

SUSTAINABILITY SKILLS SURVEY 2020-21

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

HIGHER EDUCATION REPORT



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM

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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 online survey was completed by over 8000 students in October and November 2020 to build on the data gathered through ten years of previous research. 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



84% would like to see sustainable development actively incorporated and promoted through all courses



66% say sustainable development is something they would like to learn more about

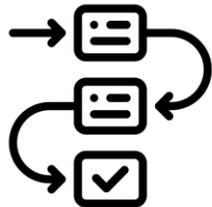
Looking at specific ‘skills’ related to sustainable development reveals variation in (recognition of) coverage during their time in higher education so far...



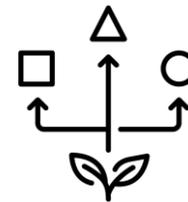
66% say ‘considering ethical issues linked to their subject’ has been covered during their time in higher education so far



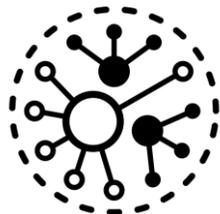
34% say ‘understanding how human activity is affecting nature’ has been covered during their time in higher education so far



52% say ‘planning for the long term as well as the short term’ has been covered during their time in higher education so far



32% 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



50% say ‘solving problems by thinking about whole systems’ 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

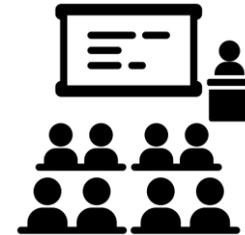
Respondents recognise the action taken by their institution to address negative impacts, and report a positive influence on their own attitudes and behaviours



74% agree that 'My university/college takes action to limit the negative impact it has on the environment and society'

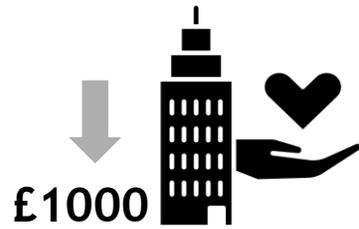


65% agree that 'being a student at my university/college encourages me to think and act to help the environment, and other people'

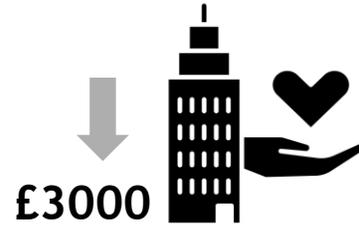


32% say university is the place they've studied that has encouraged them to think and act to help the environment and other people the most

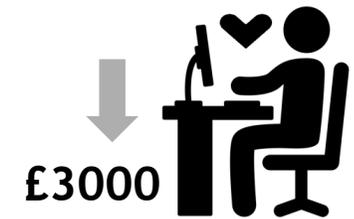
Looking beyond their time in education respondents show a desire to work for companies that perform strongly in relation to sustainable development, and in roles that contribute positively in this area



80% would accept a salary £1000 lower than average to work in a company with a good social and environmental record



57% would accept a salary £3000 lower than average to work in a company with a good social and environmental record



58% would accept a 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 2020-21 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 **54% and 55% respectively**, up from **52%** in 2019-20.



65% cite a role that contributes to helping the environment as an important factor in applying for jobs, compared to **62%** in 2019-20.



12% reported that the possibility to improve their ability to make a difference to the environment was a factor that influenced their choice of subject, compared to **10%** in 2019-20.

Introduction - Objective, methodology and survey details

1

Introduction - Objective, methodology and survey details

This report presents research designed 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 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 2020-21 online survey was completed in October and November 2020 by students across the UK studying in higher education. The survey was completed during a period of significant disruption in the education sector as a result of measures related to the COVID-10 pandemic. Over 8300 respondents completed the survey, which was promoted on a national basis through the TOTUM student cardholders database and also through local promotions by universities and students' unions.

The survey was incentivised with a £1000 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. 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.

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:

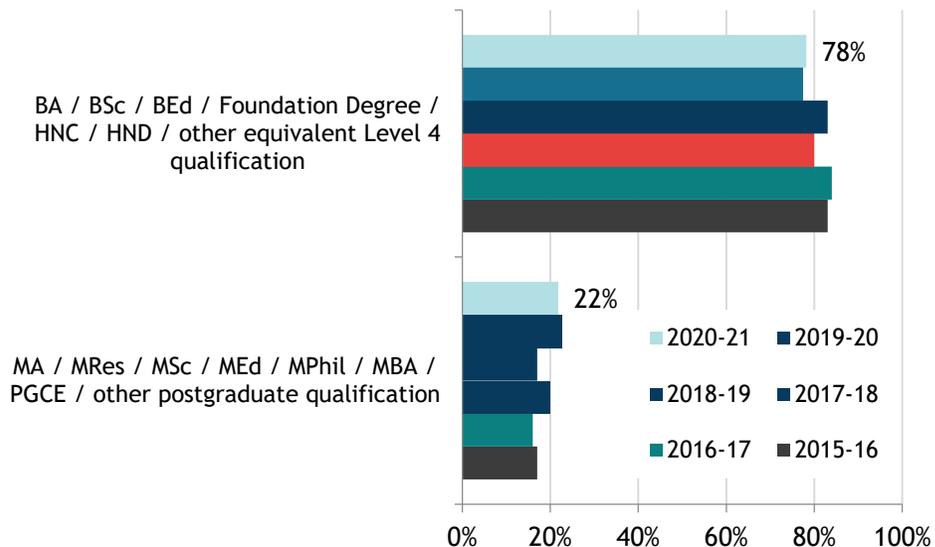


The respondents

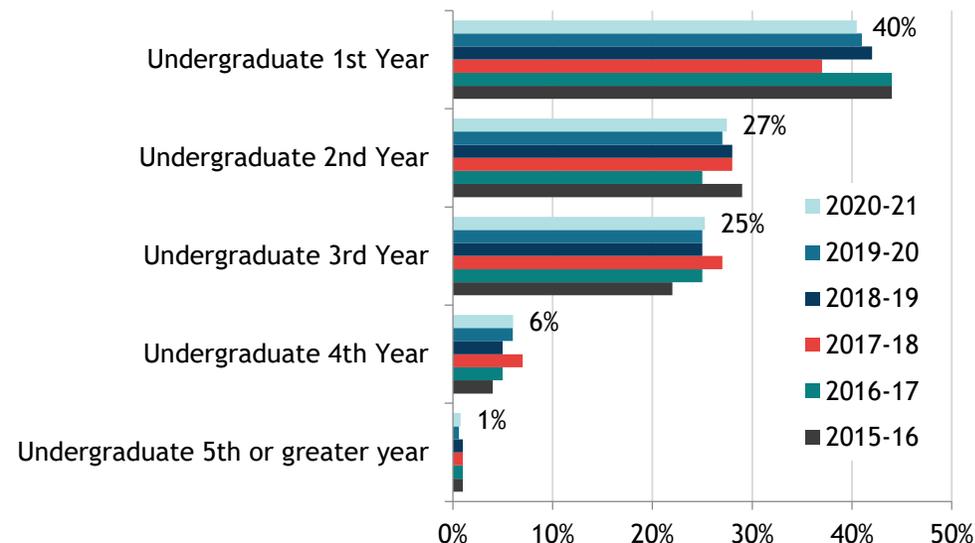
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Respondent demographics

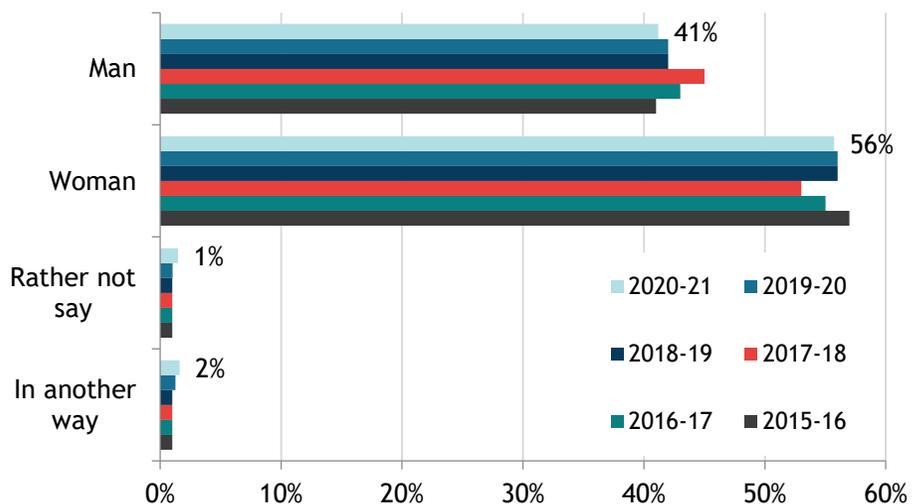
LEVEL OF STUDY



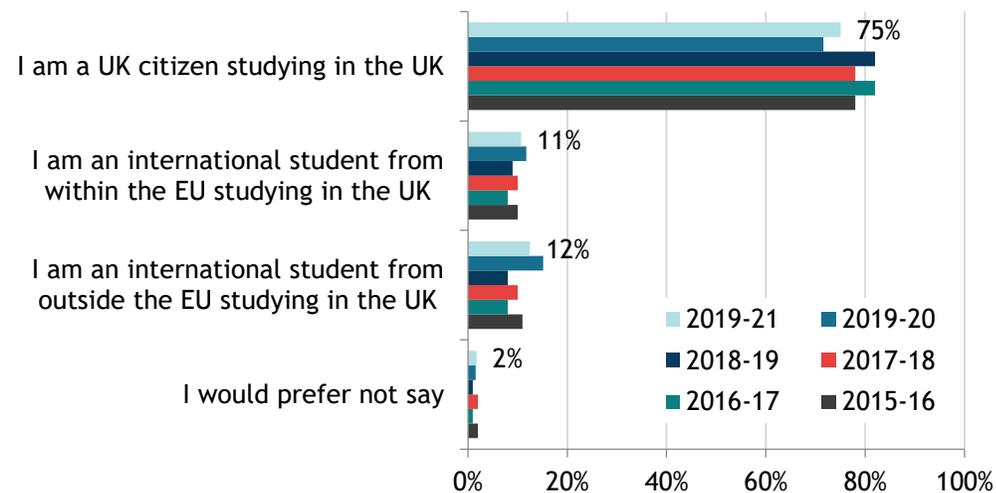
YEAR OF STUDY (UNDERGRADUATES)



