

# Sustainability Skills | 2015-2016

Research into students' experiences of teaching and learning on sustainable development

**September 2016**

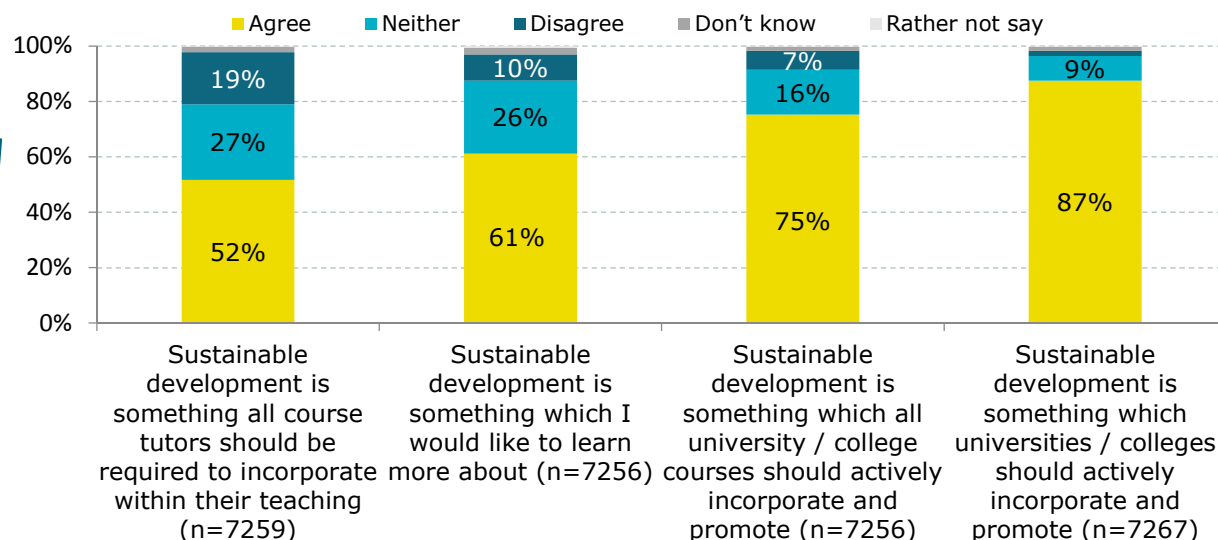
# Sustainability Skills | 2016

A national online survey was completed by over 8000 students in February and March 2016 to build on the data gathered through five years of previous research<sup>1</sup>, funded by the Higher Education Academy. The research continues to track student experiences and expectations around teaching and learning for sustainability. This year, the research has been 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. Students in further education are included in the research for the first time. This summary highlights the longitudinal trends from the historic research before considering new insight for both higher and further education respondents.

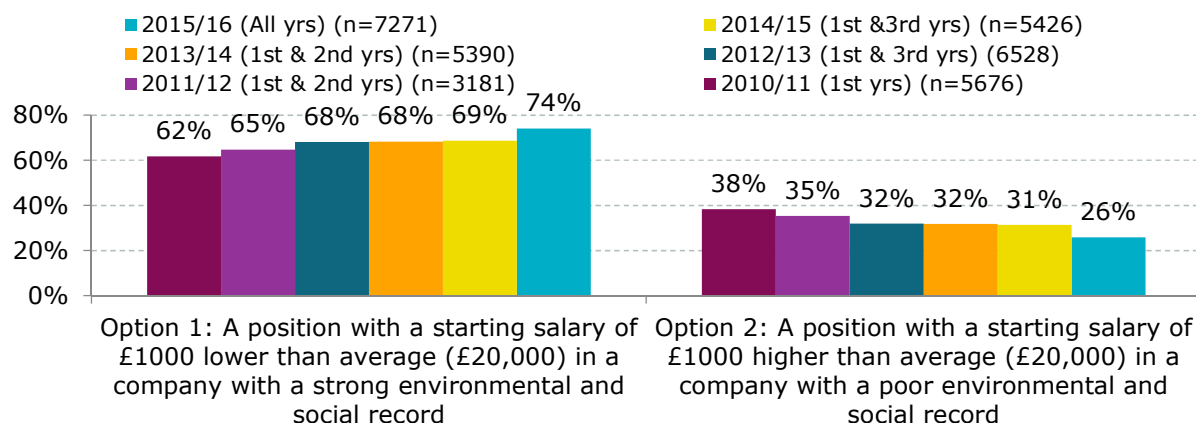
## Tracking longitudinal trends in higher education – 2010/11 to 2015/16

