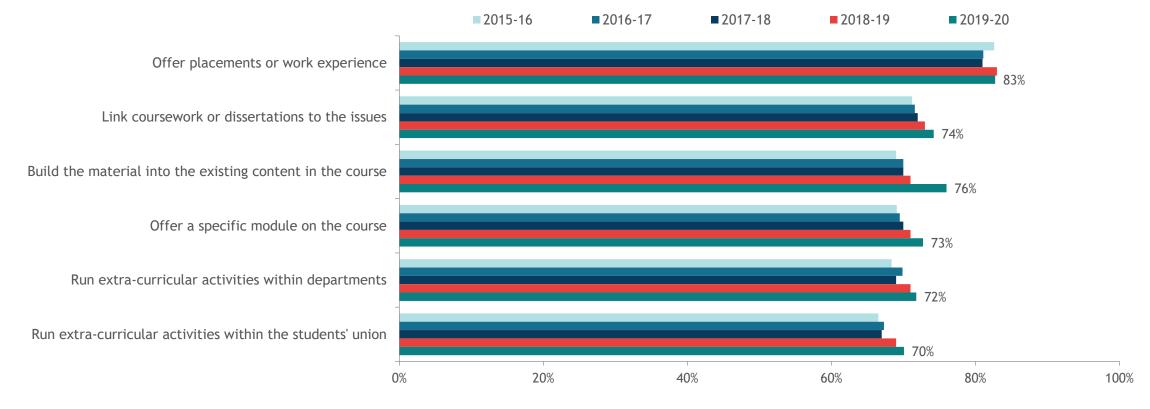
Overall, a majority respondents agree that universities and colleges should be obliged to develop students' social and environmental skills as part of the courses they offer (81%, n=7002).





#### How should sustainability skills be developed and included in courses?

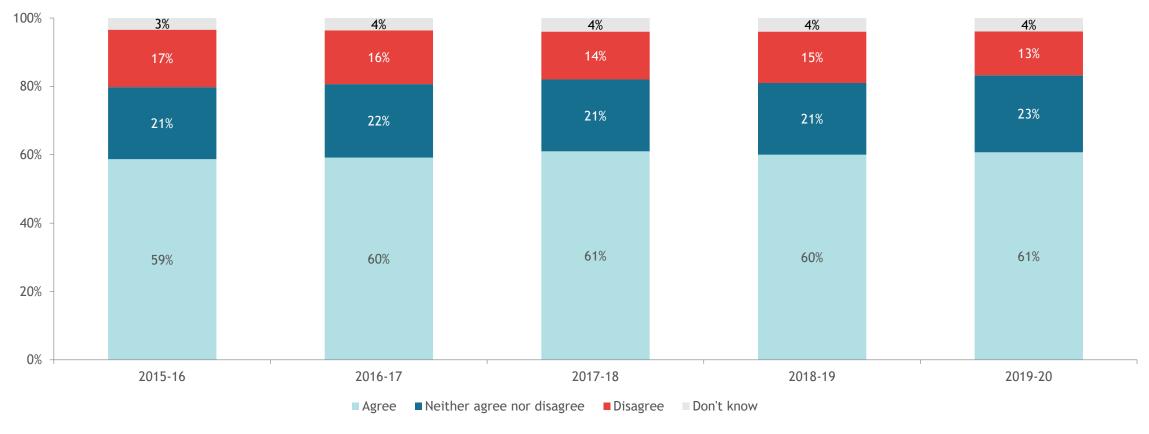
When asked to consider the relevance of different ways of including the development of skills and knowledge to help other people and the environment within their courses, respondents showed a preference for learning through placements or work experience (83%, n=7155). Building material into existing course content (76%, n=6545) and linking to coursework and dissertations (74%, n=6431) were also seen as relevant methods of including skills and knowledge for sustainability. Respondents who identify as women were significantly more likely than those identifying as men to state a preference for all methods of including sustainability content.





#### To what extent do students feel able to influence their curriculum?

Four fifths of respondents feel able to contribute to the development of the curriculum for their courses (61%, n=5257).

