

SUSTAINABILITY SKILLS SURVEY 2021-22

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 8500 students in October and November 2021 to build on the data gathered 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



79% 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

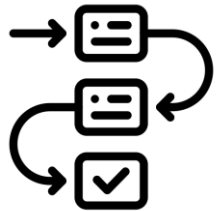
Looking at specific ‘skills’ related to sustainable development reveals variation in (recognition of) coverage during their time in higher education so far...



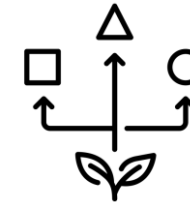
68% say ‘considering ethical issues linked to their subject’ has been covered during their time in higher education so far



37% 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



34% 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



40% 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



Commonly used words for defining sustainable development

"With my plans to have a career in the fashion industry as a buyer I believe it would be necessary for me to delve deeper and widen my knowledge on sustainable development due to the fashion industry being one of the largest environmental and social polluters."

To create the future we want

"I believe it is something everyone needs to be educated on and most people have not, we need it to ensure a good future for the future generations."

"Within my industry (structural engineering), it is an underrepresented resource and there is limited change occurring with respect to industry methods and practices. Understanding how to implement change within current economic and business models is difficult but important to investigate."

To improve my carbon footprint

"How to incorporate into more aspects of life and future careers. As well as more visibility about employers and their sustainability records."

"Environmental issue is the thing that every global citizen should be aware of. Sustainable development is one of the important concepts and I want to know more about it."

"Without sustainable development we're just going to harm the world and people more, and the climate crisis will worsen. The only way to have a good future is for sustainable development to become the norm."

"This is because the Global North is only focusing on how to improve once economy while the Global South are facing various issues. Global South are already facing their internal issues such as war and politics yet they had to suffer from climate change, global warming and natural disaster."

Motivations for learning about 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



71% agree that 'My university/college takes action to limit the negative impact it has on the environment and society'

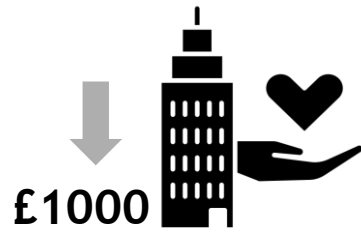


67% agree that 'being a student at my university/college encourages me to think and act to help the environment, and other people'

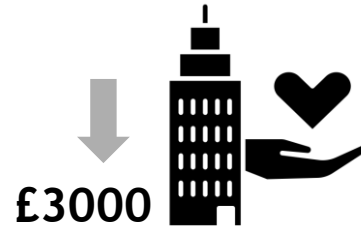


64% say their students' union has encouraged them to think and act to help the environment and other people the most

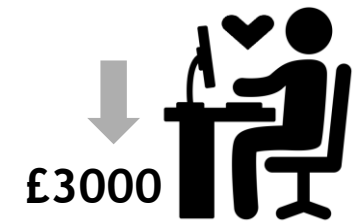
Looking beyond their time in education respondents show a desire to work for companies that perform strongly in relation to sustainable development, and in roles that contribute positively in this area



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



53% would accept a salary £3000 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 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 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 2021-22 online survey was completed in October and November 2021 by students across the UK studying in higher education. The survey was completed during a period of disruption in the education sector as a result of measures related to the COVID-19 pandemic. Many students were involved in 'blended learning' strategies, which involved at-home learning and attending in-person seminars in smaller groups. Some may also have attended in-person larger lectures, as blended learning strategies vary across UK universities. Over 8500 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 £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:

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

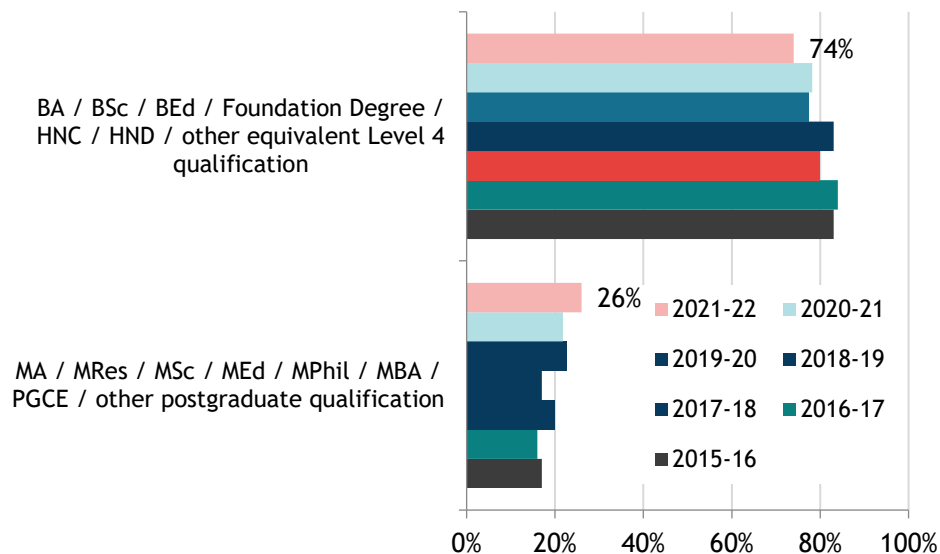
Planning for the long term, as well as the short term

The respondents

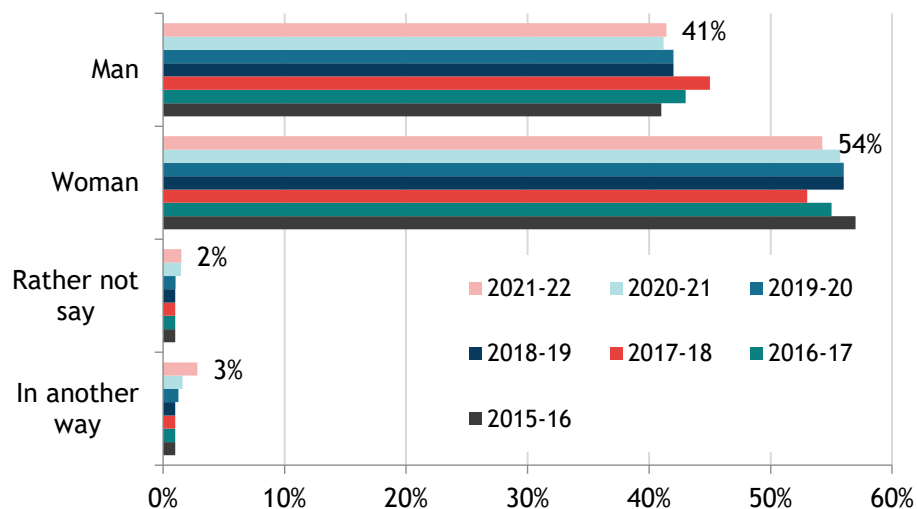
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Respondent demographics

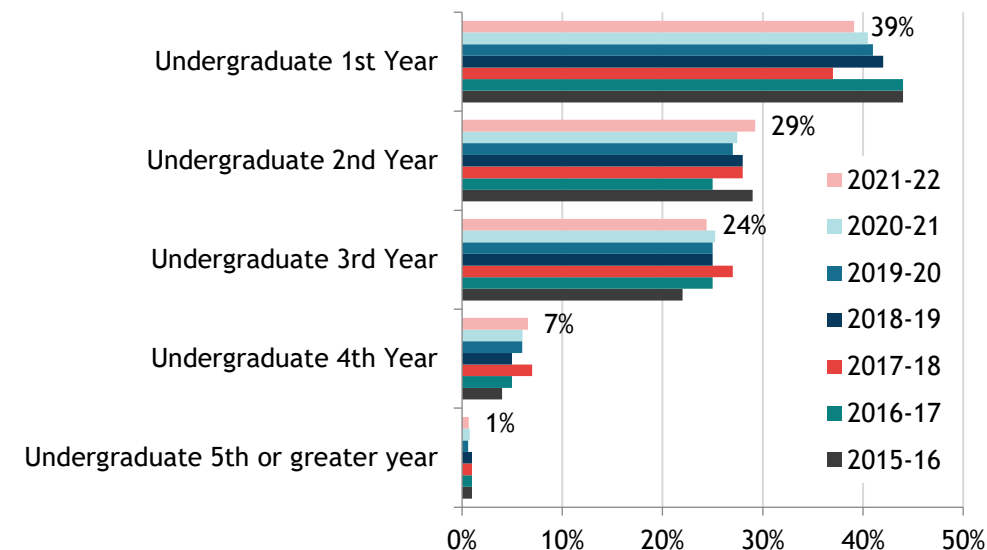
LEVEL OF STUDY



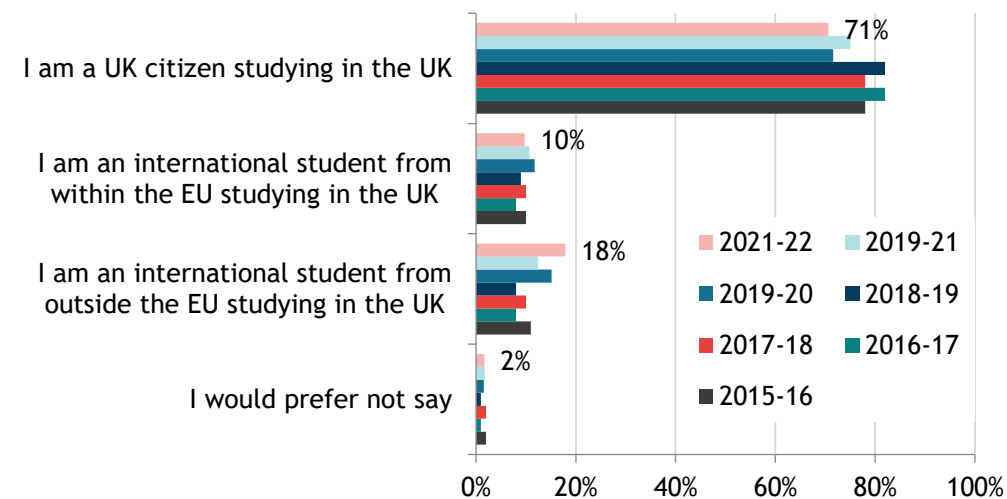
GENDER



YEAR OF STUDY (UNDERGRADUATES)