- As with the five previous years of research completed with HE students, there is **overwhelming agreement amongst 2015/16 respondents in HE that sustainable development is something that universities and colleges should actively incorporate and promote** with almost 9 out of 10 respondents (87%, n=6357) saying they agree with this statement.
- In 2015/16 approximately **two thirds agree that sustainable development is something they would like to learn more about** (61%, n=4439). Again this matches the historic data gathered since 2010.
- 2015/16 respondents are **significantly more likely to say they would accept a salary sacrifice of £1000 to work for a company with a strong environmental and social record** than all other years of research (2010/11 to 2014/15) (e.g. 74%, n=5388 respondents in 2015/16 compared with 69% (n=3728) respondents in 2014/15 ).
- There is also a small but significant **increase in the willingness to accept a salary sacrifice of £3000 amongst 2015/16 respondents for a specific role that contributes to environmental and social change** (for example 53%, n=3856, in 2015/16 compared with 51%, n=2760 in 2014/15 and 50%, n=2662, in 2013/14).
- A range of sustainability skills continue to be seen as important when entering employment. Whilst the skills researched this year have been updated, **an understanding of the relationships between humans and nature continues to reflect both a lack coverage in teaching and receive low assessment of importance amongst HE respondents in comparison with other sustainability skills**. For example, 91% (n=6603) rank "communicating complex information clearly and effectively to different types of people" as important, whereas 58% (n=4169) rank "understanding how human activity is affecting nature" as important to their future employers.

### To what extent do you agree that...



### Assuming all other factors are equal, which option would you choose?

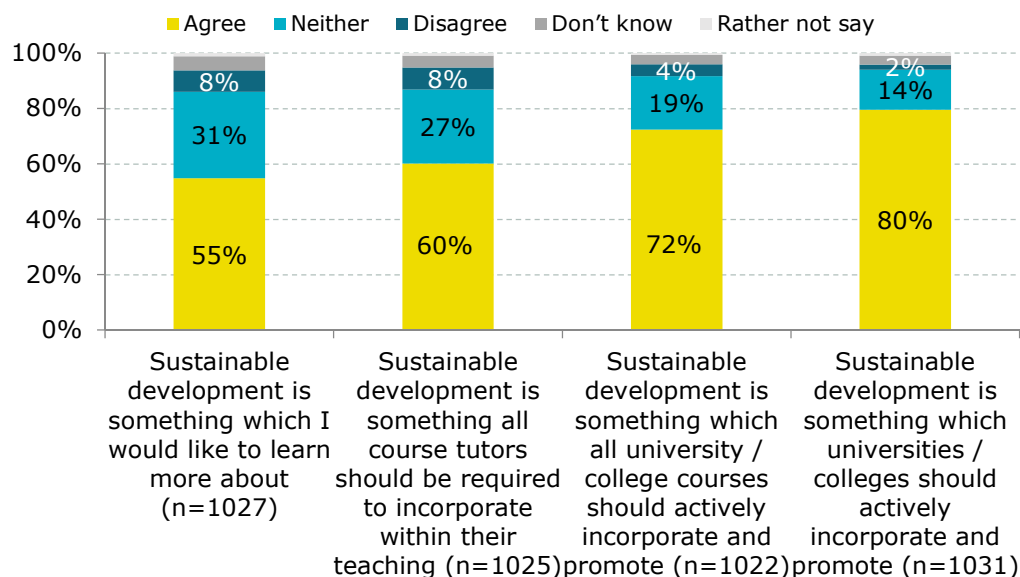


<sup>1</sup> Details of the previous research can be found at: <https://www.heacademy.ac.uk/resource/student-attitudes-towards-and-skills-sustainable-development-2015>