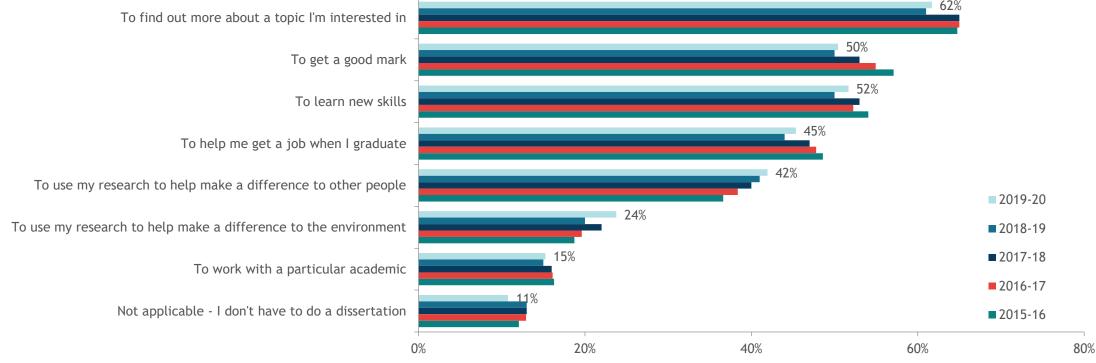




#### How are dissertations linked to sustainability?

Respondents were asked to consider what they hoped to get out of the opportunity to complete a dissertation. For around two thirds of respondents (62%, n=5353) completing a dissertation is an opportunity to find out more about a topic they are interested in. Half see their dissertation as an opportunity to get a good mark (50%, n=4376) and to learn new skills (52%, n=4484), which will in turn help them to get a job when they graduate (45%, n=3935).

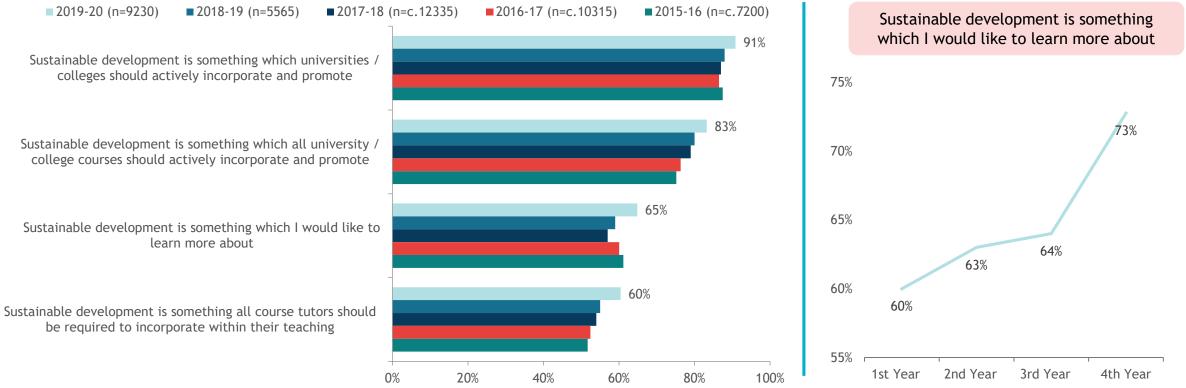
Two in five respondents see their dissertation as an opportunity to carry out research that will make a difference to other people (42%, n=3640). A quarter (24%, n=2064) reported that their dissertation is an opportunity to complete research that helps make a difference to the environment. Respondents identifying as women are most likely to say they hope to make a difference to other people (46%, n=227) through their dissertation. International students from outside the EU are most likely to say they hope to make a difference to other people (51%, n=675) or the environment (37%, n=491) through their dissertation.





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

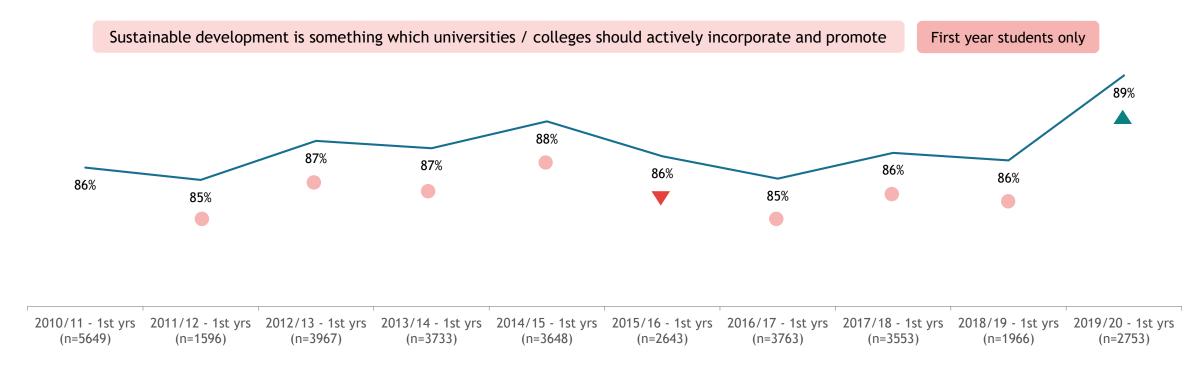
As with previous rounds of research, there is overwhelming agreement that sustainable development is something that universities and colleges should actively incorporate and promote with 91% (n=7861) saying they agree with this statement. 8 in 10 (83%, n=7916) also agree that sustainability is something all courses should actively incorporate and promote, and 60% (n=5229) agree that course tutors should be required to incorporate sustainable development within their teaching. Two thirds agree that sustainable development is something they would like to learn more about (65%, n=5600). International students from outside of the EU are most likely to agree that sustainable development is something they would like to learn more about (78%, n=1015). Demand for learning more about sustainability increases as students progress through their university experience.