GENDER



NATIONALITY

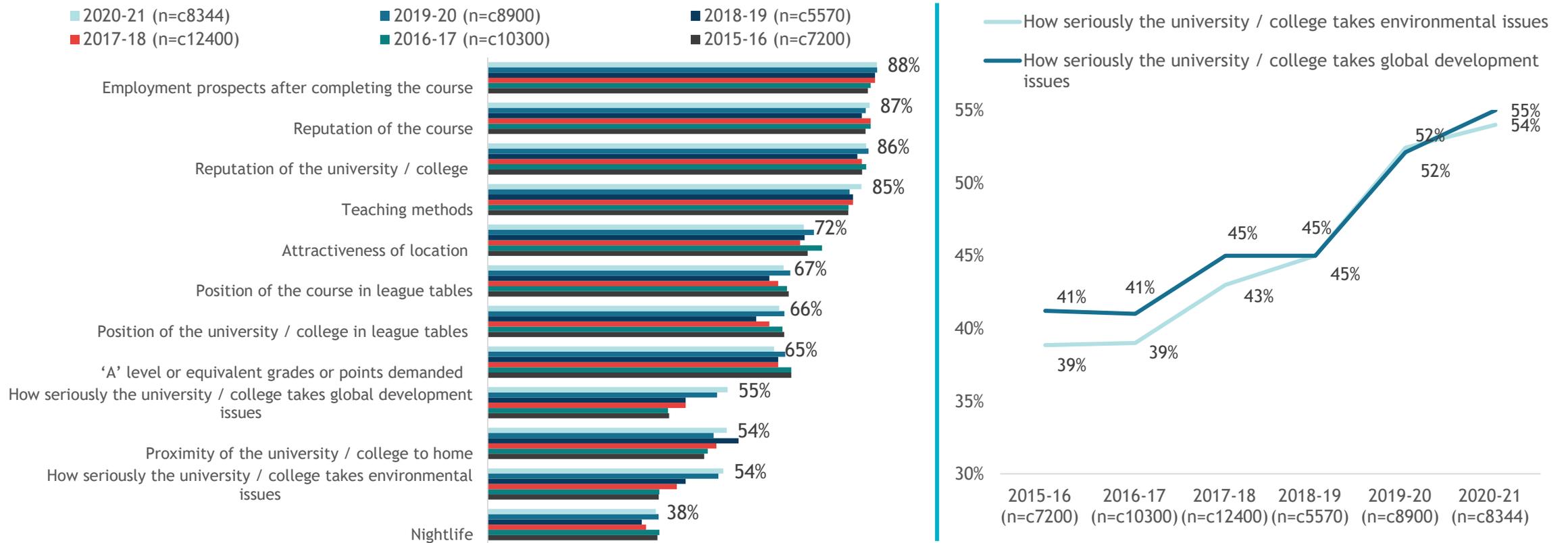


Expectations for teaching and learning for sustainability

3

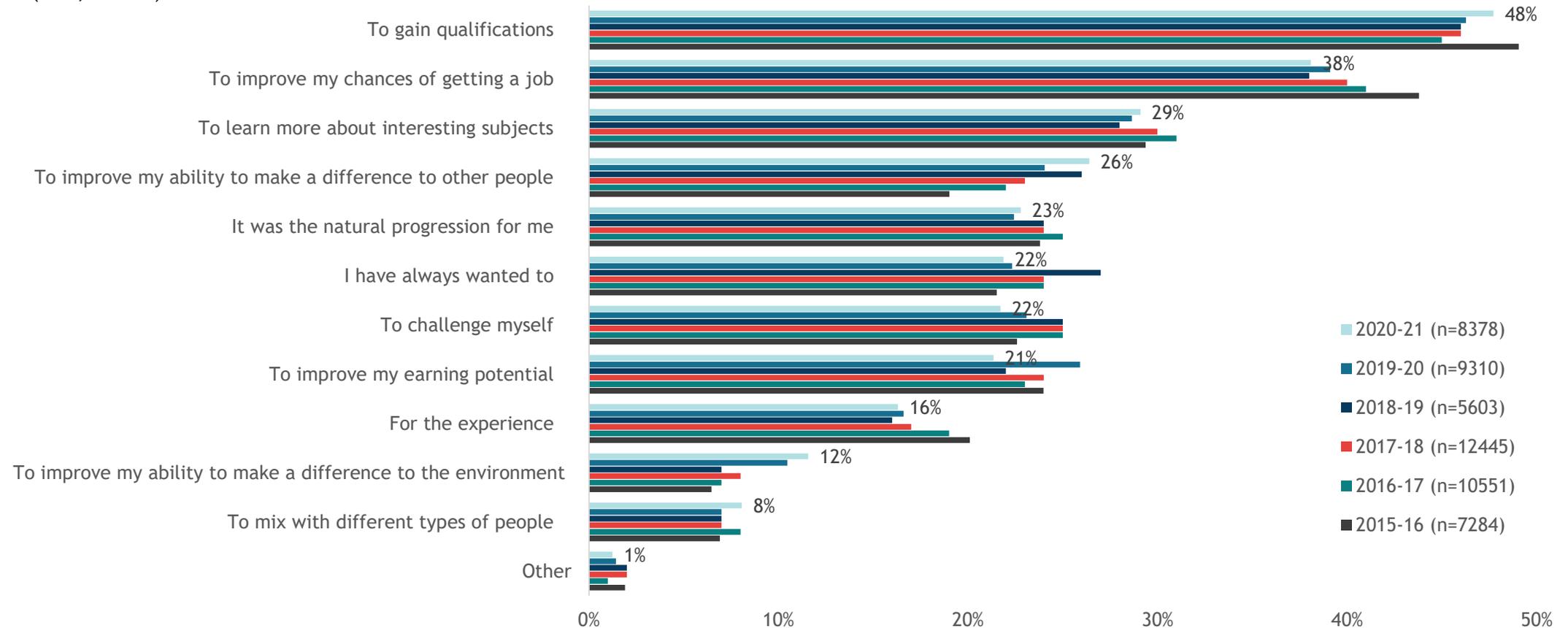
What factors influence choice over place of study?

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=4474) 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 (55%, n=4554). These motivations have significant increased over the course of this research. International students from outside the EU are most likely to say action on environmental issues (65%, n=676) and global development issues (72%, n=749) is important to their choice of place of study.



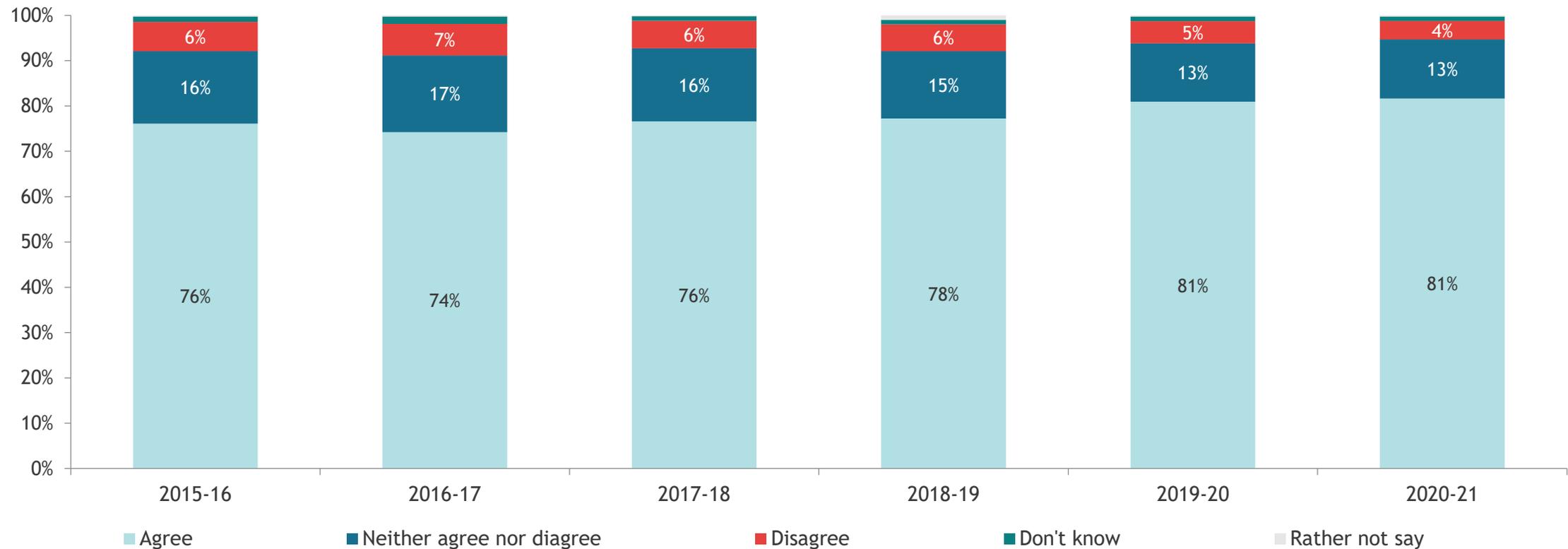
What influences choice of subject or course?

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 (48%, n=3998) and to improve their chances of getting a job (38%, n=3191). 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=2212 and 12%, n=969 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 (19%, n=194).