NATIONALITY

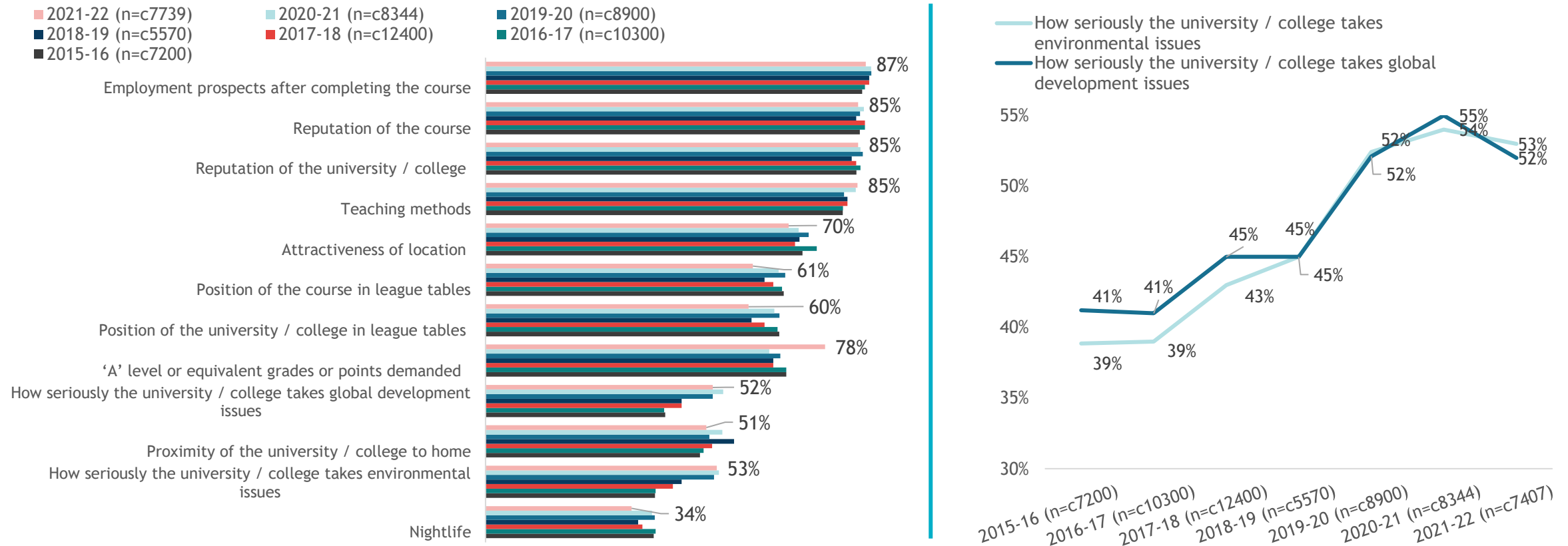


Expectations for teaching and learning for sustainability

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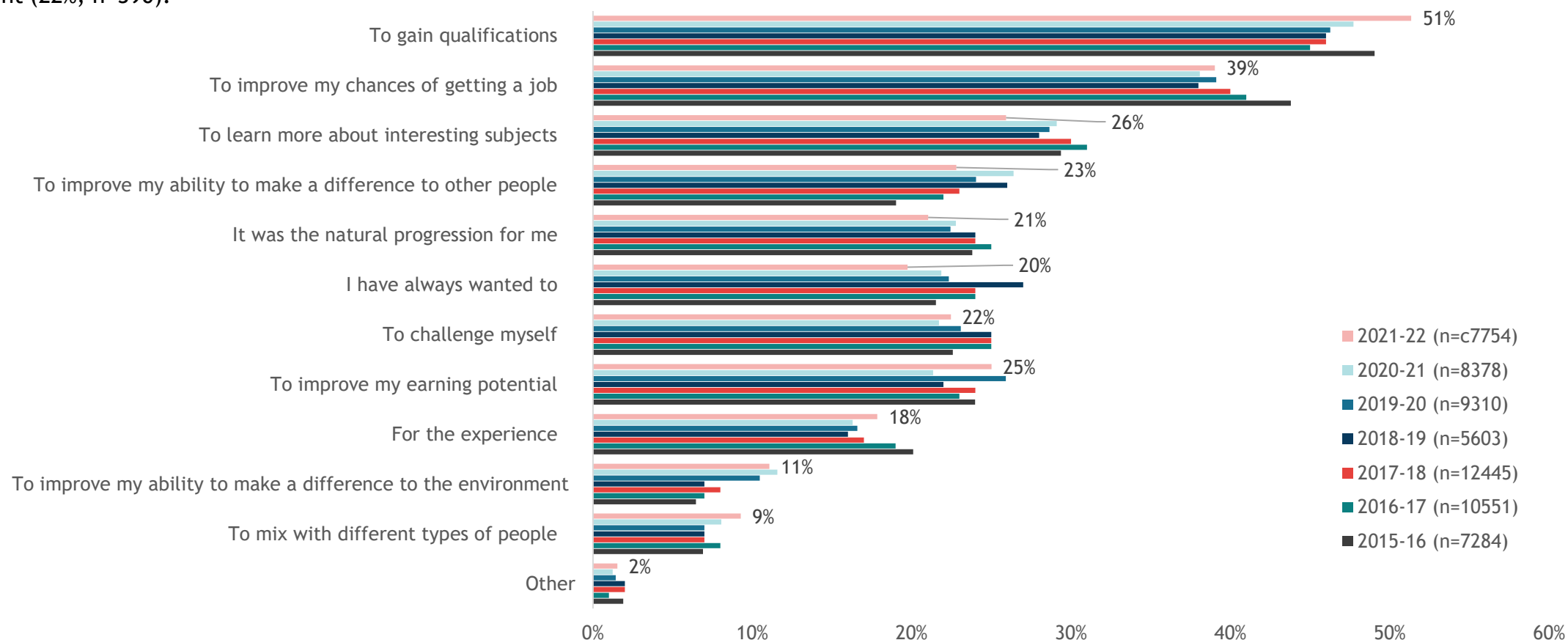
What factors influence choice over place of study?

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, employment prospects on completion of their course reputation of their course and institution and the teaching methods used. However, over half (53%, n=4109) 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=4035). 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 (74%, n=1024) and environmental issues (69%, n=958) are most likely to influence their choice.



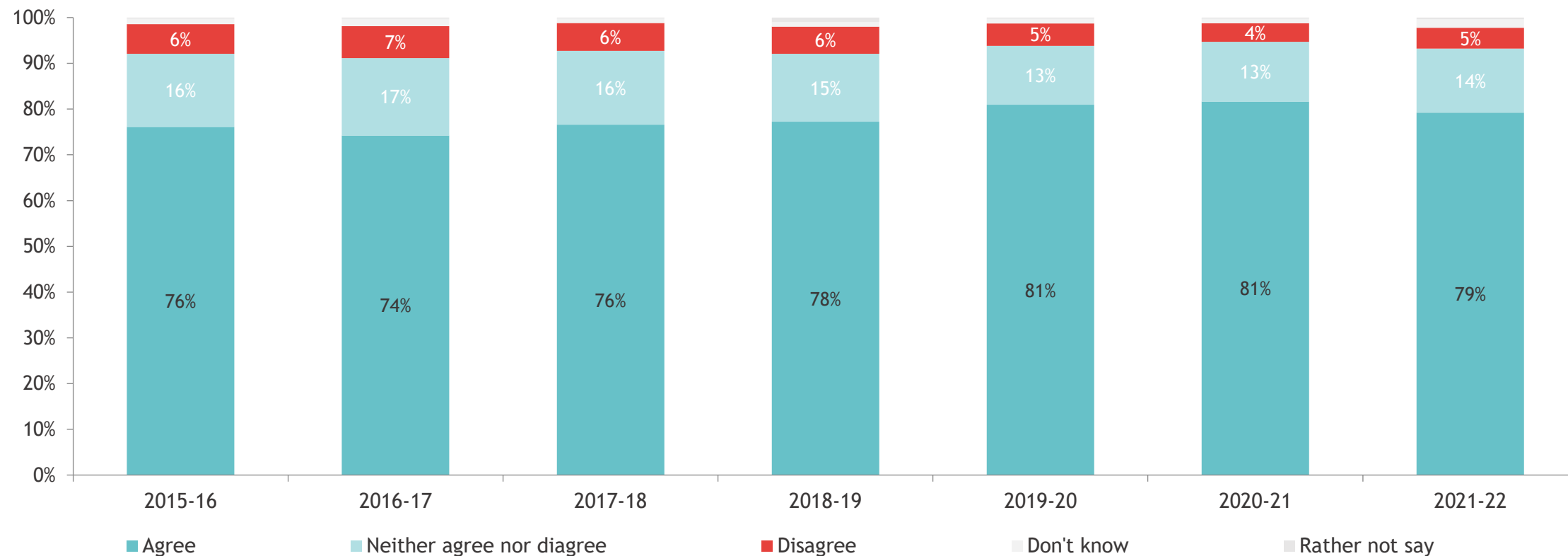
What influences choice of subject or course?