#### What expectations do students have for their university?

As mentioned previously, almost 9 in 10 agree that sustainable development is something they think their university or college should actively incorporate and promote. The chart below focuses specifically on 1<sup>st</sup> year student responses and shows a consistent and continuing demand for action on sustainable development by their institution throughout the seven years of research.



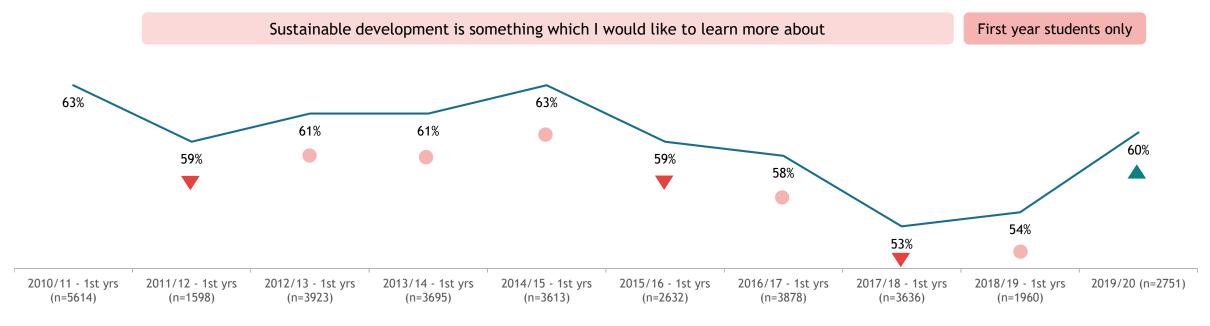
Each year of study is compared to the preceding year to identify any significant differences with the following symbols identifying any significant change in reported agreement: 
No change compared to the previous year, Significant increase compared to the previous year, Fignificant decrease compared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



#### Do students want to learn more about sustainability?

Amongst 1st year HE students there is less demand for learning about sustainable development compared to previous rounds of research, with 60% of respondents saying they would like to learn more the topic (n=1539).

The chart below focuses specifically on 1st year student responses and shows a relatively consistent demand for learning about sustainable development throughout the research. However, there are 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 below in the chart.



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 1 Significant 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 500 completed responses were coded and show that the most common reason respondents reported was that they believe that having an understanding of sustainability was because they wanted to be able to take action and make a difference individually. Also common was a belief in the benefit of learning about sustainable development for current and future generations, society in general and the planet. There was also a view that it was important to know about and that they wanted to understand the issues better. Spontaneous mentions of the relevance of the concept to their course or their future career are also high.

To ensure it's a part of collective life / improve society / the environment	165
Make personal changes / take action personally	151
Further knowledge, and use knowledge	111
Career and course aspirations/relevance	103
Believe its important generally	80
Anxiety / concern about the environment / future	2

"It is our duty to ensure future generations have a suitable world to live in. To do this we must be equipped with the correct knowledge and information."

"The world's resources are not unlimited. Learning how to sustain many resources of our own will enhance the world longevity which leads to personal growth as well as societal change." "I think it's important for every one of us to take responsibility for the damage we have done so far and to take an invested interest in the future and how we can make this better for ourselves and future generations."

"I'd like to learn how my course and profession (pharmacy) could help sustainability."

"Sustainable development is something that would benefit everyone in every profession and it's important for us to learn and implement it in order for our next generation to strive."

"What it means, how we can incorporate it and enforce it in businesses and our future jobs and the benefits of this process."



### 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 500 responses were coded and revealed that whilst waste and recycling dominate perceptions of sustainability action, a wide variety of action is suggested across campuses and curricula.

Waste and recycling improvements	9
Incorporation of sustainability within the formal curriculum	9:
General awareness-raising and information provision	8
Develop / provide opportunities for students related to sustainability (extra-	
curricular)	79
No further suggestions - already believe university is doing enough on	
sustainability	4
Improve energy / building performance	3
Improve communications on sustainability action within the institution	20
Improve food sustainability	19
Provide access to sustainable transport options	10
Take action on carbon / climate change / divestment	14
Develop policy supporting sustainability	1:
Take action to improve biodiversity	

"Offering additional 'qualifications' for completing a course in this subject, I feel this will help get students to get more involved if they feel they are 'benefitting' from it, to which students will join if they get a qualification from it, however, be learning at the same time and realise how important the matter at hand really is."