# Sustainability Skills | 2016

## Uncovering trends in further education – 2015-16

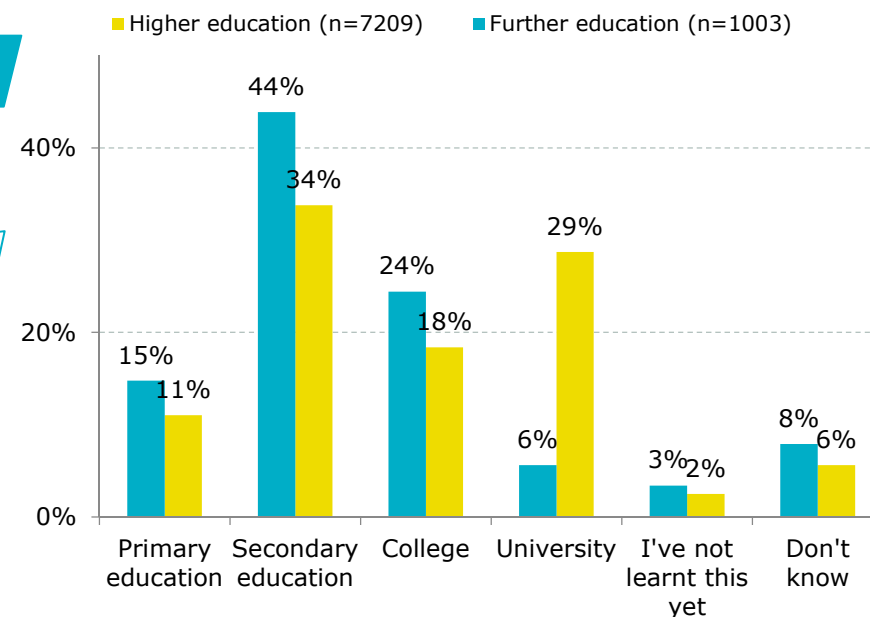
### To what extent do you agree that...



- Similar to students studying in HE, the majority of FE respondents also agree that **sustainable development is something their college should actively incorporate and promote** (80%, n=821).
- Almost three quarters of FE respondents (72%, n=740) also agree that **all courses should actively incorporate and promote sustainable development** and **just over half say sustainable development is something they want to learn more about** (55%, n=563).
- **Three quarters of FE respondents say they would be willing to sacrifice £1000 from a starting salary to work for a company with a positive environmental and social record** (76%, n=783) and **over half say they would sacrifice £3000 from their starting salary** to work in a company with these credentials (59%, n=608).
- **Exposure to teaching on the the most overtly sustainability-focused skills is reported as lowest by FE respondents**, for example 26% (n=255) have experienced teaching on 'understanding how human activity is affecting nature' and 28% (n=334) say they have experienced teaching on 'looking at global problems from the perspective of people from around the world'.

## New insight further and higher education – 2015-16

- Respondents were asked to identify which place of study has had the greatest influence on them. **Both HE and FE respondents most frequently identify secondary education as the place of study which encouraged them to act the most to help the environment and other people** (44%, n=440 FE respondents and 34%, n=2435). University is reported as being the strongest influence for just under a third of HE respondents (34%, n=2069).
- Respondents were also asked to identify the place of study they perceive as taking the most action to reduce its negative impact on the environment and society. For HE respondents, this is their current place of study (35%, n=2500). For FE respondents, secondary education is seen as the place of study which has acted to reduce its negative impact on the environment and society the most (43%, n=429).
- **HE and FE respondents attribute most of their learning on sustainability related issues to their time in secondary school**, when considering their time in formal education as a whole. For example, 70% (n=699) FE respondents say climate change was covered during their time in secondary school and 74% (n=5312) of HE respondents the topic was covered at this point.
- The most commonly reported impact of learning about sustainable development by respondents in HE and FE was a belief that they think and do things differently as a result. Respondents also felt that learning about these issues improved them as individuals, and were generally important life skills to have.



**Which place where you have studied encouraged you to think and act to help the environment, and other people the most?**

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# 1. Introduction | Objective, methodology and survey details

This report presents research completed by NUS 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 five years of previous research<sup>1</sup>, funded by the Higher Education Academy, and continues to track changes in demand amongst students across the UK. This year, the research has been 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.

A national online survey was completed in February and March 2016 by students across the UK. Whilst in previous years the research has been focused on students in higher education, this year's survey was also distributed to students studying at further education institutions. Over 8000 respondents completed the survey, 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 £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. 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. Significant differences are reported at 99% confidence level unless specified otherwise.

#### Differences by respondent characteristics

- Within HE, there were no significant differences in terms of preferences for learning about sustainability according to year of study.
- HE women respondents are more likely to report that offering placements or work experience, and running extra-curricular activities either by the students' union or within departments is relevant compared to HE respondents who are men (e.g. 71%, n=2894 HE women say extra-curricular activities within their department is a relevant way to learn about sustainability compared to 66%, n=1961 men respondents).

#### This report

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

#### Acknowledgements

NUS wishes to thank those organisations and individuals who have contributed to the development of this research both currently and historically, including The Higher Education Academy, Change Agents UK and Professor Stephen Martin.

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 the work of NUS in this area.