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=3982) and to improve their chances of getting a job (39%, n=3026). 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 (23%, n=1769 and 11%, n=858 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 (22%, n=390).



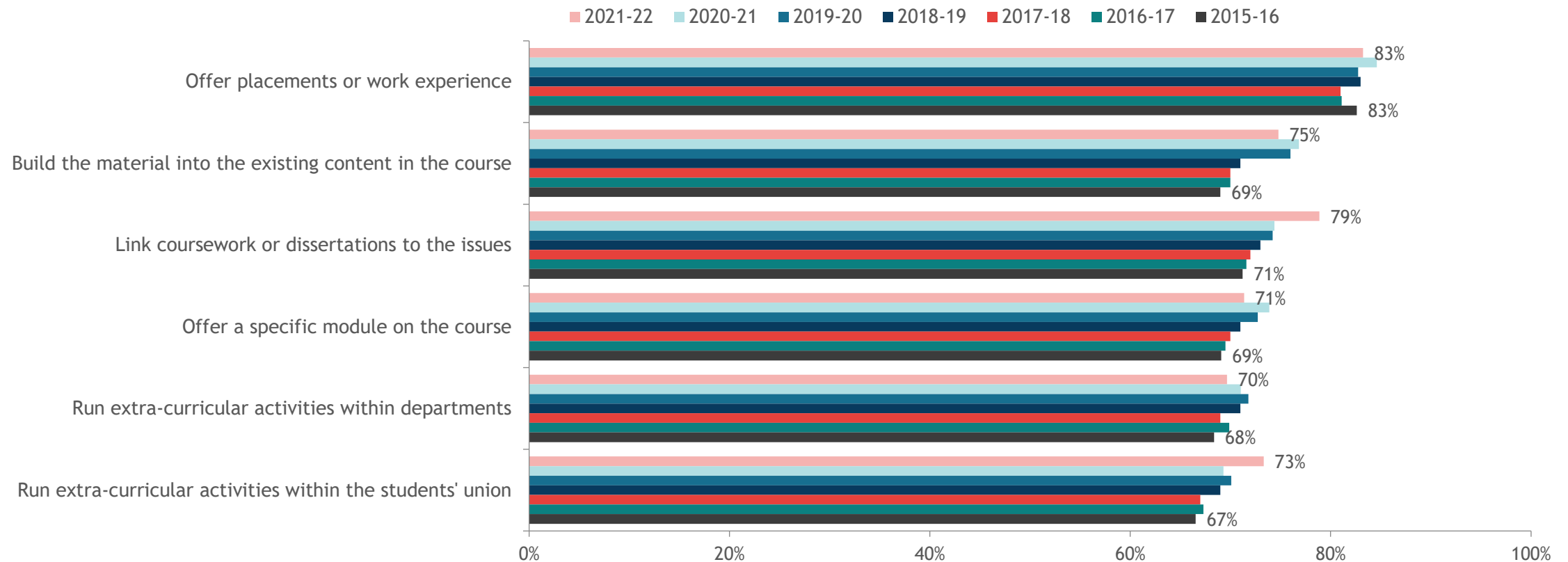
Do students expect universities / colleges to develop students' sustainability skills as part of courses?

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 (79%, n=6112).



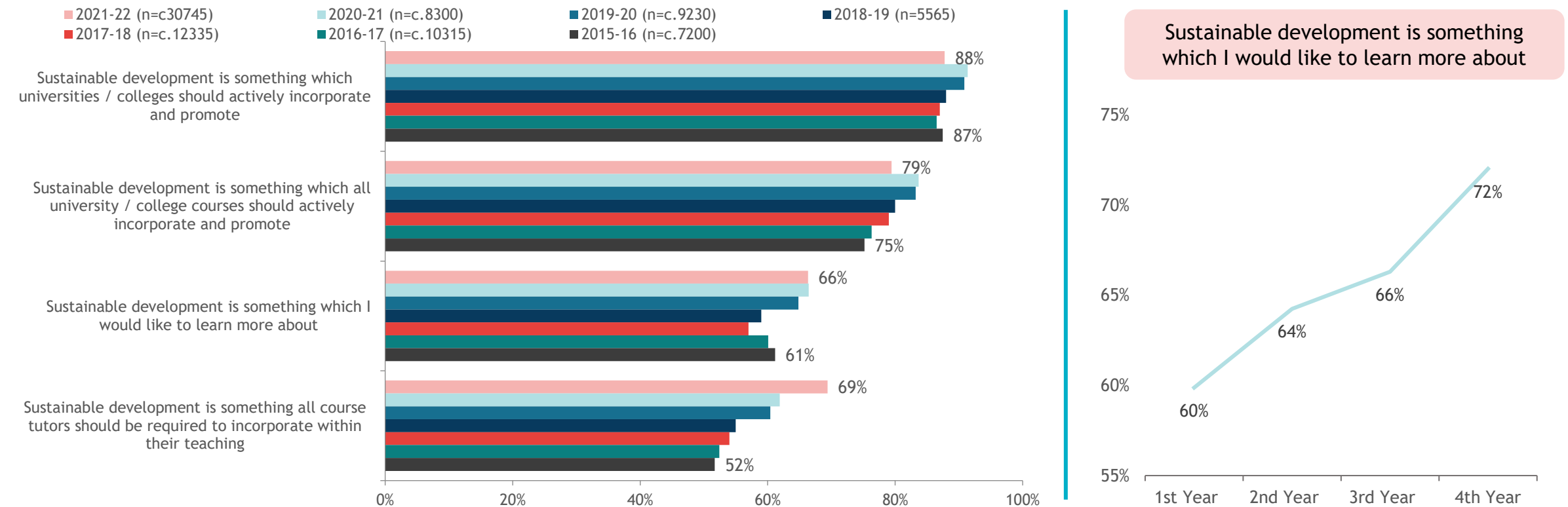
How should sustainability skills be developed and included in courses?

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=6413). Building material into existing course content (75%, n=5748) and linking to coursework and dissertations (79%, n=6080) were also seen as relevant methods of including skills and knowledge for sustainability.



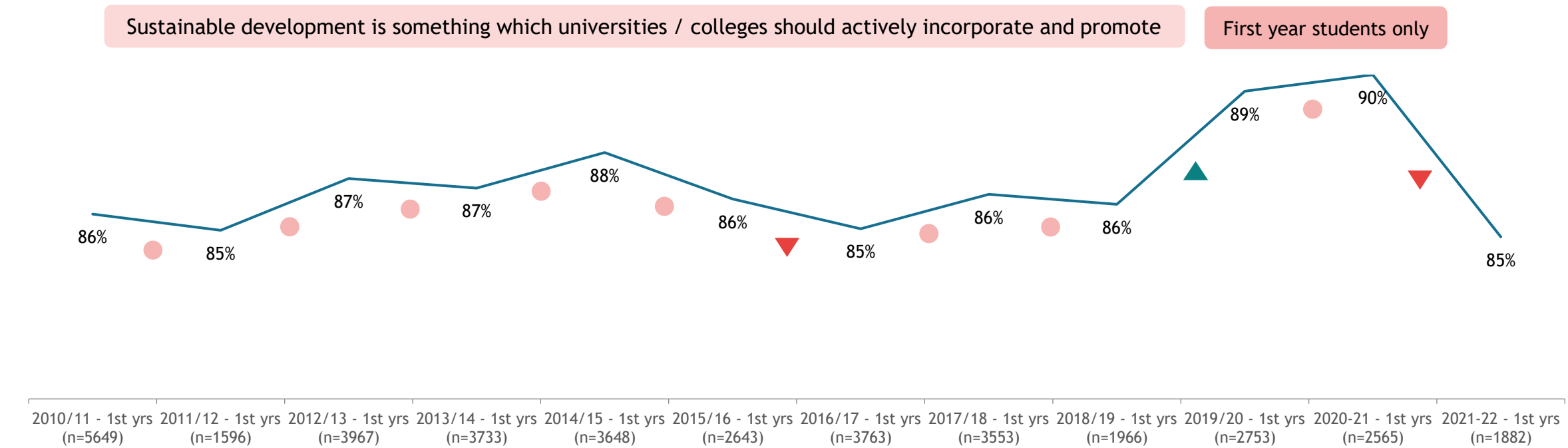
Do students expect universities / colleges to take action on sustainability?