"Provide wider opportunity for students to actively engage with their environment, my campus is a green campus there's little excuse to why we can't be taught about these issues surrounded by nature."

"Reducing the use of printed materials. Renovation and environmental improvements of existing campus buildings rather than demolition and rebuilding."

"Promote sustainable development by introducing a topic in each module about sustainable development."

"More awareness and movements for radical impact, to become innovative and leaders in promoting greener strategies and reduce carbon emissions and footprint and environmental impact. Not only to reduce their impact but reverse it e.g. plant trees, incentives for cycling / public transport / car pool instead of driving, online learning courses, recycled materials and a plastic - free campus."



# Experiences of sustainability in education

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### 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 should allow resources to be available in the future. Its also felt to be about natural progression and continual development, about the efficient use of the world's resources and growth which does not harm the environment. Overall the definitions tie in with the 1987 Brundtland definition of sustainable development.



"I understand that it means we need to try and meet realistic needs for everybody in the present but without jeopardising resources etc. for all future generations. We need to act sensibly and responsible now."

"The term to me means growing within your means and not causing damage to the environment or local area both now and in the long term."

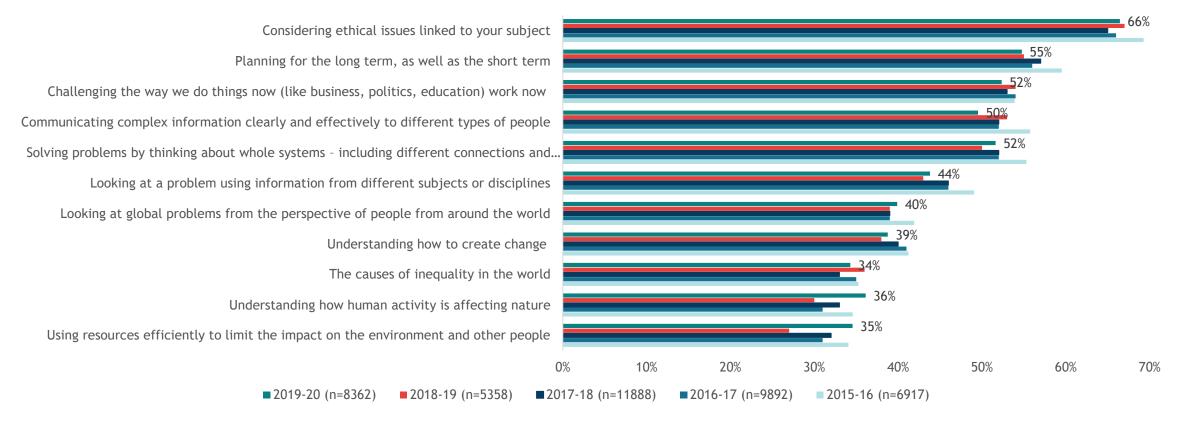
"There is obviously the Brundtland report general definition, however I think it's a lot more complex that that. The main aspect is the need to ensure social and environmental development is prioritised over economic growth, or we are basically \*\*\*\*\*\*." "Sustainable development means socially responsible and progressively energy-efficient development, considering these factors even in the event of loss of profit."

"Making things better for people (i.e. better living conditions) without making environmental problems worse (and environmental problems in the end always have a negative impact on people, particularly at the poorest end of the scale, so it is all interlinked)."



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

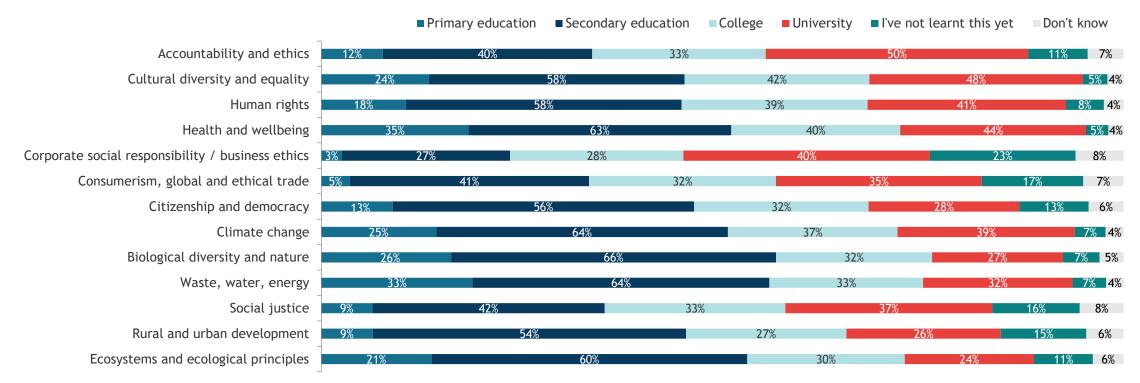
Overall respondents say their teaching covers a wide range of skills and knowledge associated with sustainability. Most commonly, HE respondents report coverage of 'considering the ethical issues linked to their subject' (66%, n=5555) and being 'planning for the long term as well as the short term' (55%, n=4578).