1. Previous research, funded by the Higher Education Academy, can be accessed at: <https://www.heacademy.ac.uk/resource/student-attitudes-towards-and-skills-sustainable-development-2015>

## Sustainability skills and understanding

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

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

The causes of inequality in the world

Understanding how to create change

Understanding how human activity is affecting nature

Considering ethical issues linked to your subject

Solving problems by thinking about whole systems – including different connections and interactions

Communicating complex information clearly and effectively to different types of people

Looking at a problem using information from different subjects or disciplines

Challenging the way we do things now (like business, politics, education) work now

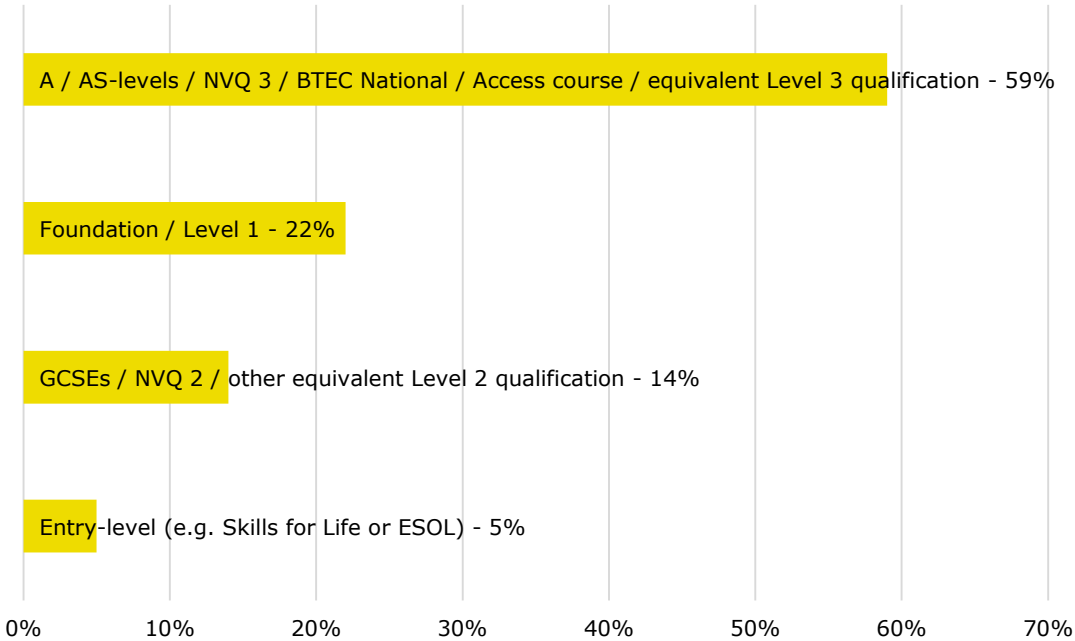
## 2. The respondents



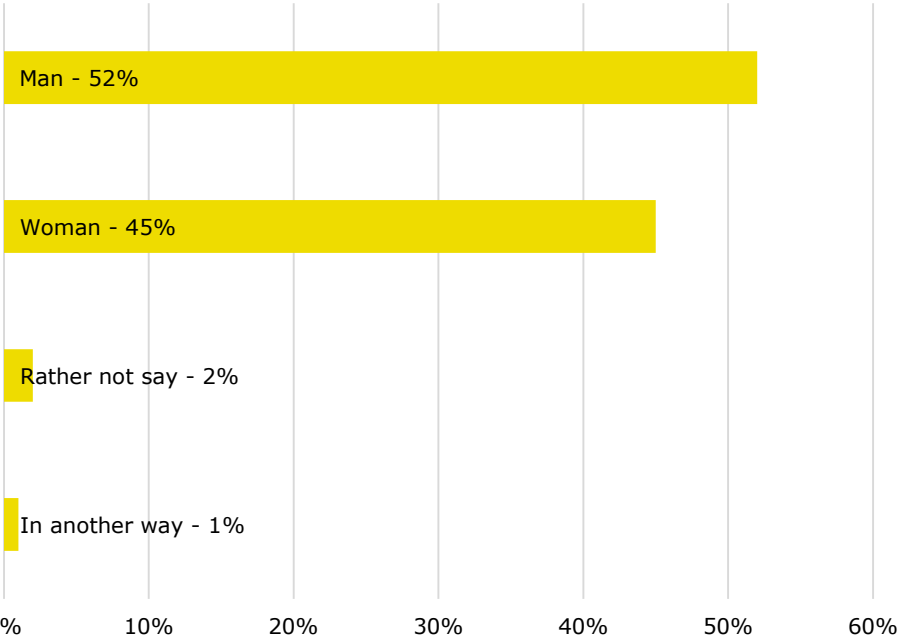
# Respondent demographics

Further education

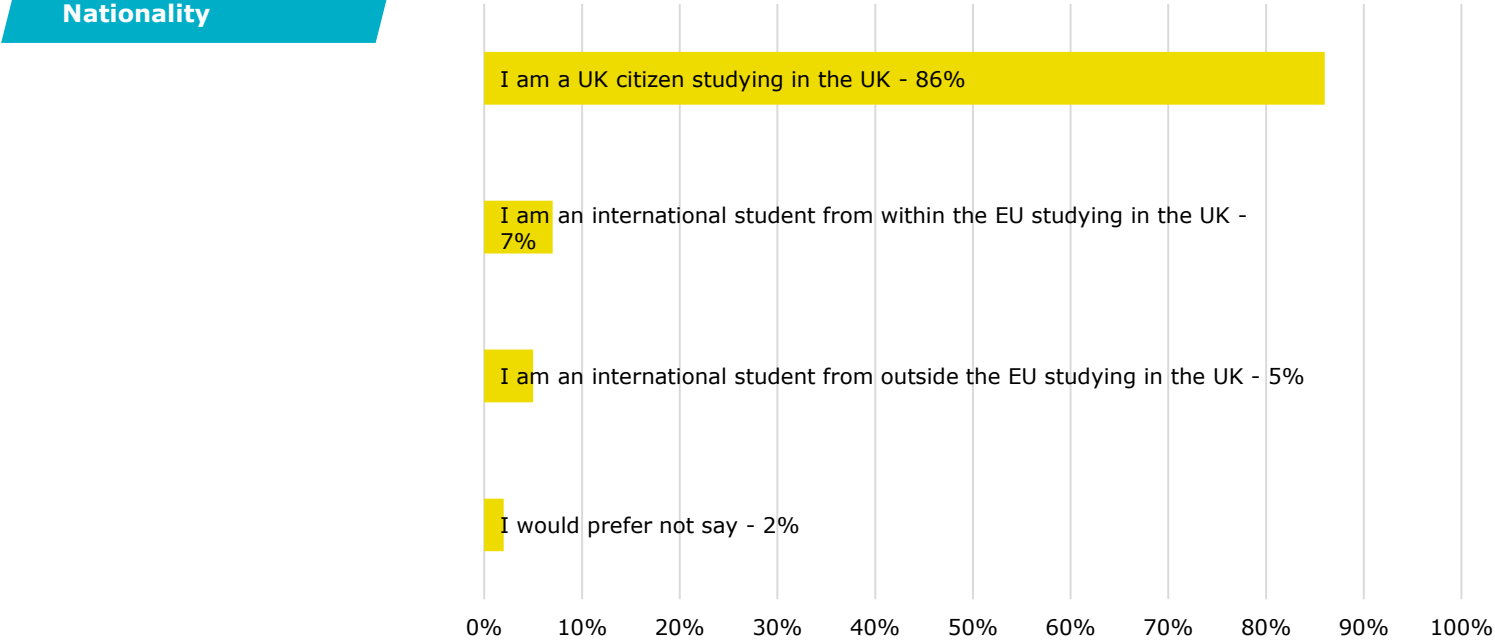
## Level of study



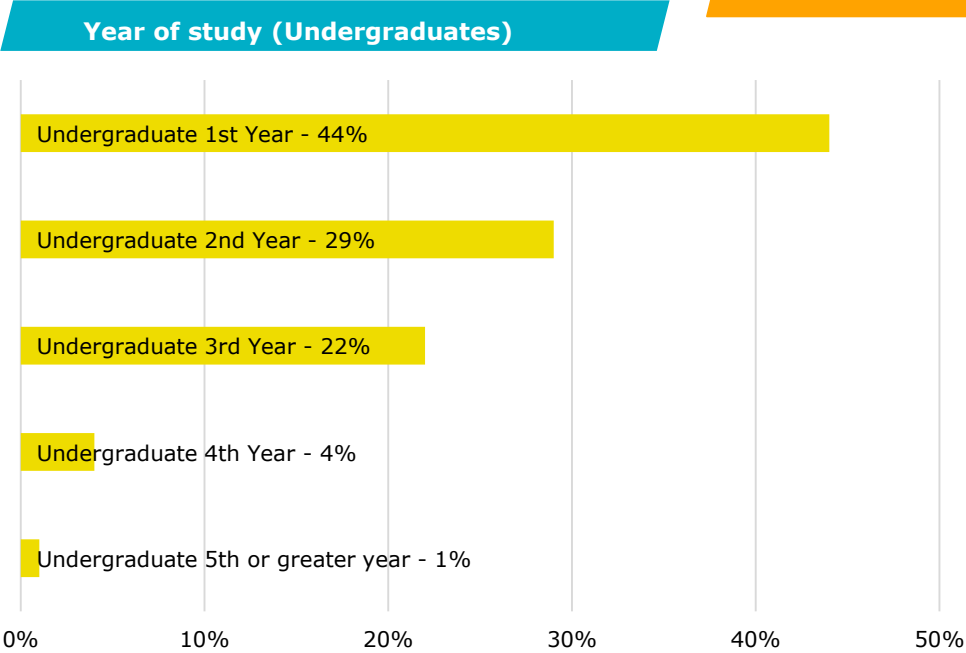
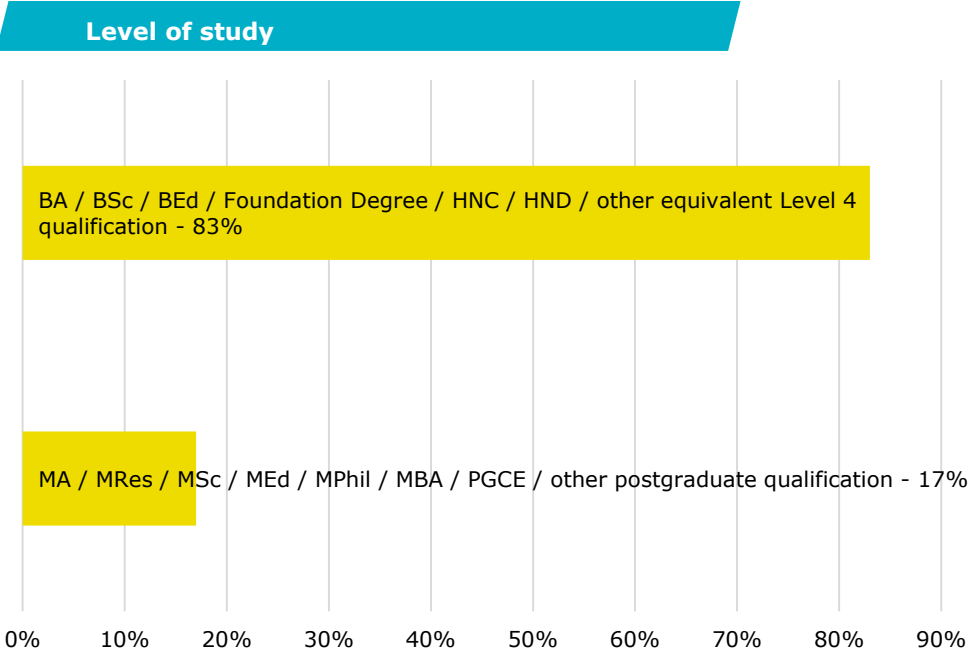
## Gender