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= 6750) saying they agree with this statement. 8 in 10 (79%, n= 6103) also agree that sustainability is something all courses should actively incorporate and promote, and 69% (n= 5334) 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=5099). International students from outside of the EU are most likely to agree that sustainable development is something they would like to learn more about (80%, n=1097). Demand for learning more about sustainability increases as students progress through their university experience.



What expectations do students have for their university?

Nearly 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.

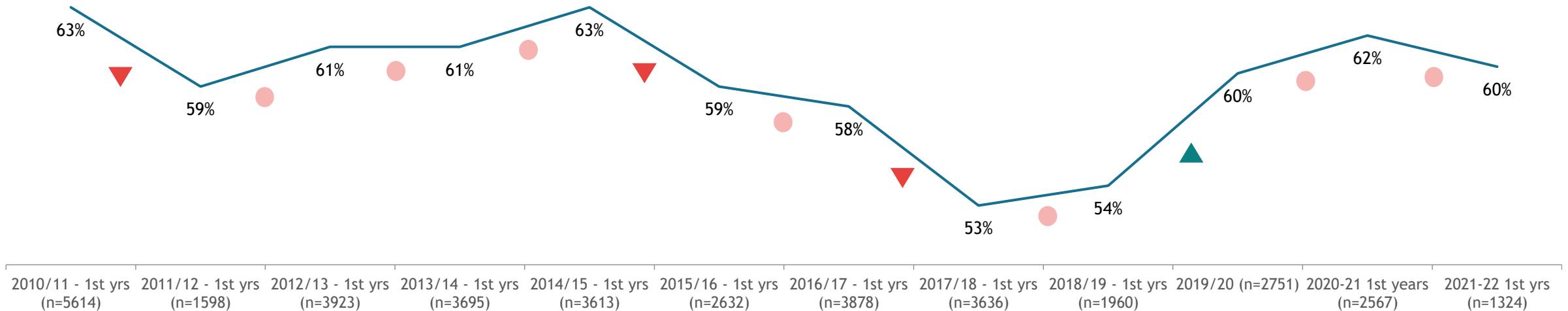


Do students want to learn more about sustainability?

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 60% of respondents saying they would like to learn more the topic (n=1324) in 2021-22. 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. 1440 completed responses were coded and show that the most common reason respondents reported was due to anxiety and concern about the environment, finite resources and future. Also common was to ensure that sustainability is a part of collective life and society, as there was a general view that collective efforts would improve society and the environment. There was also a view that it was important to know about and that they wanted to understand the issues better and mentions of the relevance of the concept to their course or their future career are also high.

Anxiety / concern about the environment / future	414
To ensure it's a part of collective life / improve society / the environment	332
Further knowledge, and use knowledge	280
Career and course aspirations/relevance	263
Make personal changes / take action personally	207
Believe its important generally	100

"This can change one's life habits and cultivate one's own professional skills."

"Because I think everyone should learn more about it to give them a better idea of how they should live their lives and the impact they personally can have on the world. Now we just need world governments and multinational companies to actually do something meaningful..."

"It is one of the potential career paths for me once I graduate as I would like to be in a role that relates to implementing or educating others about sustainable development."

"It is important for everyone to do their bit to help save future generations and our planet."

"I would like to learn more because I would never want to selfishly meet my needs and then end up ruining the world for future generations to come."

"To gain better understanding of the actions I could take within future employment to help protect the environment for 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 300 responses were coded and revealed that many students have no further suggestions, and incorporation of sustainability within formal and informal curricula dominate perceptions of sustainability action required at respondents institutions’.

No further suggestions including those who already believe university is doing enough on sustainability	62
Incorporation of sustainability within the formal curriculum	51
Develop / provide opportunities for students related to sustainability (extra-curricular)	50
General awareness-raising and information provision	33
Waste and recycling improvements	31
Take action on carbon / climate change / divestment	15
Improve communications on sustainability action within the institution	14
Take action to improve/ protect biodiversity and green spaces	12
Improve energy / building performance	10
Provide access to sustainable transport options	8
Improve food sustainability	7
Develop policy supporting sustainability	6

“Make more use of online teaching and learning so unnecessary travel for students and staff is kept to a minimum. Timetable students so that whole days are spent on campus instead of the odd couple of hours as this is a waste of resources travelling for such a short period of time. Do more to create diverse habitat and mini ecosystems on campus, e.g. consider having a lake, bat boxes or bird boxes to encourage biodiversity. Consider the building materials used when developing the campus and opt for more natural options.”

“My place of study does an excellent job already; I think one area of improvement could be the amount of food waste.”

“It would be great if my place of study could add a sustainable development module that ties into each program of study.”

“If there were more organised groups (there is one group in place) that go to climate marches, demonstrations, more voluntary action. They should promote all of these on social media, get more people involved and advertise themselves.”

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.



“A development of our society without wasting as much as we do now or polluting the air much less.”

“Creating global change in a way that doesn’t harm the futures of younger generations and the planet.”

“Development that meets the needs of the present without hindering the ability of future generations to meet their own needs.”

“Maintaining the resources used to undertake a project by engaging in practices that ensure their natural or artificial replenishment.”

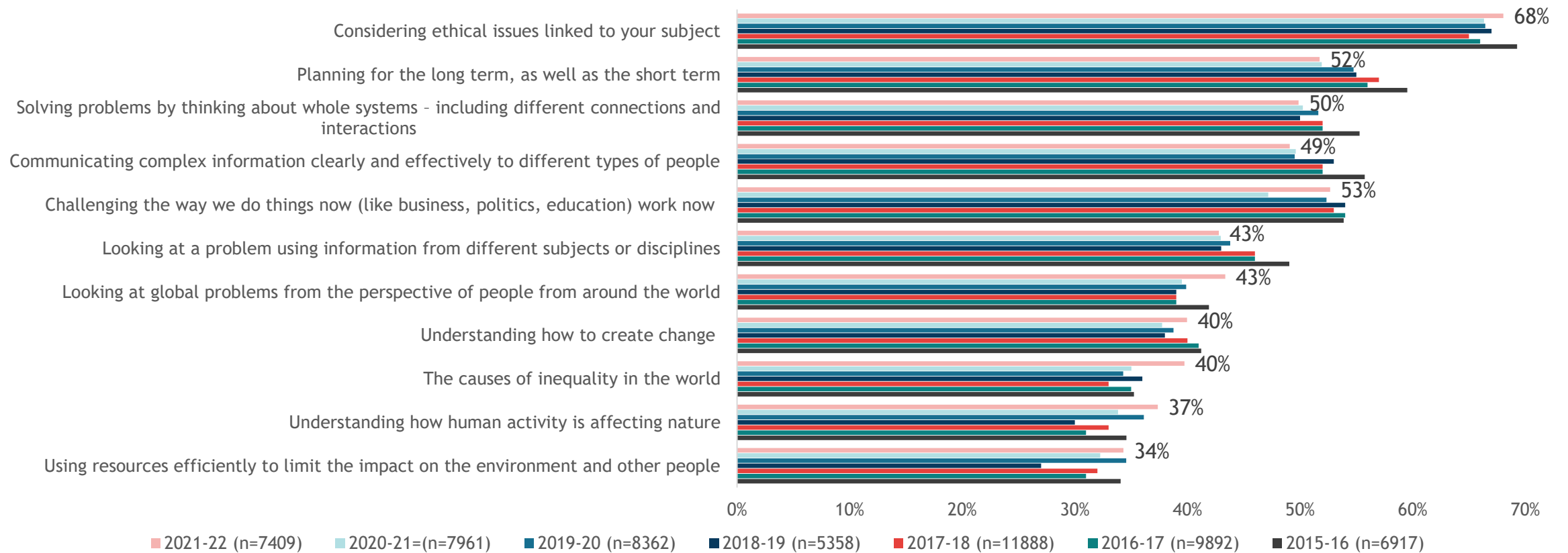
“Creating and developing in a way to benefit the planet.”

“Reducing the impact a person or organisation has on the environment around it when expanding or developing. Ensure that little to no trace is left behind, and climate emissions are kept low to protect future generations.”

“Improving the conditions in which we live in for our own generation and future ones to come, both on an environmental and social level so that future generations are never worse off than our current one. The development must be inexhaustible and have freedom for exponential compounded growth.”