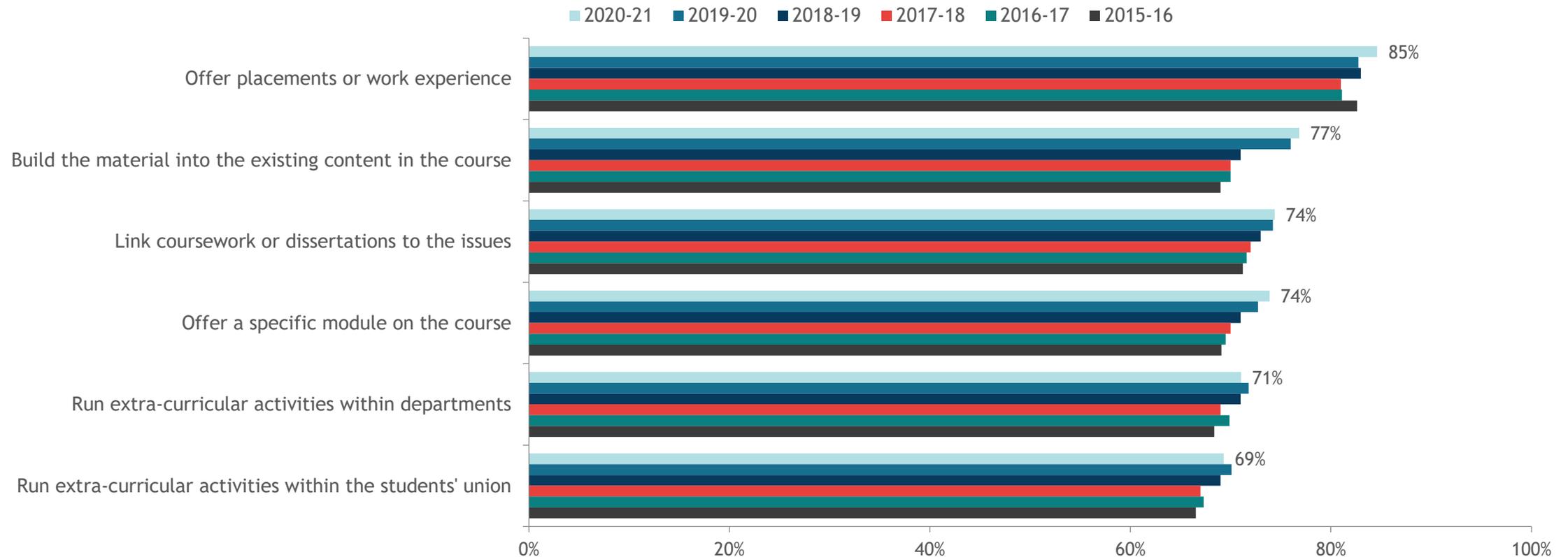
Do students expect universities / colleges to develop students' sustainability skills as part of courses?

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=6803).



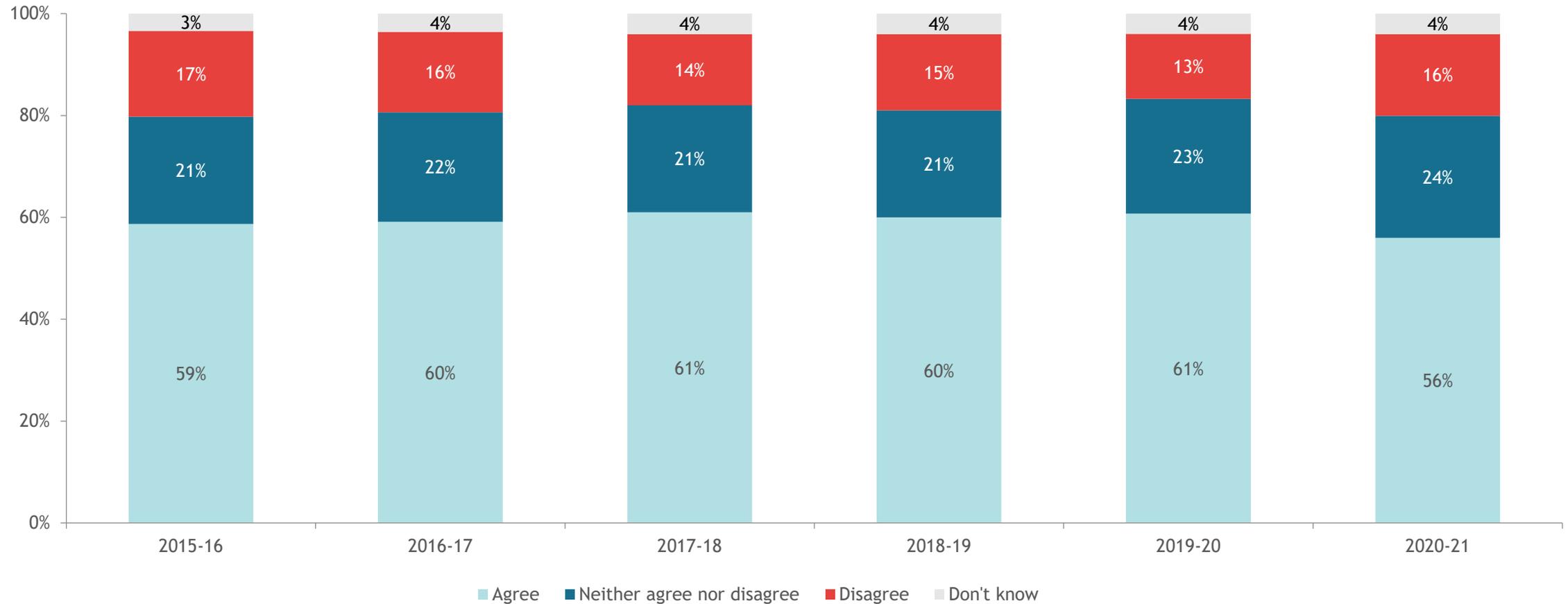
How should sustainability skills be developed and included in courses?

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=7025). Building material into existing course content (77%, n=6373) and linking to coursework and dissertations (74%, n=6179) were also seen as relevant methods of including skills and knowledge for sustainability.



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

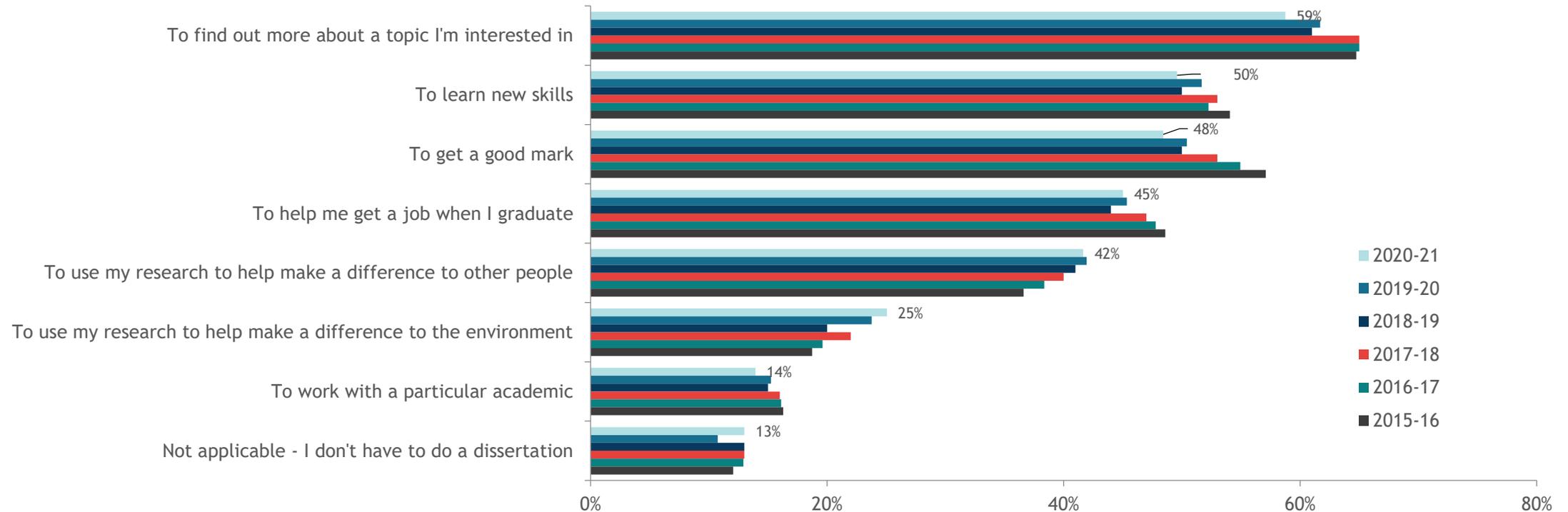
Just over half of respondents feel able to contribute to the development of the curriculum for their courses (56%, n=4677).



How are dissertations linked to sustainability?