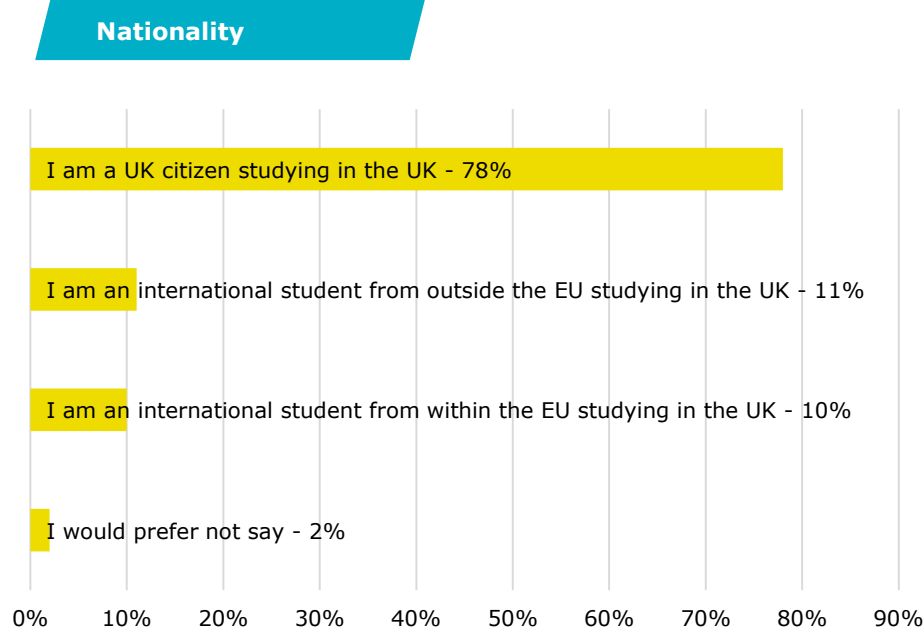
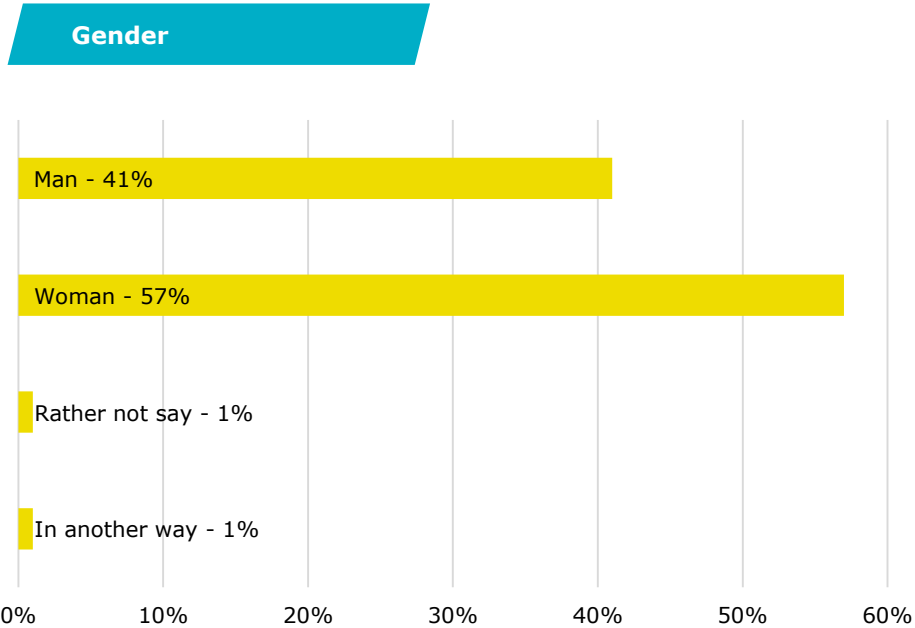
## Nationality