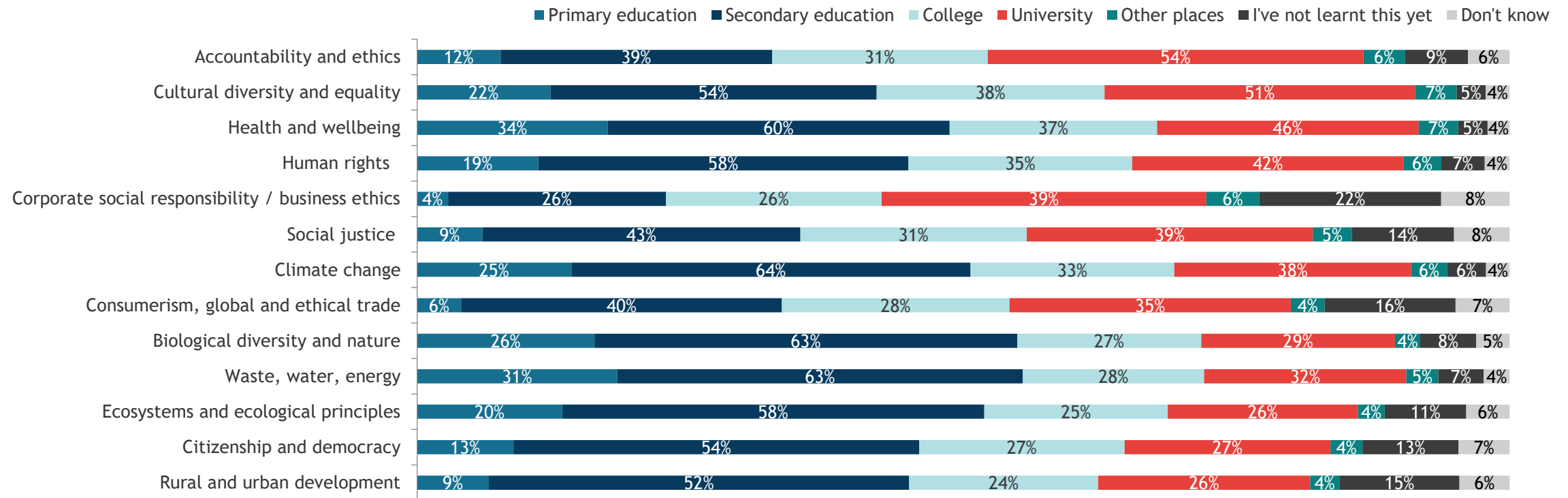
To what extent are students experiencing teaching and learning of sustainability skills and knowledge in higher education?

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' (68%, n=5043) and being 'planning for the long term as well as the short term' (52%, n=3834) 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?

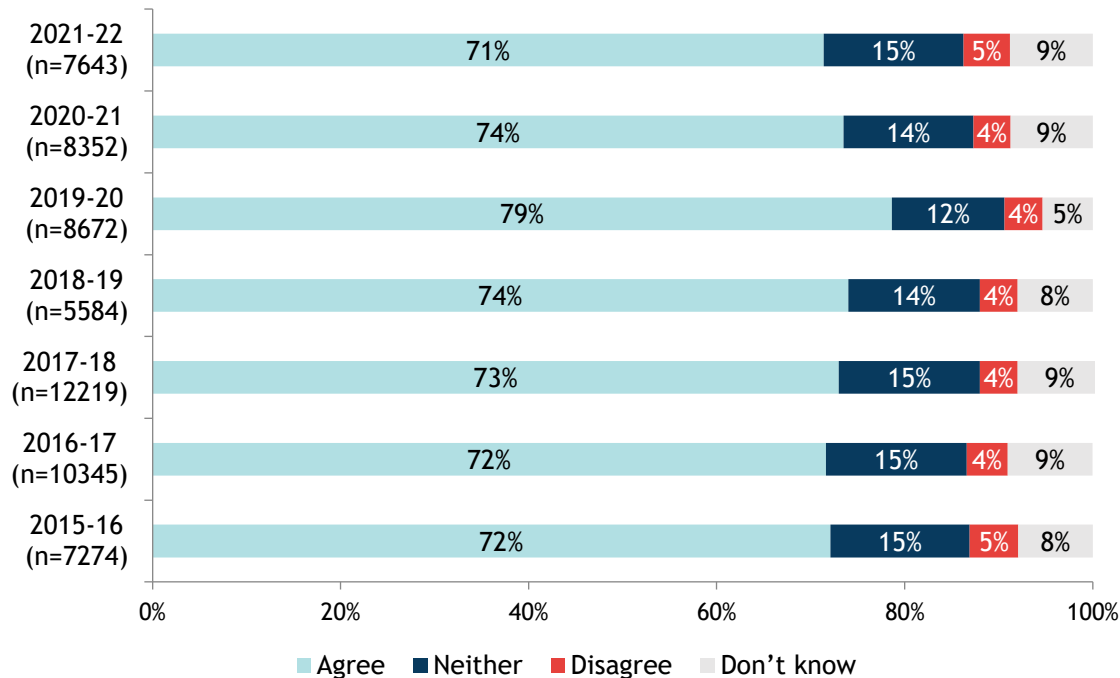
Respondents were also asked to reflect on their journey through education so far, and identify at which stage issues relating to sustainability have been covered by the teaching. Higher education respondents report that most of the teaching they have received on sustainability issues occurred during secondary education, for example 64% (n=4871) 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 cultural diversity and equality (51%, n=3888) and health and wellbeing (46%, n=3502).



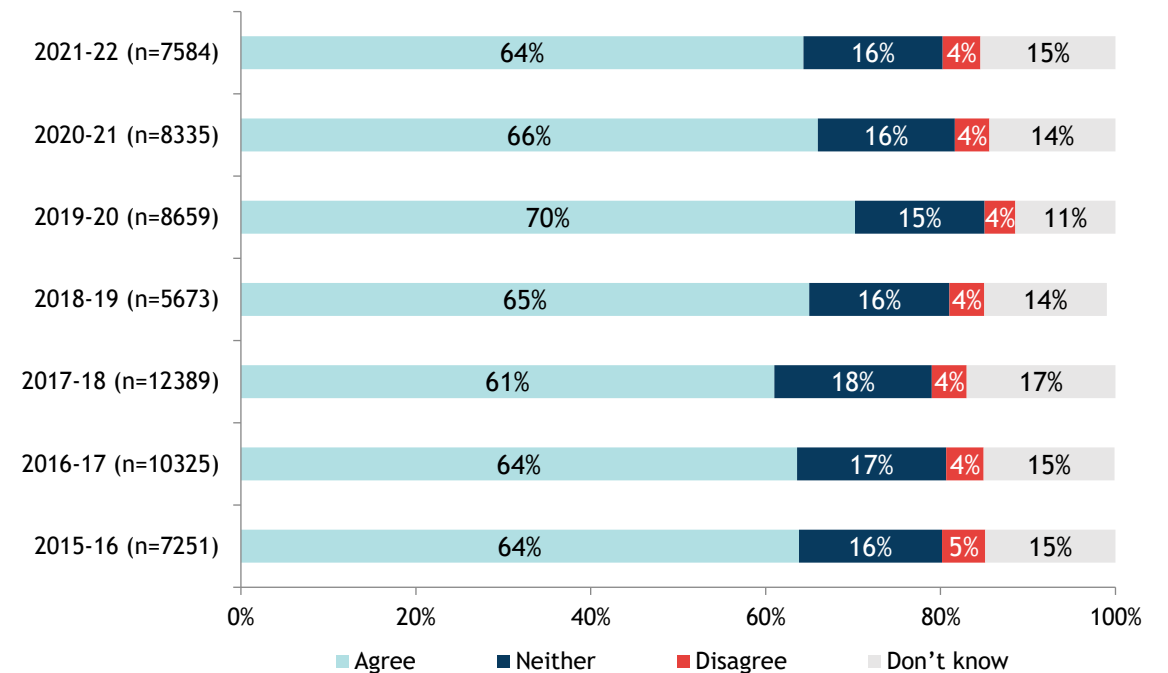
What impression do students have of their place of study in terms of action for sustainability?