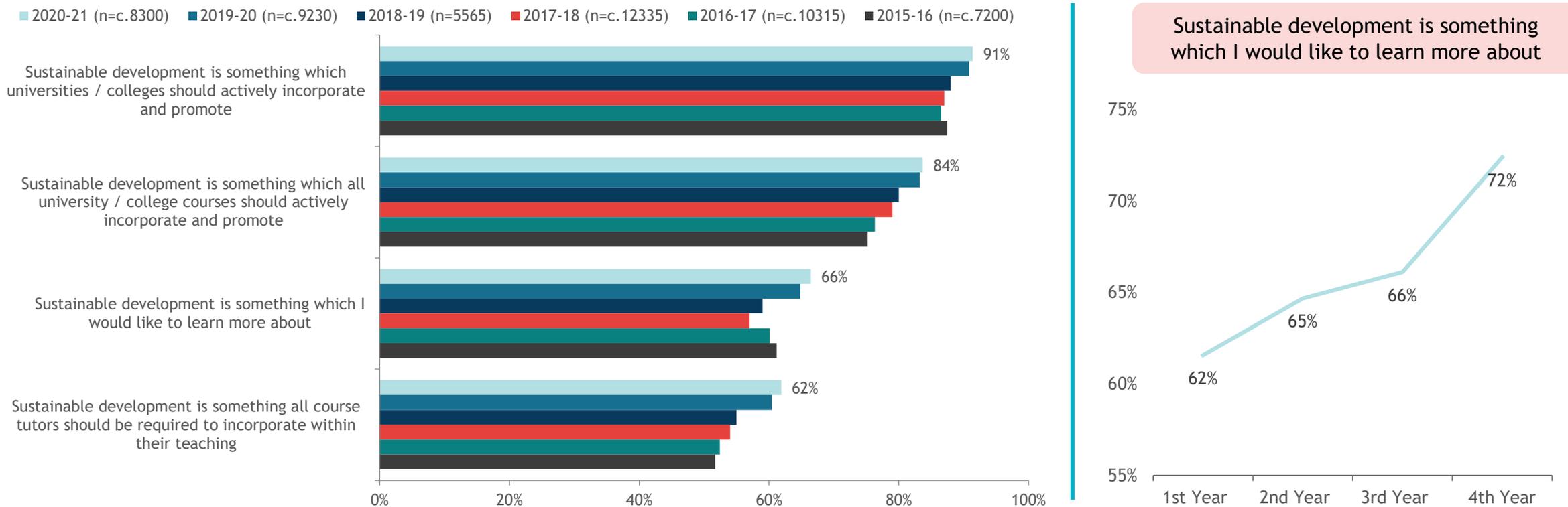
Respondents were asked to consider what they hoped to get out of the opportunity to complete a dissertation. For around two thirds of respondents (59%, n=4793) completing a dissertation is an opportunity to find out more about a topic they are interested in. Half see their dissertation as an opportunity learn new skills (50%, n=4046) or to get a good mark (48%, n=3950), which will in turn help them to get a job when they graduate (45%, n=3672).

Two in five respondents see their dissertation as an opportunity to carry out research that will make a difference to other people (42%, n=3399). A quarter (25%, n=2043) 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=2097) through their dissertation. International students from outside the EU are most likely to say they hope to make a difference to other people (49%, n=500) or the environment (38%, n=388) through their dissertation.



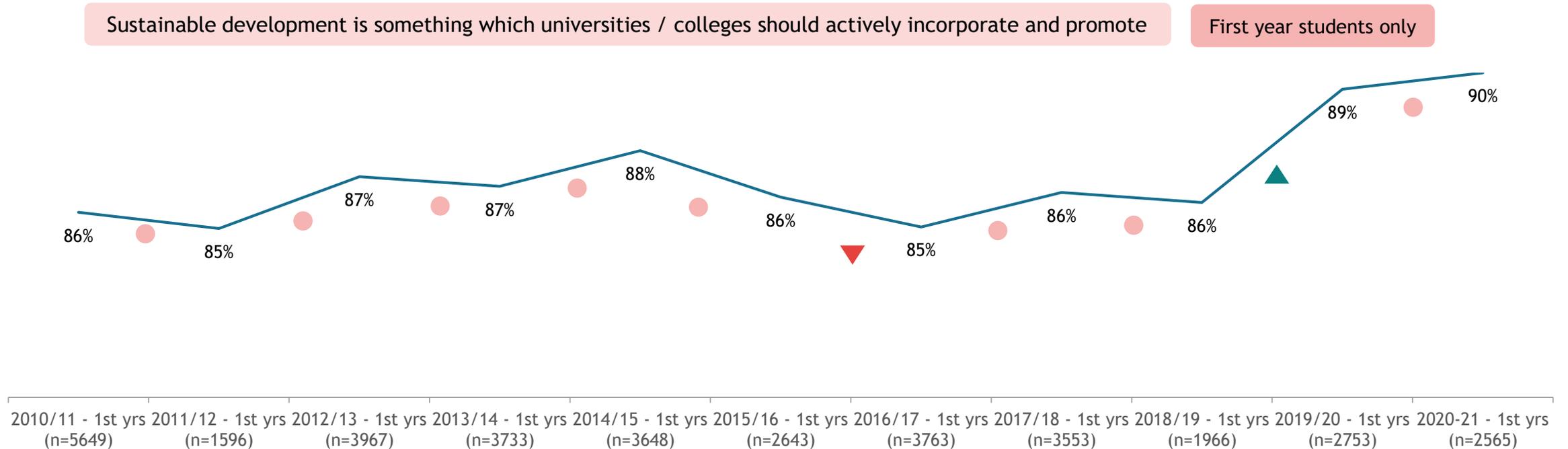
Do students expect universities / colleges to take action on sustainability?

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= 7603) saying they agree with this statement. 8 in 10 (84%, n= 6949) also agree that sustainability is something all courses should actively incorporate and promote, and 62% (n= 5145) 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 (66%, n=5516). International students from outside of the EU are most likely to agree that sustainable development is something they would like to learn more about (77%, n=797). 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, 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 1st year student responses and has previously shown a consistent and continuing demand for action on sustainable development by their institution throughout the seven years of research.



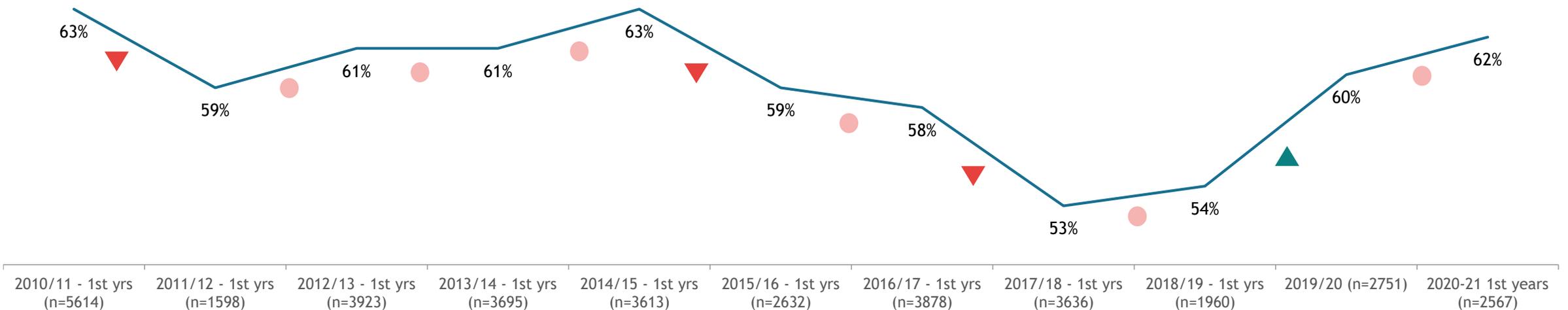
Each year of study is compared to the preceding year to identify any significant differences with the following symbols identifying any significant change in reported agreement: ● No change compared to the previous year, ▲ Significant increase compared to the previous year, ▼ Significant decrease compared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

Do students want to learn more about sustainability?

The chart below focuses specifically on 1st year student responses and shows a relatively consistent demand for learning about sustainable development throughout the research, with 62% of respondents saying they would like to learn more the topic (n=1576) in 2020-21. 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.

Sustainable development is something which I would like to learn more about

First year students only



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, ▼ 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 300 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 importance of learning about sustainable development in general. 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.

Make personal changes / take action personally	103
Further knowledge, and use knowledge	90
Believe its important generally	67
Career and course aspirations/relevance	61
To ensure it's a part of collective life / improve society / the environment	47
Anxiety / concern about the environment / future	47

“My area of expertise is within the built environment and it is a very important factor when designing infrastructure. I would like to develop my knowledge on sustainable development so that I can implement mitigations to ensure the infrastructure does not have a negative impact on our communities.”

“Past manufacturing and development in general had a negative effect on the environment, as university students are the future leaders they need to start learning how to incorporate sustainable thinking in their job and everyday life.”

“I believe that sustainable development is more important now than ever to tackle the social, environmental and political issues that the world faces. We should all be trying to step forward, not two steps back.”

“I think everybody should have to learn more about it in order for there to actually be a change in the way we are living, and the effect it is having on the environment.”

“It's our generation that is responsible for ensuring the future of the natural world within our planet. We need to learn how to effectively create change for the better.”

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 300 responses were coded and revealed that incorporation of sustainability within formal and informal curricula dominate perceptions of sustainability action required at respondents institutions’.

Incorporation of sustainability within the formal curriculum	85
Develop / provide opportunities for students related to sustainability (extra-curricular)	68
General awareness-raising and information provision	66
Waste and recycling improvements	42
No further suggestions - already believe university is doing enough on sustainability	25
Improve communications on sustainability action within the institution	24
Develop policy supporting sustainability	13
Improve energy / building performance	12
Improve food sustainability	8
Take action on carbon / climate change / divestment	7
Provide access to sustainable transport options	4
Take action to improve biodiversity	2

“Make the buildings more sustainable, promote a "sustainability week" (or month!) encouraging students to take part in sustainability programmes, maybe give everyone a day or week off (including staff) to take part in a sustainability project; organise a sustainability project for students and staff to be involved in; require each department to run a sustainability project every year.”

“Every course should have a module/aspect that looks at sustainable development in relation to the subject area so students are aware of how it relates to them.”

“Provide more methods of teaching about sustainable development. And not only to make us aware of sustainable development but to also teach us how to apply it to engineering.”

“Showing students the way forward instead of telling us "how" to do things. Teach by example.”

“Educate and empower all students in fields relating to sustainable development about ways of achieving such in relation to their field and everyday living.”