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

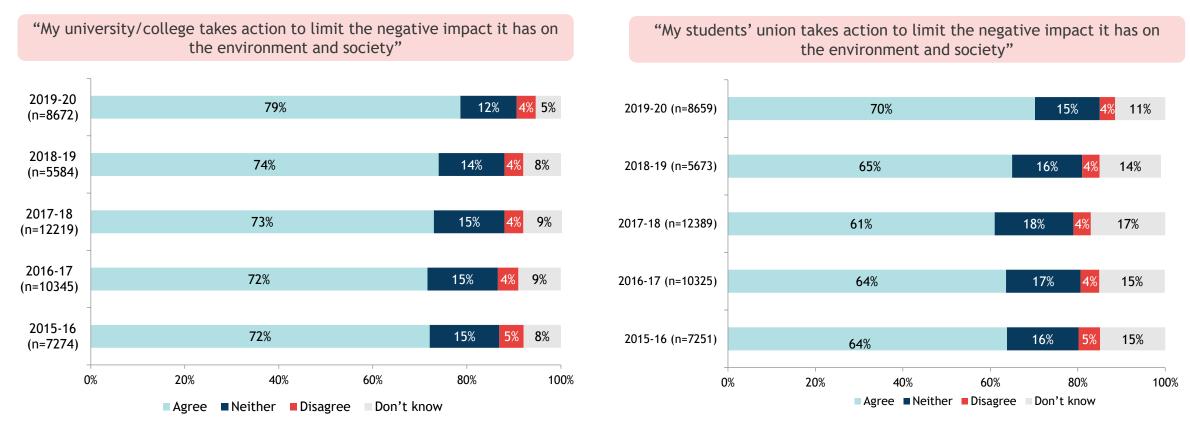
Respondents were also asked to reflect on their journey through education so far, and identify at which stage issues relating to sustainability have been covered by the teaching. Higher education respondents report that most of the teaching they have received on sustainability issues occurred during secondary education, for example 64% (n=5487) of respondents say climate change was covered at this point. However, it is worth bearing in mind that two fifths of respondents are 1<sup>st</sup> 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 (50%, n=4097) and cultural diversity and equality (48%, n=4118).





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

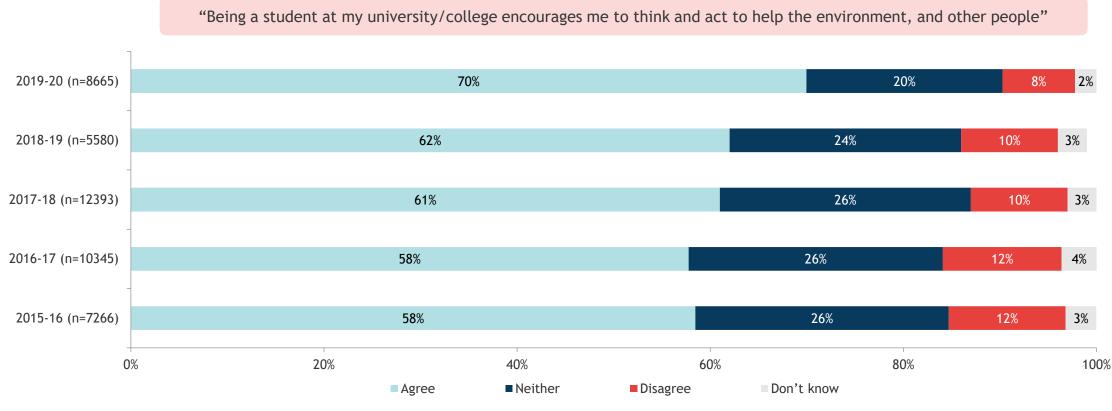
Overall, respondents have a positive view of their institutions and students' unions in terms of the action they take to reduce negative impacts on the environment and society. Over three quarters of HE respondents (79%, n=4219) agree that their university is taking action in this area. 70% (n=6079) agree their students' union is also taking action in this area, however there is also a lack of awareness with 11% (n=990) 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 (70%, n=6062) agree that being a student at their university or college encourages them to think and act to help the environment and other people. This represents a significant increase compared to the 2018-19 research.