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 (71%, n=5455) agree that their university is taking action in this area. 64% (n=4879) agree their students' union (SU) is also taking action in this area, however there is also a lack of awareness with 15% (n=1171) 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”

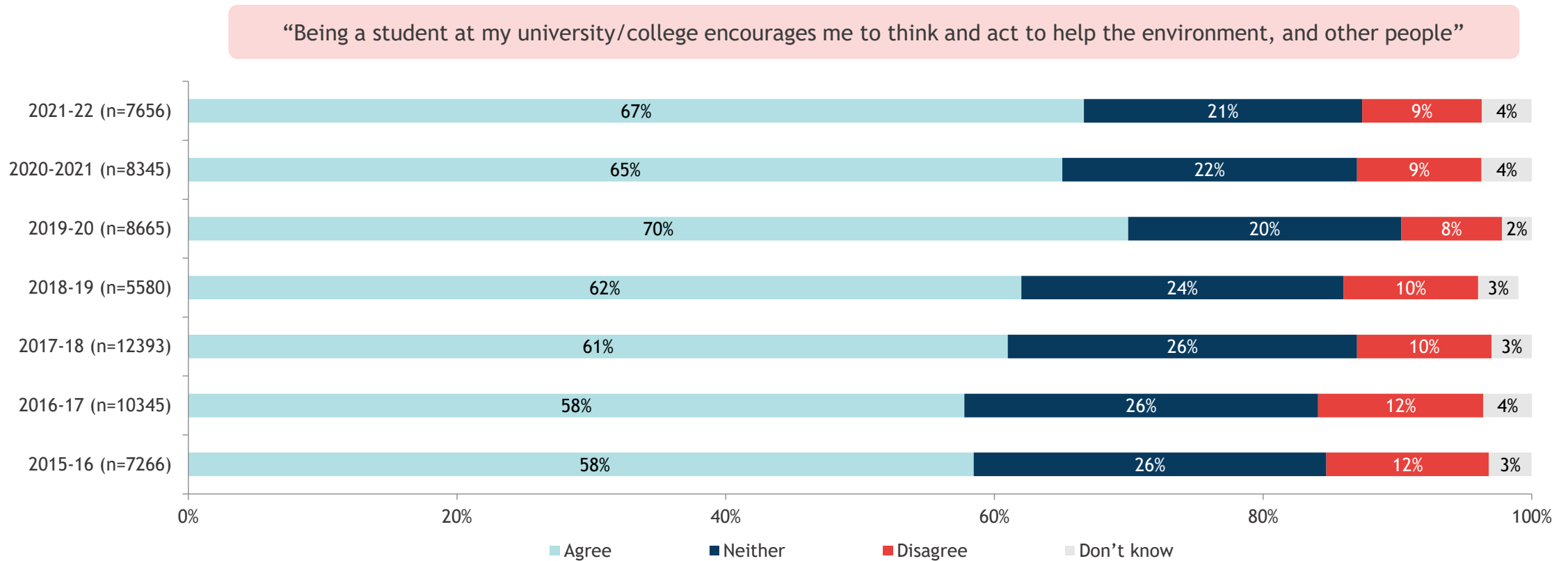


“My students' union takes action to limit the negative impact it has on the environment and society”



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 (67%, n=5104) agree that being a student at their university or college encourages them to think and act to help the environment and other people.



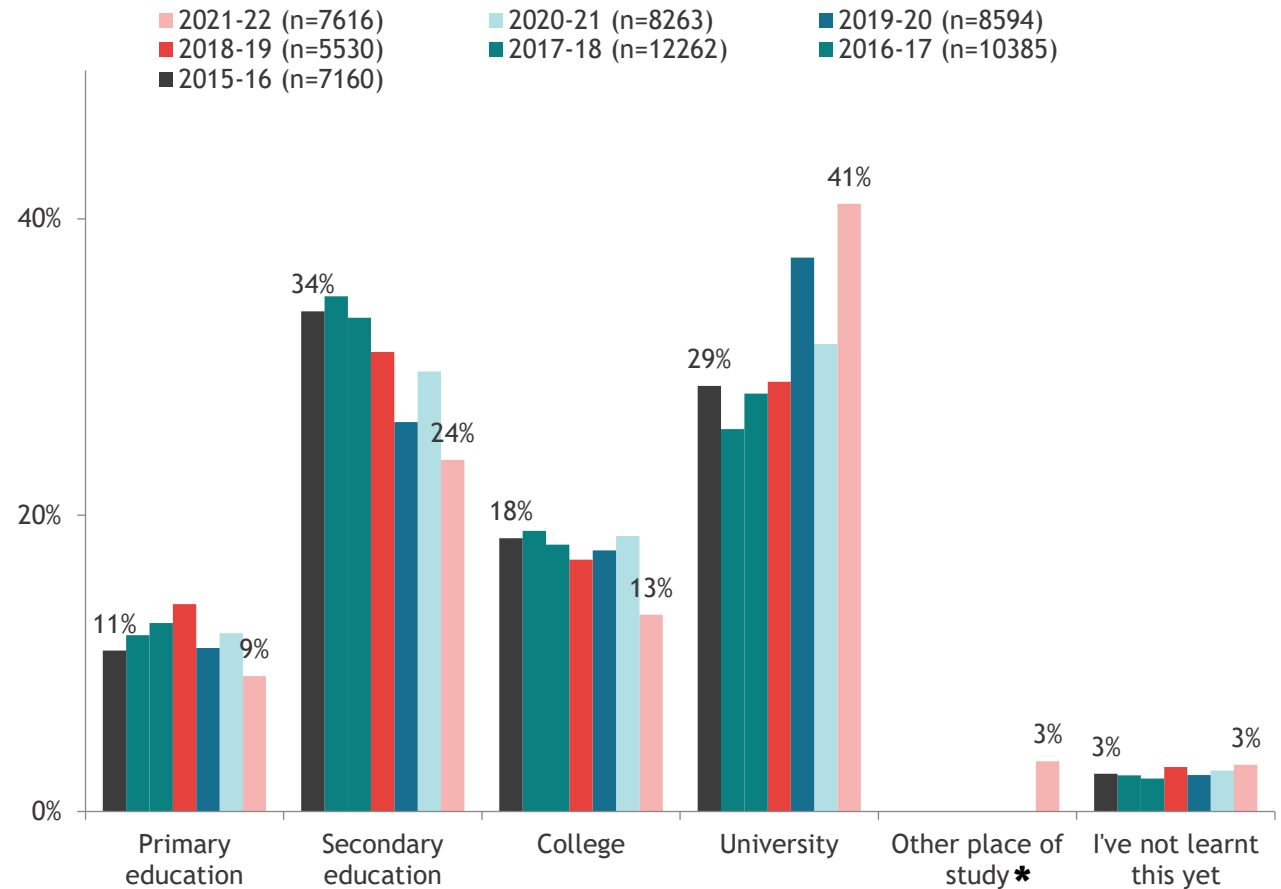
Which place of study is perceived as having the greatest influence on students to take action to help the environment and other people?

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 (41%, n=3123). The proportion identifying time at university as the strongest influence significantly increased from 2020-21, and all previous years.

Secondary education is reported as being the strongest influence for a quarter of HE respondents (24%, n=1807).

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

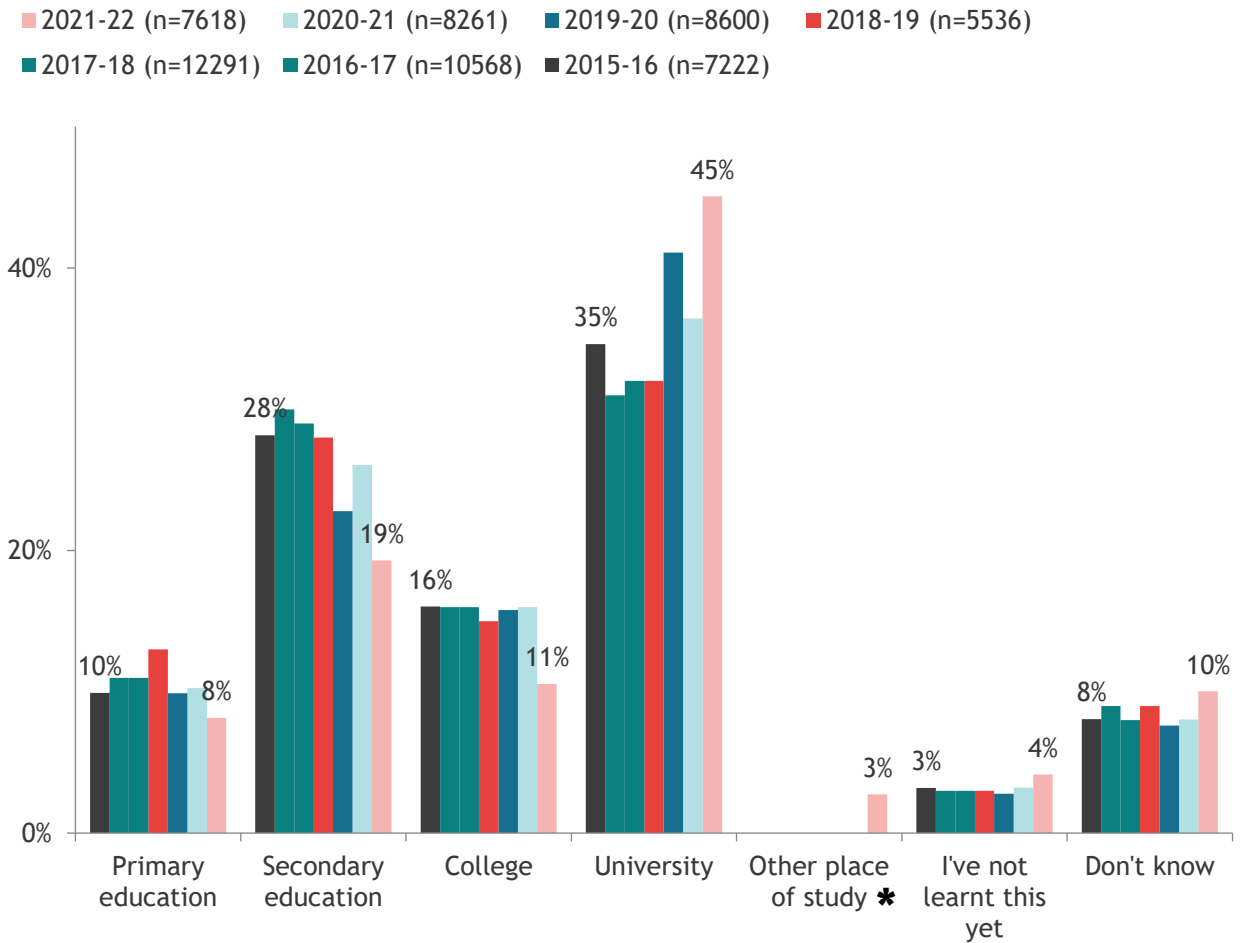


Which place of study is perceived as taking the greatest action on sustainability?