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 should allow resources to be available in the future. It's 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



“Promoting economic growth, technological advances and provision of social wellbeing necessities (healthcare, education etc) using resources in a way which will not contribute to climate change or deplete natural resources in a way to cause irreversible environmental damage.”

“Ensuring we develop in a way and at a pace that does not destroy our planet and where a negative impact is impossible to avoid, we take steps to give back to the environment and contribute to new resources.”

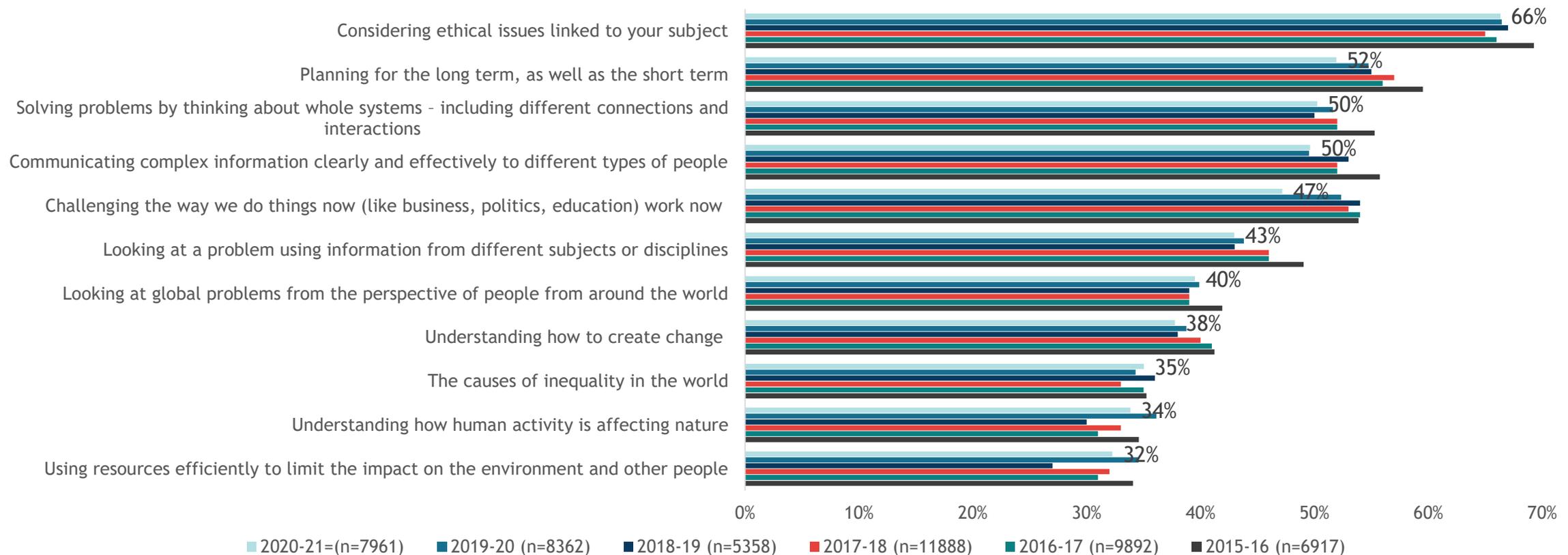
“Any kind of development that uses as many resources that can be replaced by the earth's natural processes. We do not use more than can be replaced so that we have an infinite resource that is not depleted by our use of it.”

“‘Less for me now, more for others later’ is how my economics teacher first introduced it. Ensuring that we live in such a way that there are resources for the next generation and we do not detriment the planet and environment in doing so. In ways such as recycling where we can, reducing carbon footprint, being energy efficient.”

“Developing a system or institution in a way that ensures it has minimal impact on the environment a positive one, and that has a positive social impact on the community it exists in, and ideally further afield.”

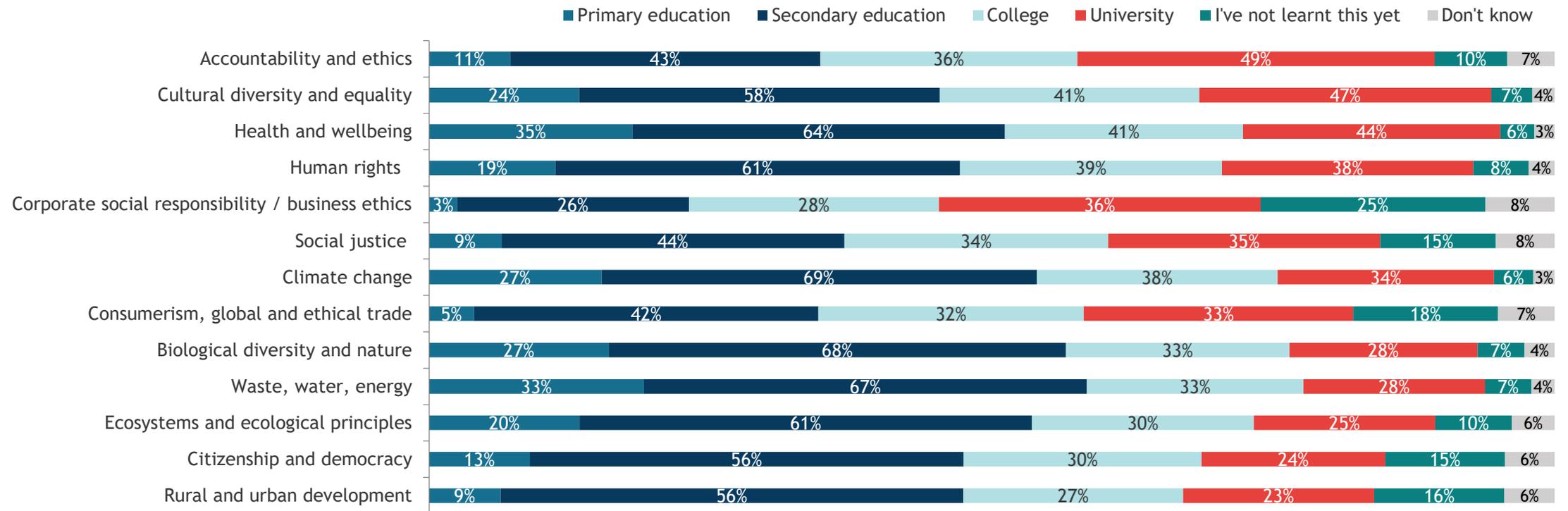
To what extent are students experiencing teaching and learning on sustainability skills and knowledge in higher education?

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=5280) and being 'planning for the long term as well as the short term' (52%, n=4133) HE respondents. Students who are UK citizens are more likely to have considered ethical issues linked to their subject.



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

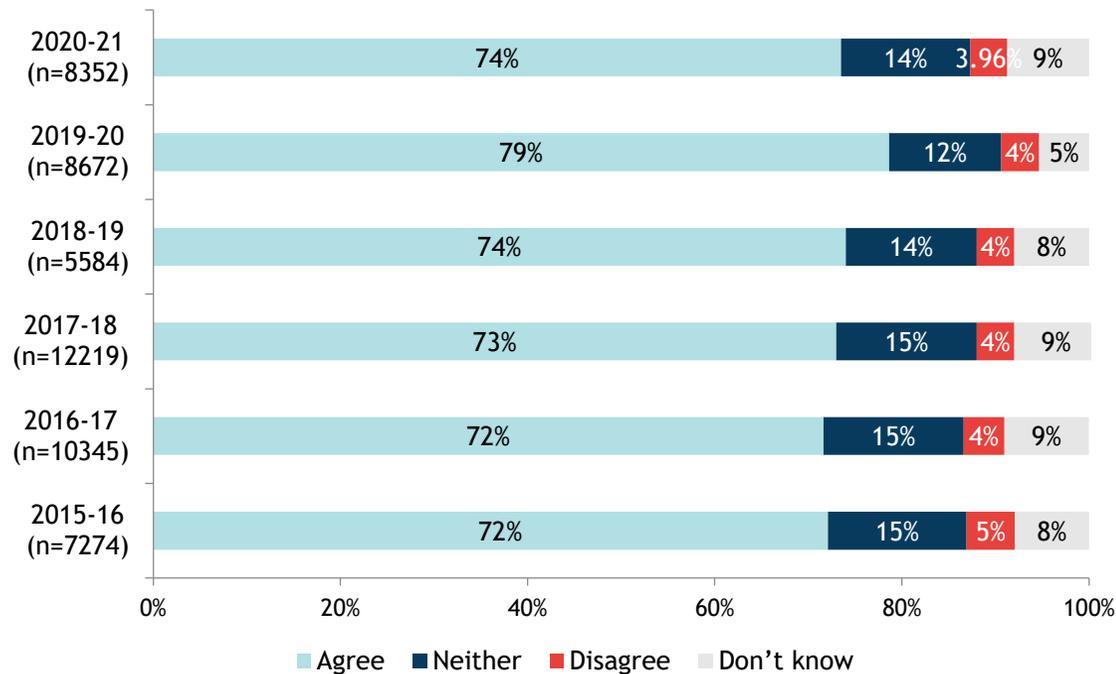
Respondents were also asked to reflect on their journey through education so far, and identify at which stage issues relating to sustainability have been covered by the teaching. Higher education respondents report that most of the teaching they have received on sustainability issues occurred during secondary education, for example 69% (n=5705) of respondents say climate change was covered at this point. However, it is worth bearing in mind that two fifths 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 (49%, n=3954) and cultural diversity and equality (47%, n=3823).