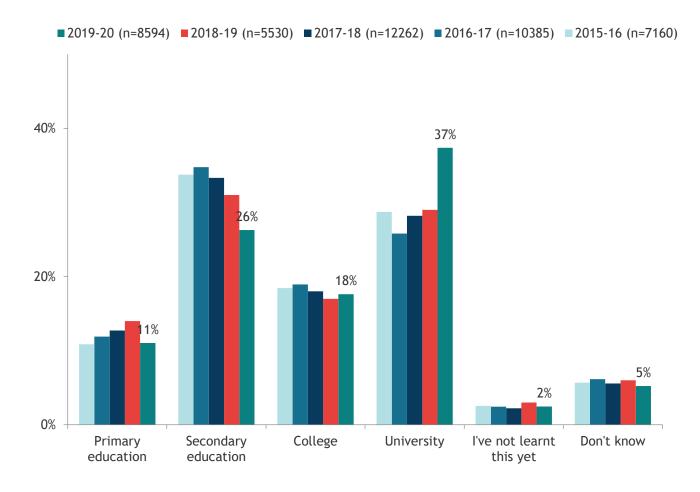


### Which place of study is perceived as having the greatest influence on students to take action to help the environment and other people?

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=3212). The proportion identifying time at university as the strongest influence is significantly higher in 2019-20 than the previous rounds of research. It is also significantly higher for UK students compared to international students from within and outside the EU (43%, compared with 40% and 35% respectively).

Secondary education is reported as being the strongest influence for a quarter of HE respondents (26%, n=2259).

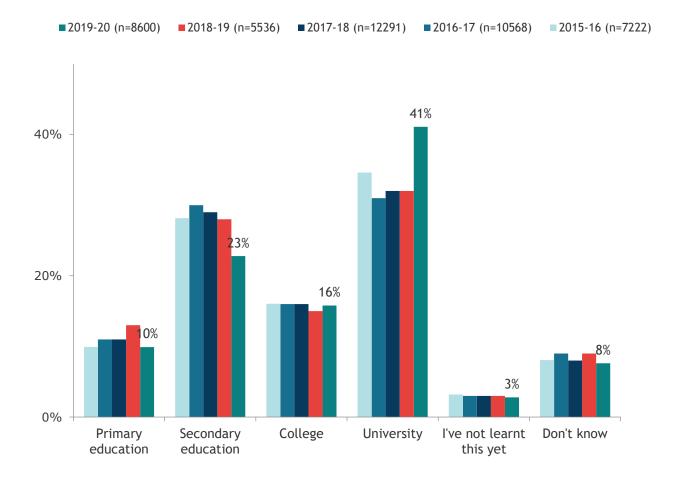




### Which place of study is perceived as taking the greatest action on sustainability?

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 (41%, n=3534). This represents a significant increase compared to previous rounds of the research.





#### 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 500 responses were coded and revealed that for HE respondents, learning about sustainability issues has encouraged them to think about things or do things differently and has improved them as people. Respondents also noted that learning about these issues has helped improve their knowledge and understanding, which has the potential to improve their career opportunities in the future. A number of respondents didn't feel that learning had impacted them at all, however others identified that most of their learning on the issues covered by the survey had come through general life experience rather than through formal education.

Prompted more personal action related to sustainability	236
Changed values / views / outlook on life	123
Better understanding of issues and impacts	120
Influenced career or study aspirations	43
No change / education on the issues has been elsewhere	33
Triggered desire to do or learn more	23
Became more worried about the issues	9

"It's made me realise that the world is in a really bad place as of now, countless countries commit human rights violations while being on the boards for human rights at the UN. The world is dying from the enormous amounts of pollution occurring everyday. Personally it makes me feel how glum the world really is."

"I found learning about human rights and ethics and impact on environment really interesting. I believe that, in a way, it made me a better person because now I always first think about how my actions affect environment and other people, although I would like to be more informed."

"I've become a more aware and engaged citizen, actively aiming to decrease my negative impact on the environment and to increase my positive effect on the communities of which I am part."

"I have tailored my life style to aim to be more environmentally friendly where I can be. I have also realised that I want to work in a job where I believe the work I does has positive real life implications for those involved."

"All make me think more about my impact of the world and everything in it, and want it want to contribute and improve."