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 (45%, n=7618). This represents a significant increase from last year.

* 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 300 responses were coded and revealed that for HE respondents, learning about sustainability issues has helped improve their knowledge and understanding, which has the potential to improve their career opportunities in the future. Respondents also noted that learning about these issues has encouraged them to think about things or do things differently and has improved them as people. 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.

Better understanding of issues and impacts	143
Changed values / views / outlook on life	90
Prompted more personal action related to sustainability	53
No impact/Not sure	41
Influenced career or study aspirations	26
Impact has come from outside education settings	13
Triggered desire to do or learn more	9
Became more worried about the issues	7

"I try to actively reduce my impact on nature and to protect it where I can. I eat differently, chose different transport and consume much less."

"Learning about climate change has made me pursue geography and I will hopefully work in the field of renewable energy or something similar that will reduce the impacts of climate change on society. Learning about diversity and citizenship at a young age is very important so that we can prevent discrimination in the future.."

"By learning about these issues it has shaped my opinions and values. I would not be the person I am without knowing about these issues."

"I'm not sure I want to have children when their future is so uncertain."

"Learning and acknowledging these factors has formed my views as an individual and influenced my development and practice within the world. Coming from the gypsy traveller community this has helped me form relationships outside the community and progress as a person."

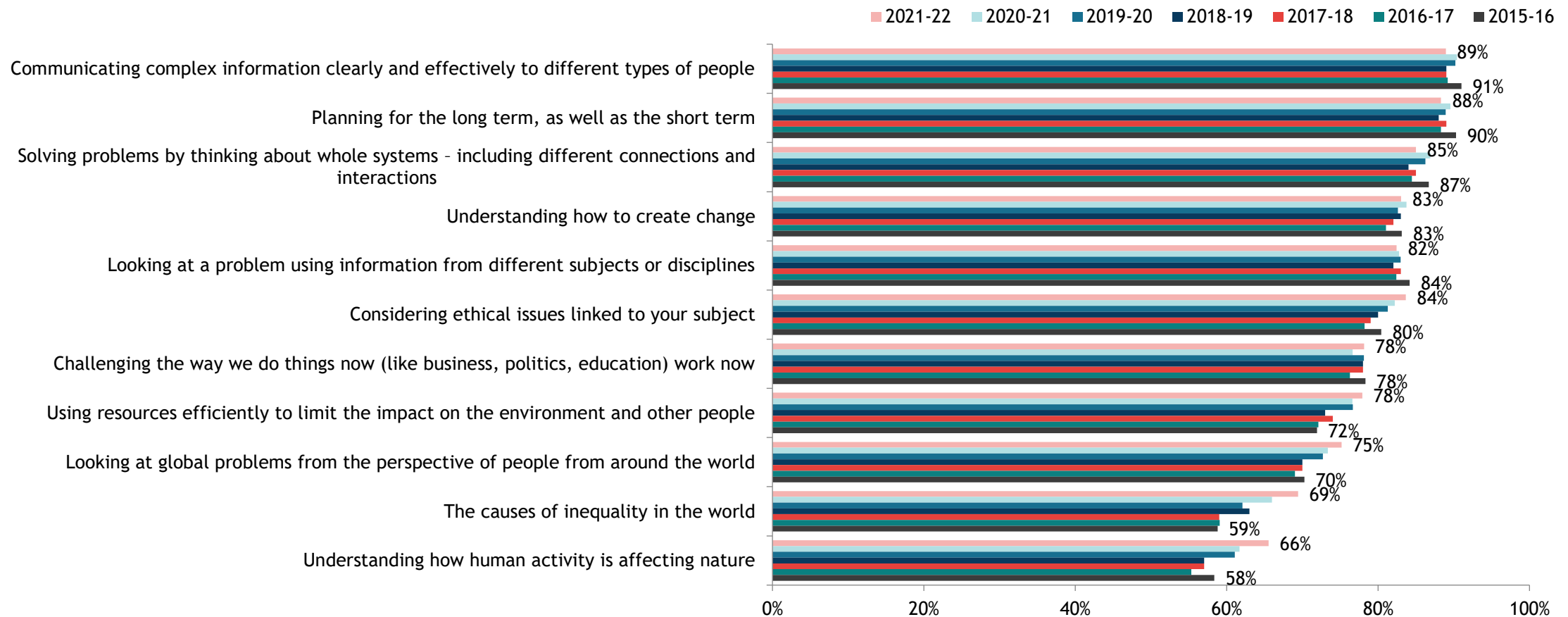
"It's affected how I see my day-to-day actions and what I need to be grateful for and prioritise in life and made me aware I would like to actively contribute to social change through my future career."

Sustainability skills beyond education

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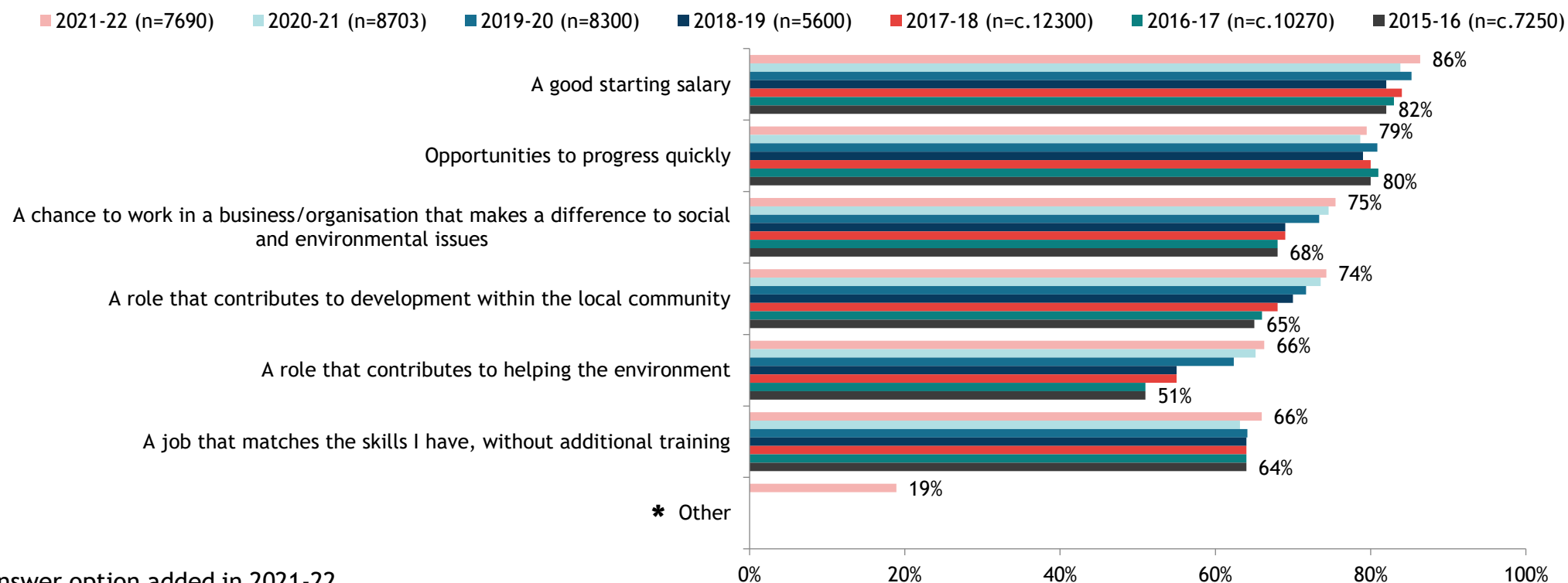
How important are sustainability skills to future employers?

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 (89%, n=6854) and planning for the long term, as well as the short term (88%, n=6810). Having an understanding of how human activity is affecting nature is least likely to be seen as being important for future employers (66%, n=5042), 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?