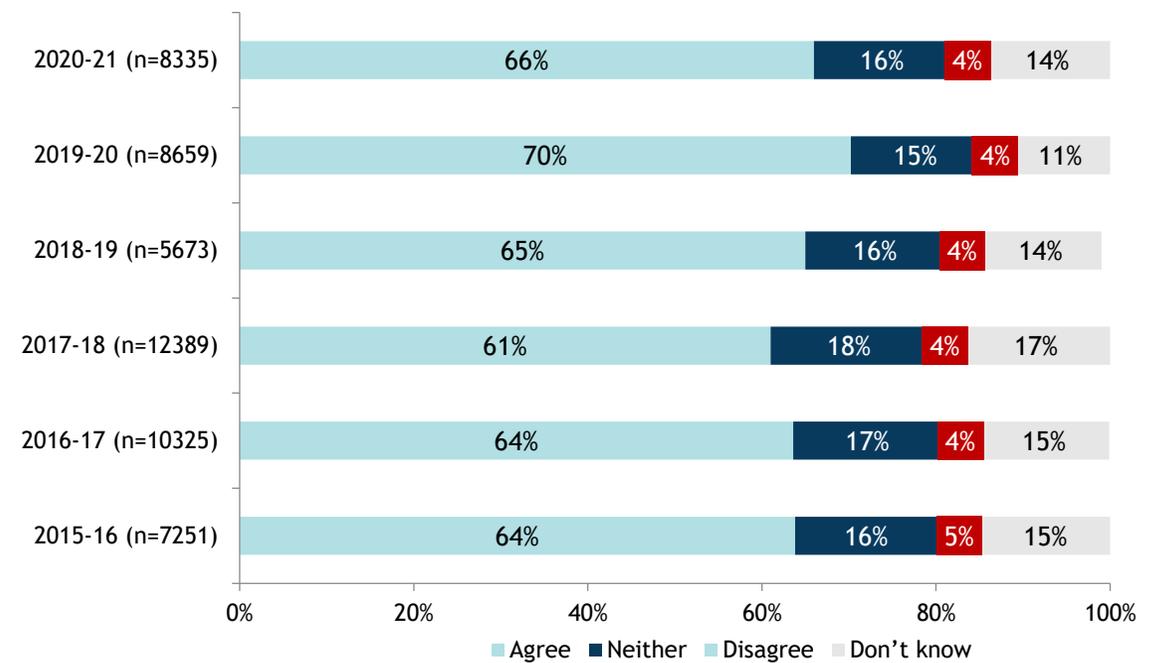
What impression do students have of their place of study in terms of action for sustainability?

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. Three quarters of HE respondents (74%, n=6140) agree that their university is taking action in this area. 66% (n=5498) agree their students' union (SU) is also taking action in this area, however there is also a lack of awareness with 14% (n=1201) saying they don't know if this is something their SU is doing.

“My university/college takes action to limit the negative impact it has on the environment and society”

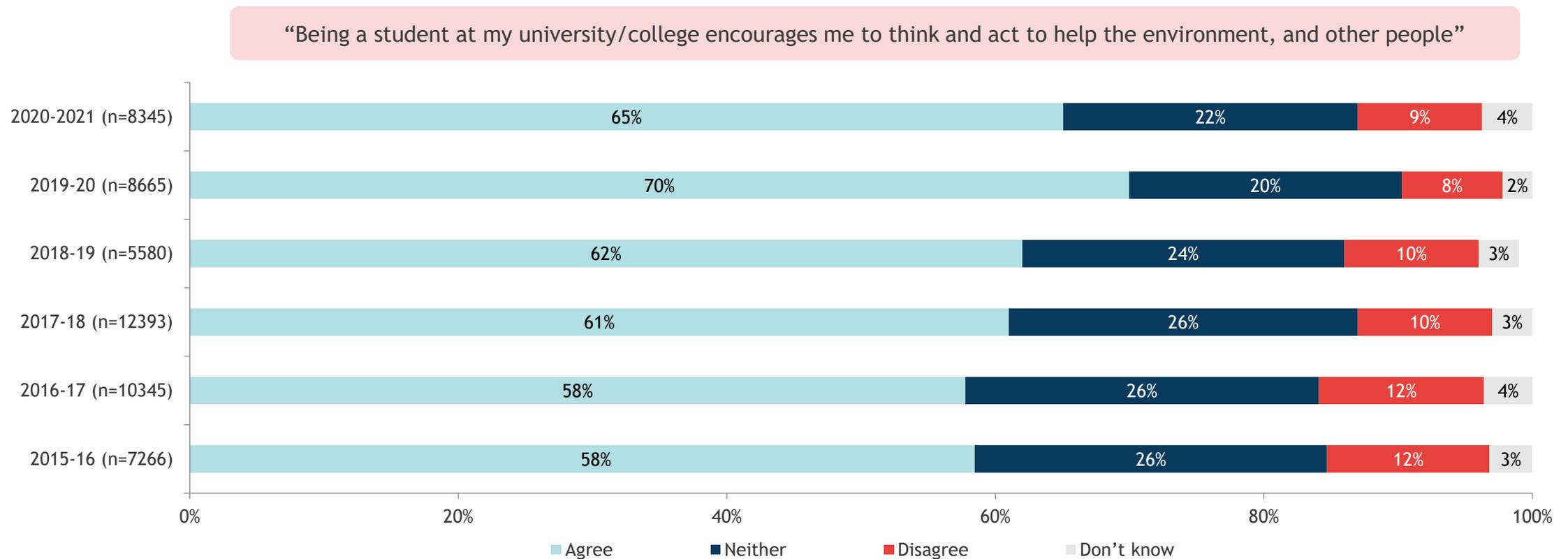


“My students' union takes action to limit the negative impact it has on the environment and society”



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. Two thirds in HE (65%, n=5429) 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 an increase compared to the 2018-19 research, but a significant decrease on last year.

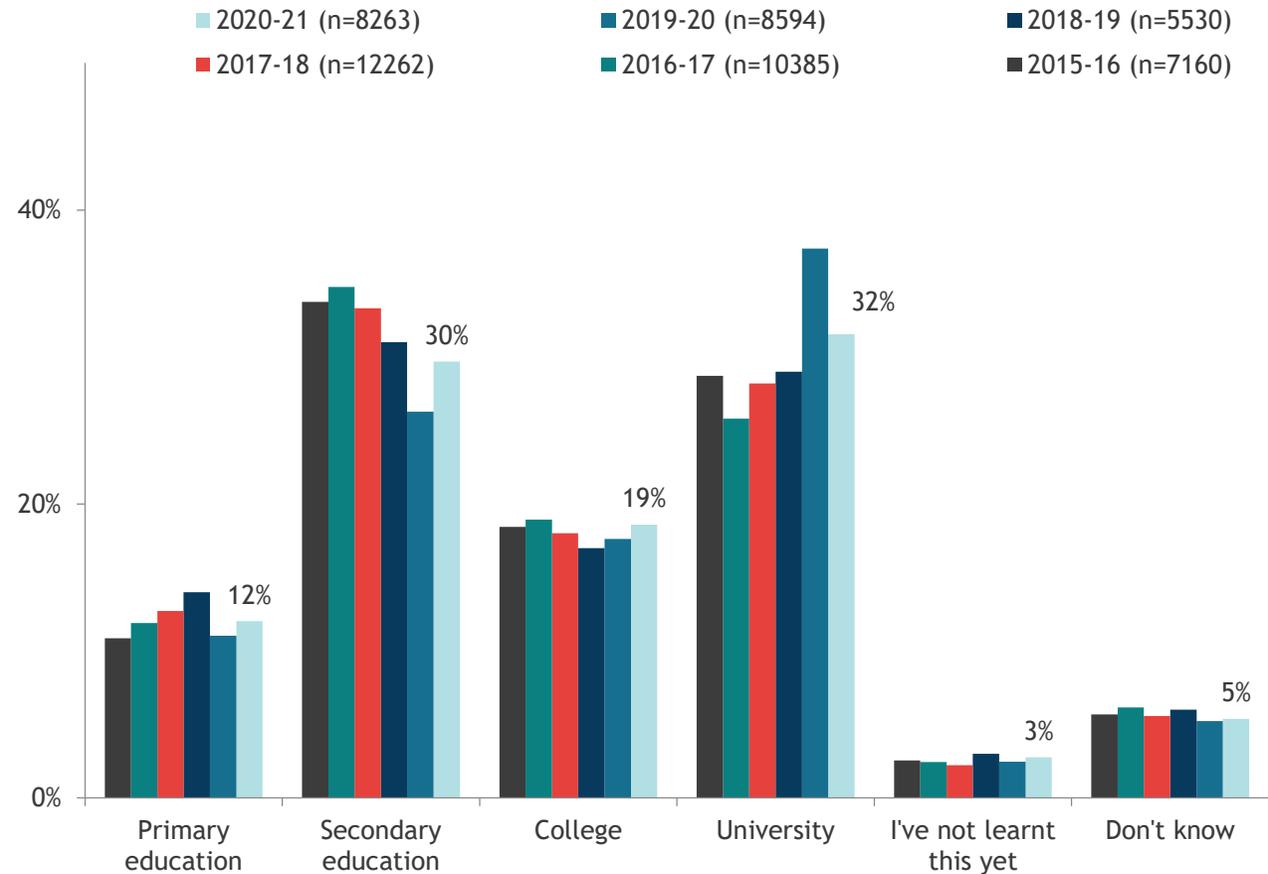


Which place of study is perceived as having the greatest influence on students to take action to help the environment and other people?

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 (32%, n=2606). The proportion identifying time at university as the strongest influence has dropped from the peak reached in 2019-20, although it is still higher than the previous rounds of research.