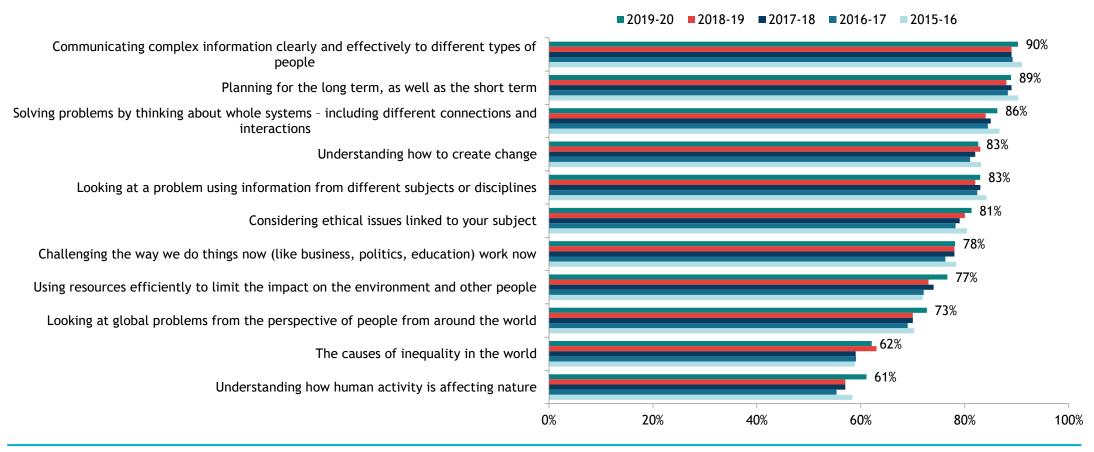


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#### How important are sustainability skills to future employers?

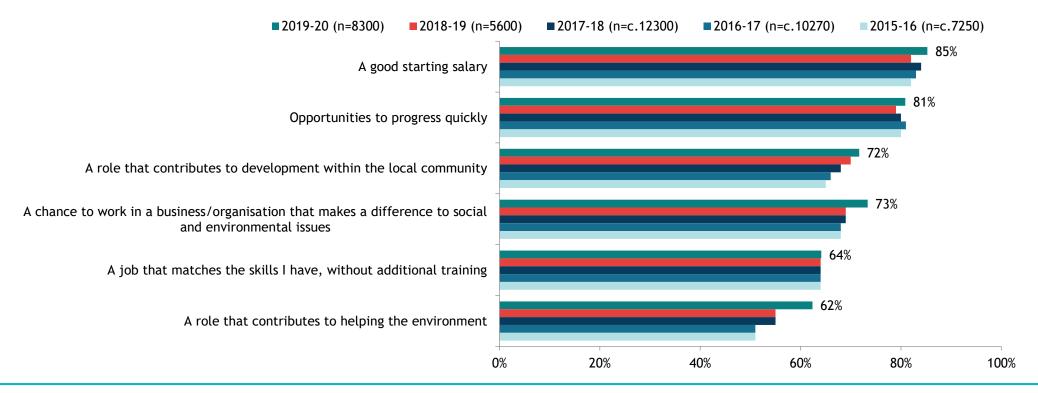
HE respondents were asked to consider how important sustainability related skills and knowledge are to their future employers. The most important skills are perceived as being the ability to communicate complex information clearly and effectively to different types of people (90%, n=7813) and planning for the long term, as well as the short term (89%, n=7694). Having an understanding of how human activity is affecting nature is least likely to be seen as being important for future employers 61%, n=5278), however the proportion who have rated this ability as important is significantly higher than respondents in 2018-19.





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

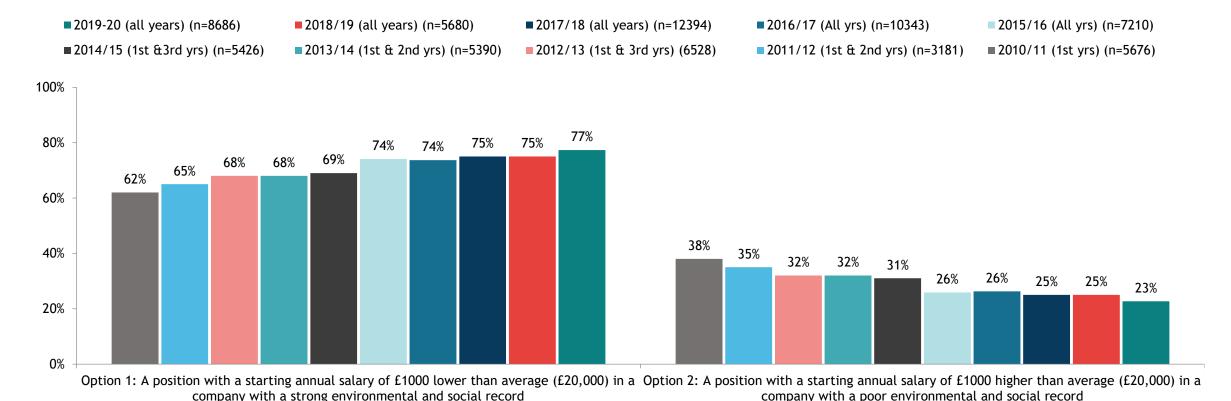
Respondents to the survey reported that a good starting salary (85% respondents (n=7194) and opportunities to progress quickly (81%, n=6753) are important factors when considering what jobs to apply for. Over two thirds of respondents in HE also reported that the chance to work in a role that contributes to development in the local community would be an important consideration (72%, n=6108). A similar proportion 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 (73%, n=6164). The proportion of respondents stating this motivation is significantly higher than in the 2018-19 research. Stated preference for working in a role that contributes to helping the environment has also significantly increased since the 2018-19 research, from 55% (n=3821) to 62% (n=5276).