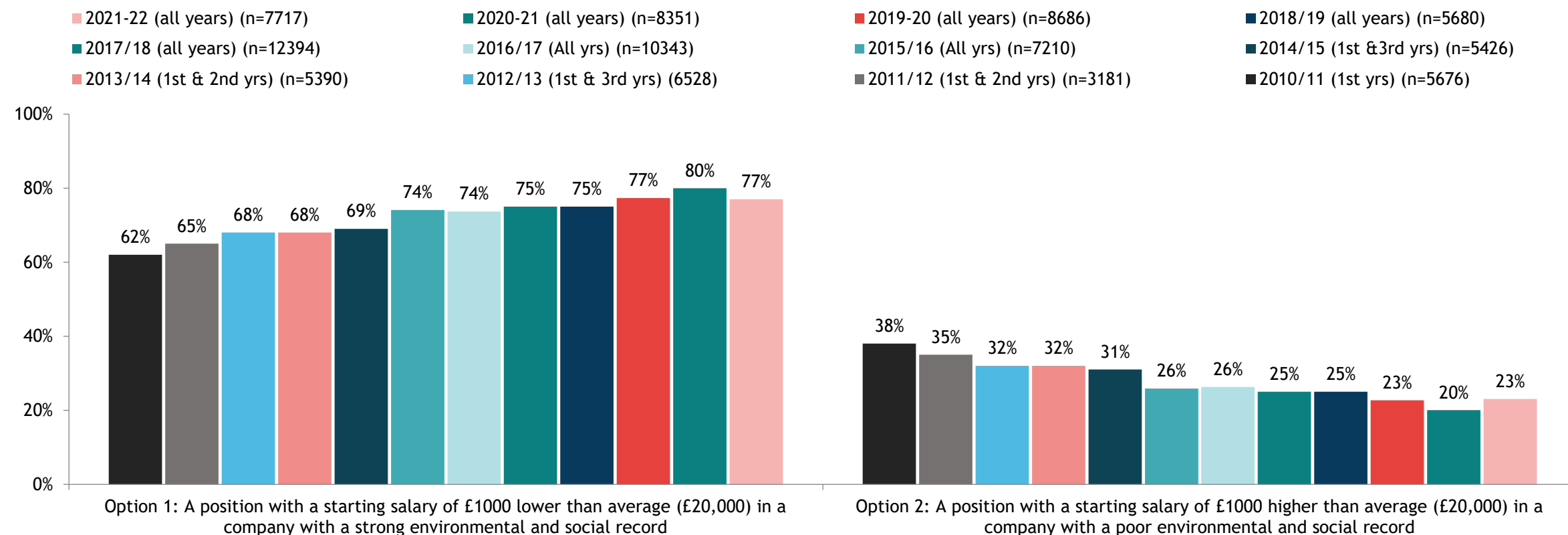
Respondents to the survey reported that a good starting salary (86% respondents (n=6647) and opportunities to progress quickly (79%, n=6109) are important factors when considering what jobs to apply for. Three quarters of respondents in HE, 75% (n=5802) said the chance to work in business or organisation 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=5706). The stated preference for working in a role that contributes to helping the environment has shown no significant change since 2021-22.



* Answer option added in 2021-22.

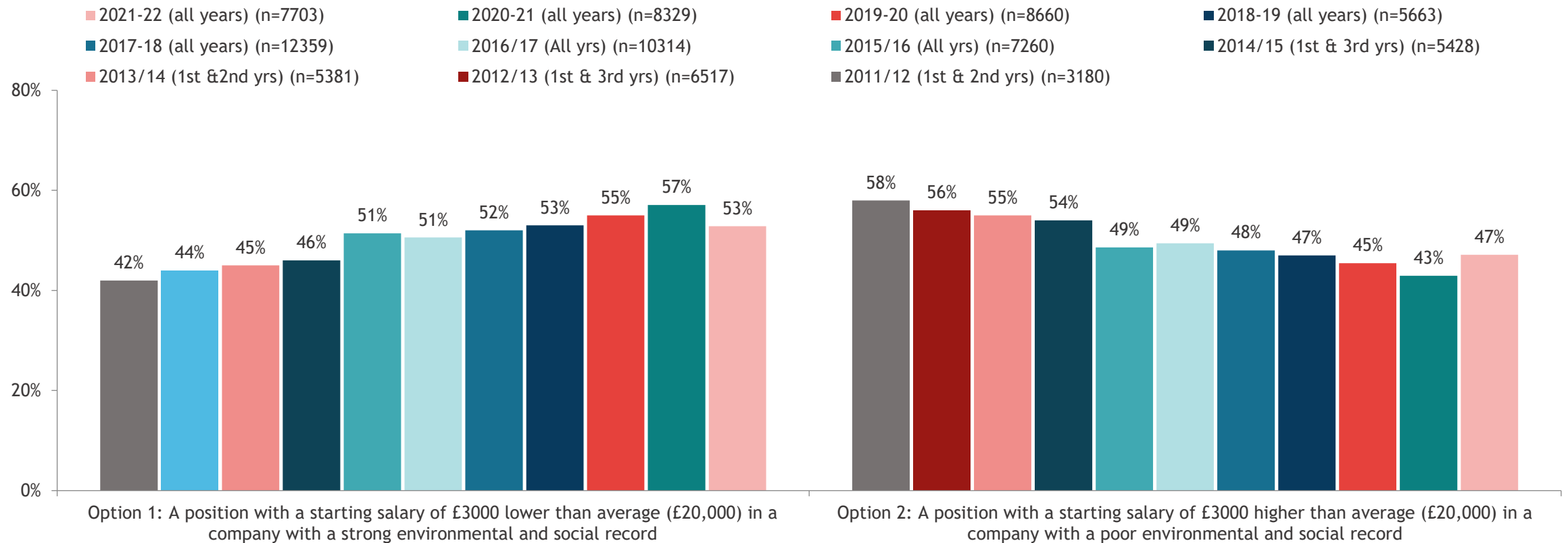
What desire do students have to work for employers with positive social and environmental credentials?

Over three quarters of HE respondents completing the survey in 2021-22 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 (77%, n=5939), which is a decrease in respondents compared to 2020-21 results, however in line with the general incline in trends reported by respondents historically throughout the research. Respondents identifying as women are significantly more likely to say they're willing to make this sacrifice (81%, n=3349) compared to respondents identifying as men (72%, n=2290).



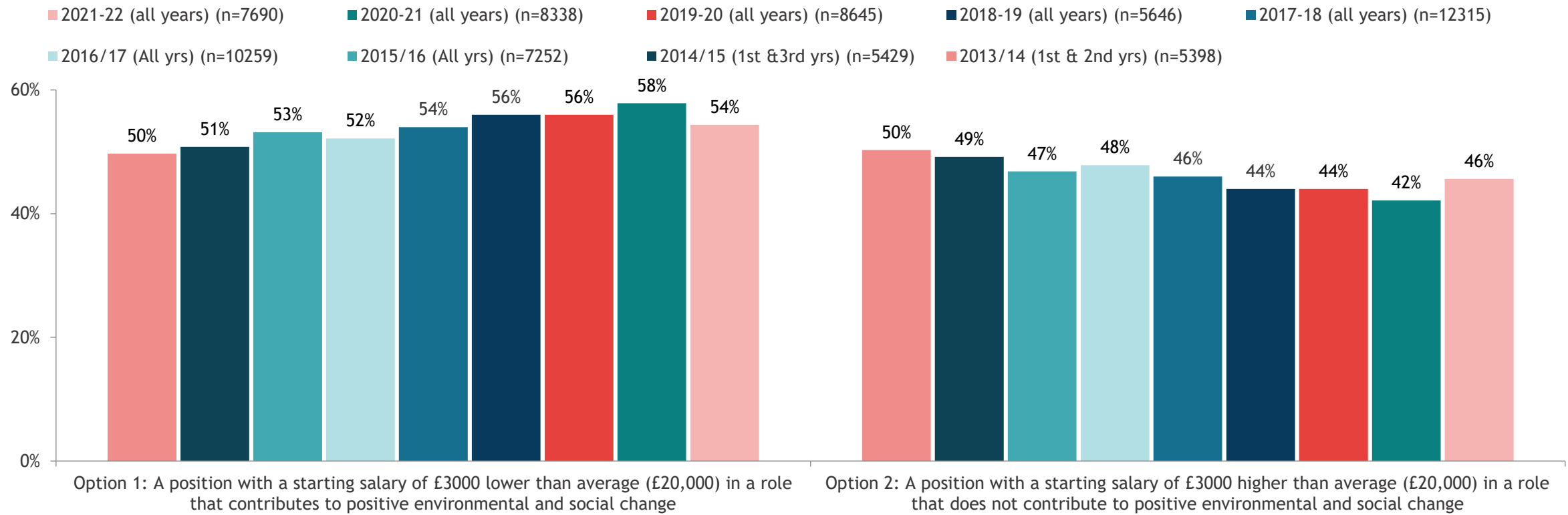
What desire do students have to work for employers with positive social and environmental credentials?

When asked to consider a salary sacrifice of £3000 from an average starting salary, over half of HE respondents (53%, n= 4072) in 2021-22 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, however a decreasing proportion are willing to make this sacrifice when compared to last years results. 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 (55%, n=4183 compared to 49%, n=3186). The proportion of women willing to make this sacrifice has reduced since 2020-21 results.



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 (54%, n=4182). 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 (58%, n=2436 compared to 49%, n=1554).



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