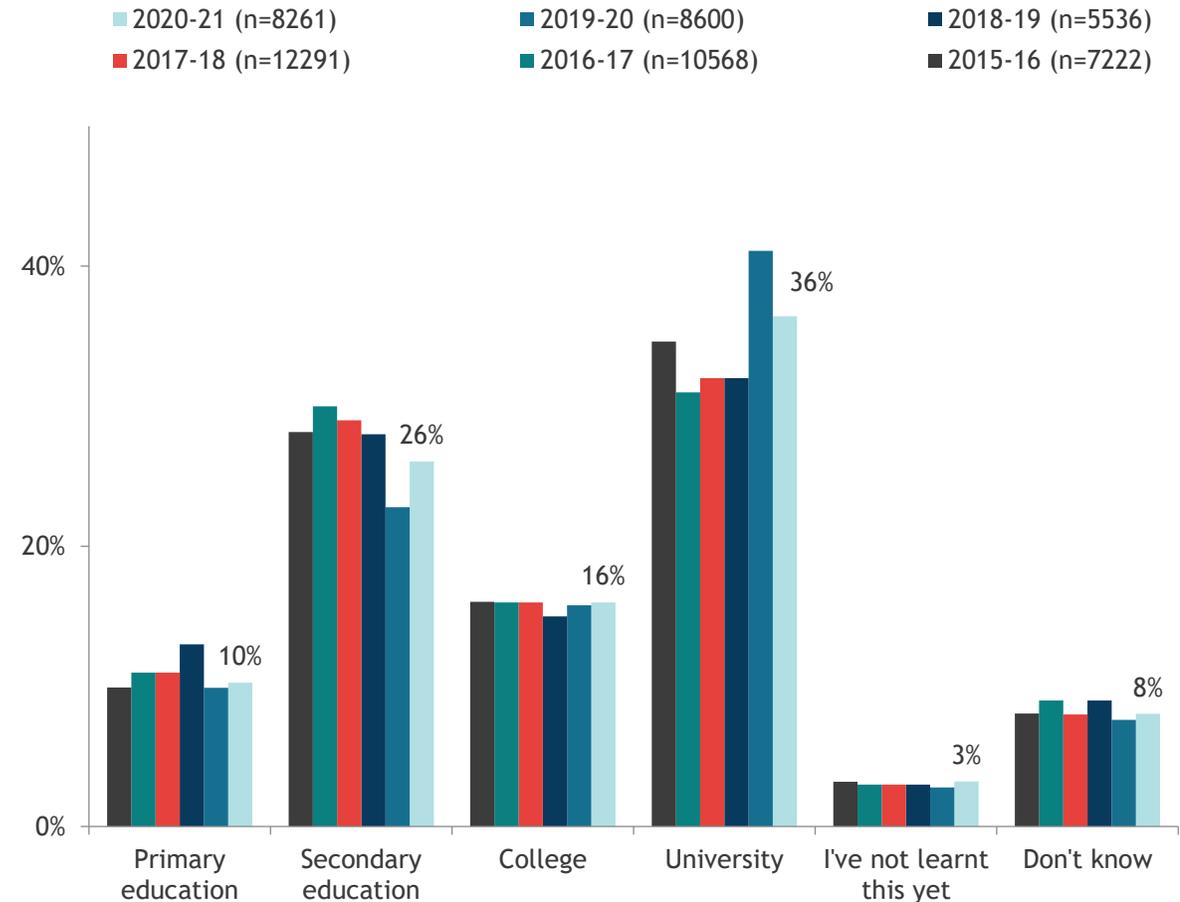
Secondary education is reported as being the strongest influence for around a third of HE respondents (30%, n=2453).



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 (36%, n=3009). This represents a significant decrease from last year.



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 300 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.

Changed values / views / outlook on life	101
Prompted more personal action related to sustainability	98
Better understanding of issues and impacts	91
No impact/Not sure	39
Influenced career or study aspirations	33
Triggered desire to do or learn more	21
Impact has come from outside education settings	19
Became more worried about the issues	3

“Understanding my impact and responsibility towards others in my community (be it the human community or my local area/country) I feel has had a major impact in how I act daily towards others and my environment. I am more conscious and compassionate.”

“It's made me more conscious of the impact I have personally, not just in terms of environmental factors but also in being aware of the privileges I have access to that others don't, and the social injustices in society.”

“The impact it has is good. As I learn I have human rights and there are laws to protect me. Also I learn diversity and equality is important and we need to treat everyone the same, one is more superior than others. Also learnt that climate change is changing and how is affecting the world and what we can do to stop climate change.”

“It has given me a broader view of the world and made me more aware of how my day to day life can have a huge impact on the world. I make more conscious choices to be less wasteful, recycle and think before I buy to avoid mass consumerism.”

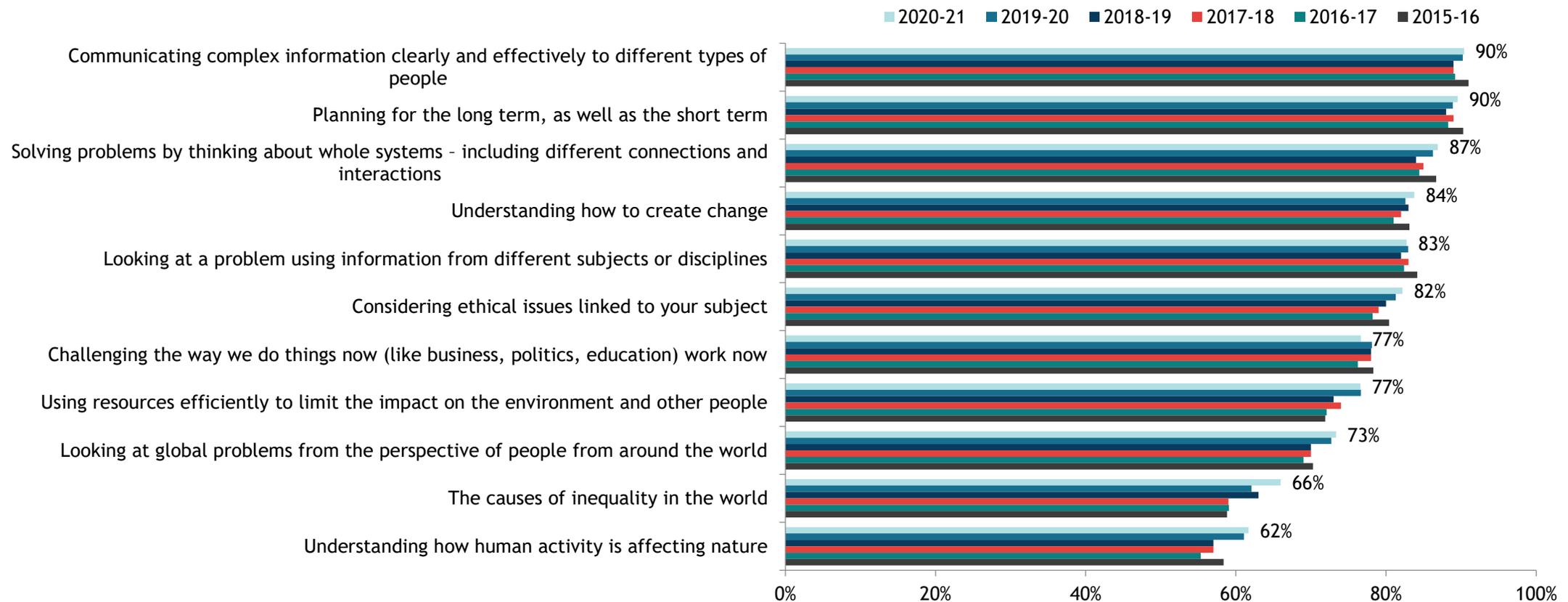
“It has made me aware about choices I make and more considerate of other people, and has given me a set of values which would mean for example not taking a job that would harm others or the environment it at all avoidable.”

Sustainability skills beyond education

5

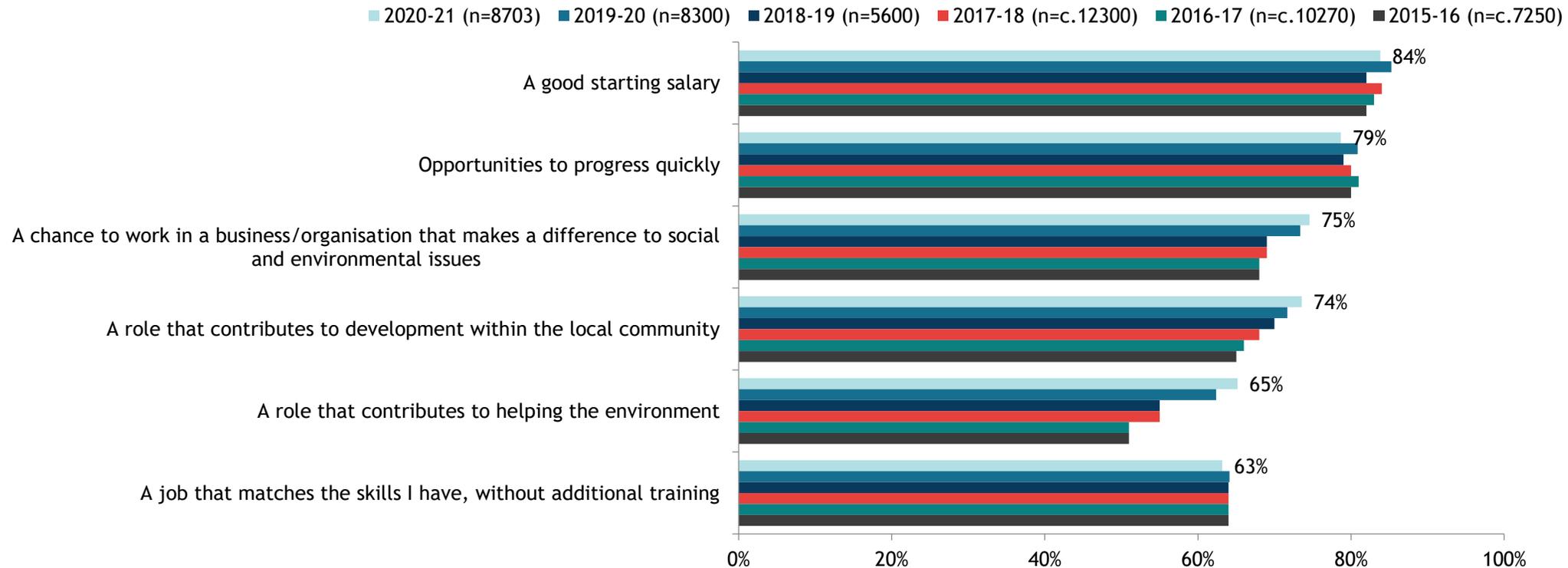
How important are sustainability skills to future employers?