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

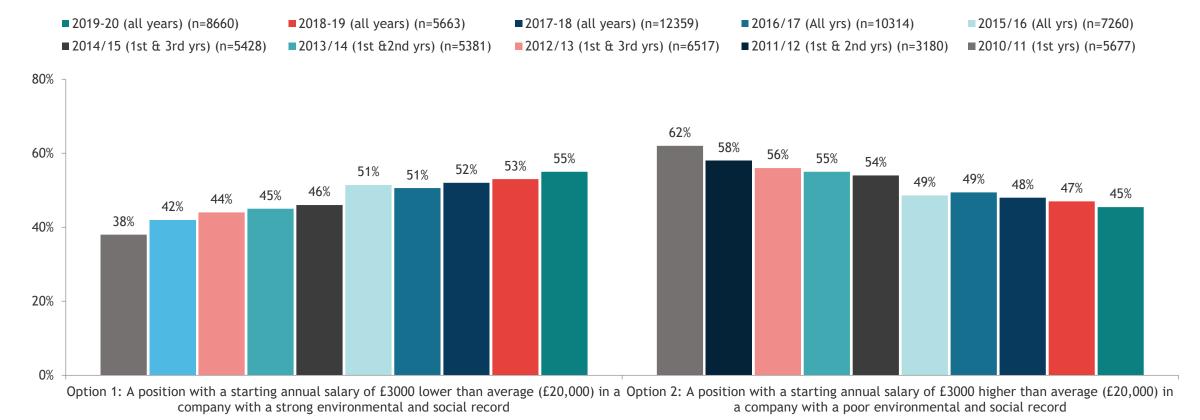
Over three quarters of HE respondents completing the survey in 2019-20 say they would opt for a reduction in starting annual salary of £1000 in order to work for a company with a strong social and environmental record (77%, n=6715), mirroring the results reported by respondents historically throughout the research that show an increasing preference for working for this kind of organisation. Respondents identifying as women are significantly more likely to say they're willing to make this sacrifice (82%, n=3987) compared to respondents identifying as men (71%, n=2587).





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

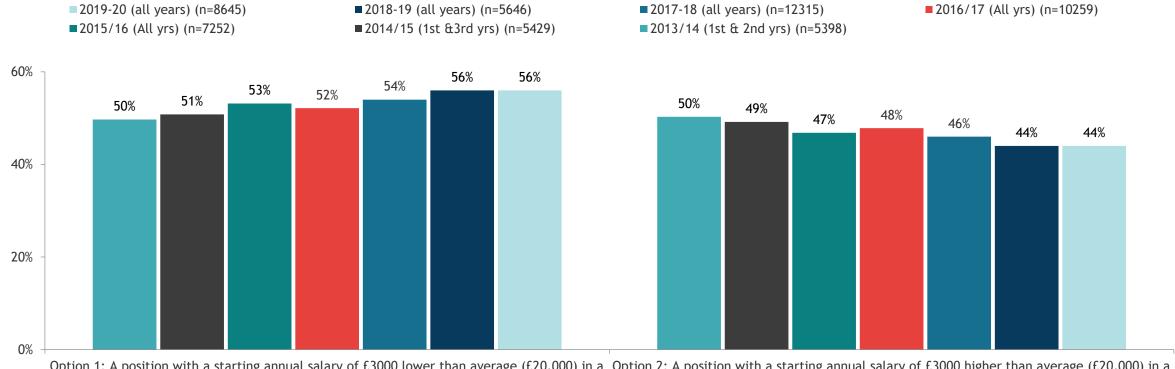
When asked to consider an annual salary sacrifice of £3000 from an average starting salary, over half of HE respondents (55%, n= 4724) in 2019-20 indicated they would be willing to make this sacrifice for a position in a company with a strong environmental and social record. Again this mirrors the results seen in previous surveys, with an increasing proportion willing to make this sacrifice. 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 (59%, n=2871 compared to 48%, n=1742).

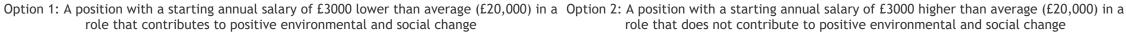




### What desire do students have to work in roles that contribute to positive social and environmental credentials?

Just over half of HE respondents report that they would be willing to make a sacrifice of £3000 from their starting annual salary for a specific role that contributes to positive environmental and social change (56%, n=4841). 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 (62%, n=2995) compared to 49%, n=1747).







### For further research on sustainability and students by SOS-UK, visit:

https://sustainability.nus.org.uk/our-research/our-reports

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PUBLISHED OCTOBER 2020