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 (90%, n=8170) and planning for the long term, as well as the short term (89%, n=8096). Having an understanding of how human activity is affecting nature is least likely to be seen as being important for future employers 61%, n=5565), however the proportion who have rated this ability as important is increasing year on year.



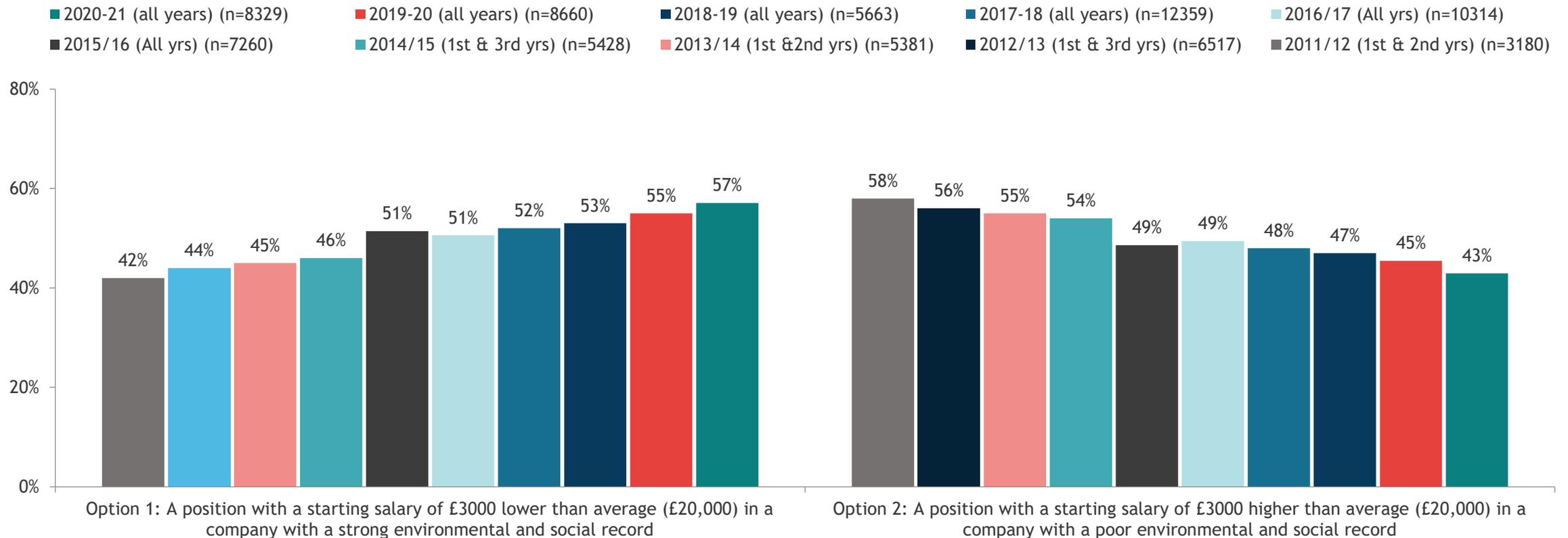
What factors are important when considering what jobs to apply for?

Respondents to the survey reported that a good starting salary (84% respondents (n=7547) and opportunities to progress quickly (79%, n=7063) are important factors when considering what jobs to apply for. Three quarters of respondents in HE, 75% (n=6699) 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 (74%, n=6621). Stated preference for working in a role that contributes to helping the environment has also significantly increased since the 2019-20 research, from 62% to 65%.



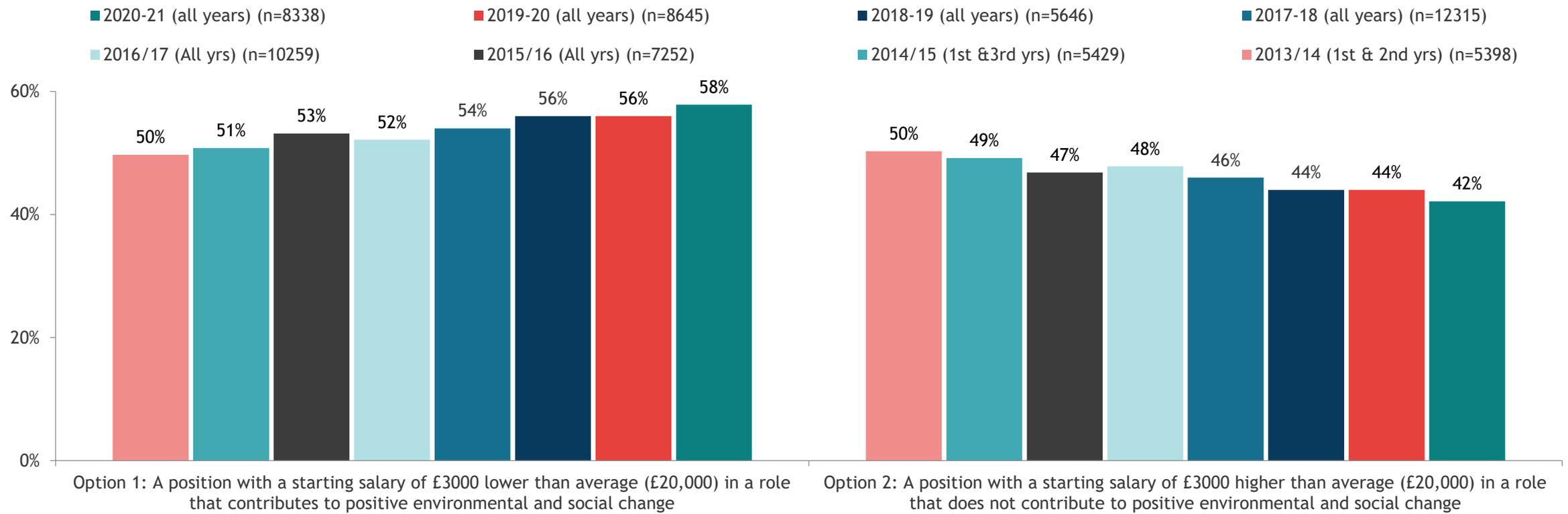
What desire do students have to work for employers with positive social and environmental credentials?

When asked to consider a salary sacrifice of £3000 from an average starting salary, over half of HE respondents (57%, n= 4724) in 2020-21 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).



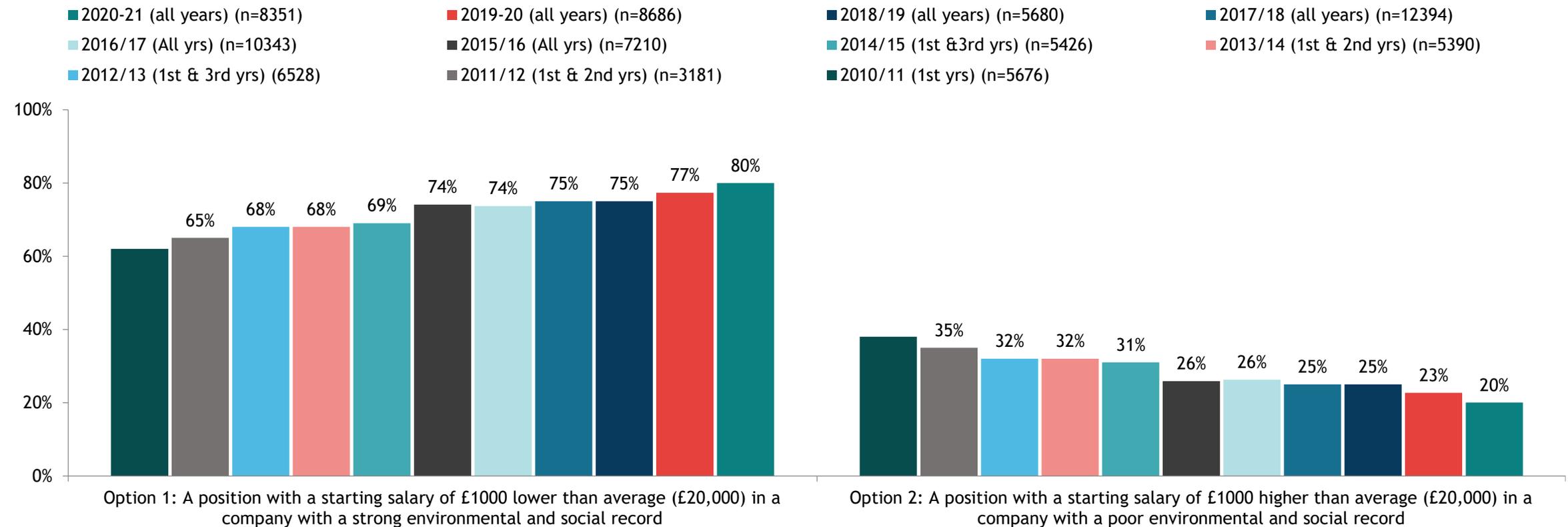
What desire do students have to work in roles that contribute to positive social and environmental credentials?

Just over half of HE respondents report that they would be willing to make a sacrifice of £3000 from their starting salary for a specific role that contributes to positive environmental and social change (58%, 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).



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 2020-21 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 (80%, 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).



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