# Respondent demographics

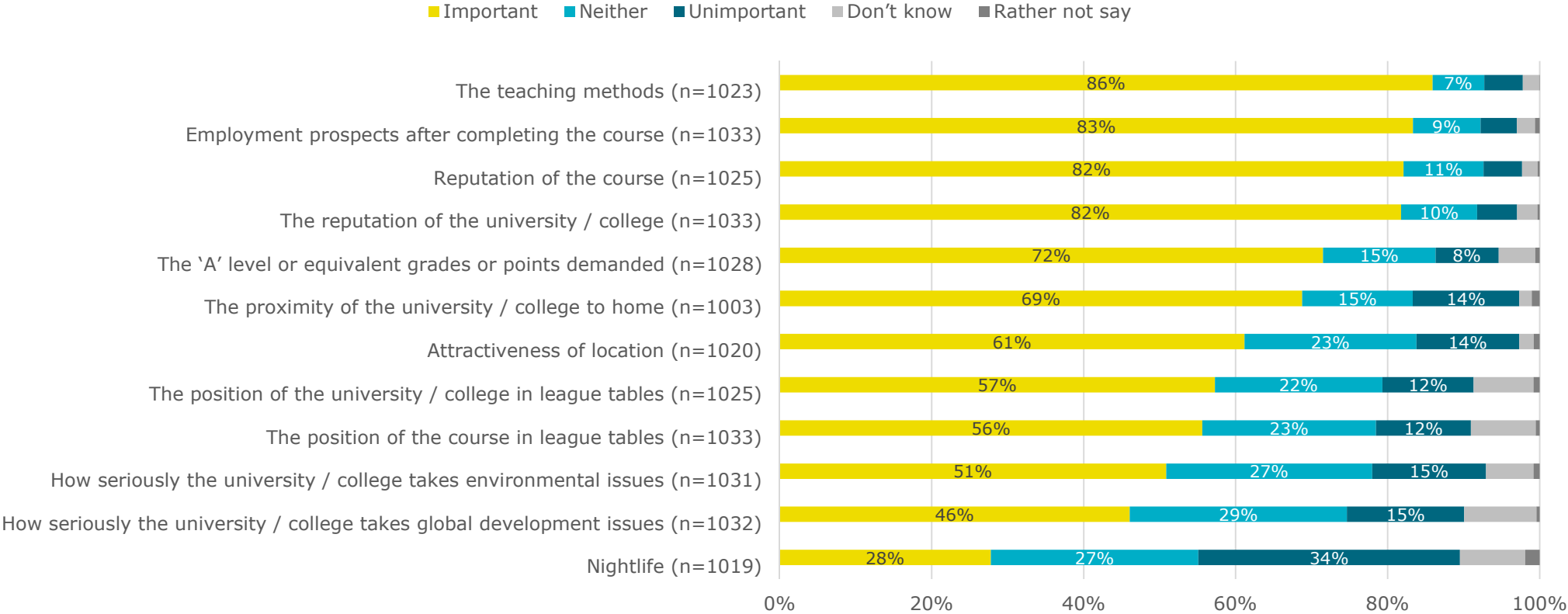


Higher education



### 3. Expectations for teaching and learning for sustainability

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 both FE and HE respondents include reputation of their course and institution, employment prospects on completion of their course and the teaching methods used. However, half of FE (51%, n=525) respondents were influenced by the action their place of study takes on environmental issues. Around a fifth (46% (n=476)) FE respondents say they were motivated by how seriously their university or college takes global development issues.

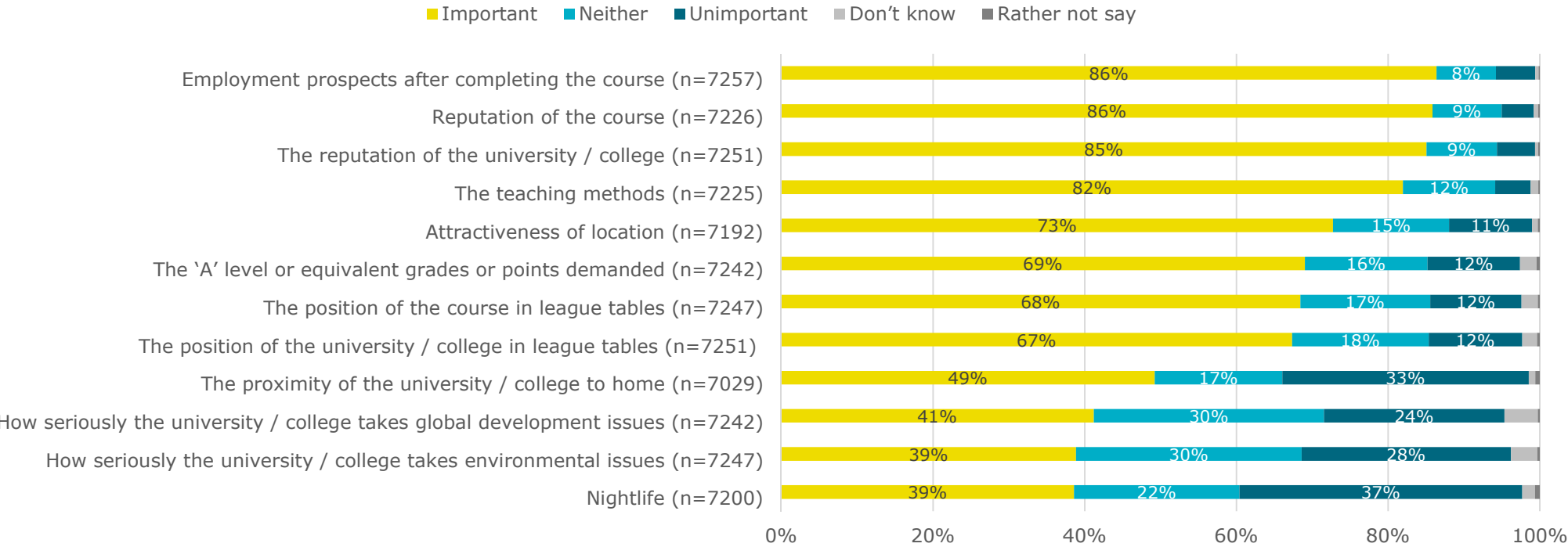
Differences by respondent characteristics

- FE respondents are more likely to report being motivated by how seriously their place of study takes environmental issues compared to HE respondents (51% (n=525) compared with 39% (n=2822) rank as important).
- HE respondents are more likely to report employment prospects as an important influence on their choice over where to study than FE respondents (86% (n=6284) compared with 83% (n=863)).
- 1<sup>st</sup> year undergraduates in HE are more likely to say they were influenced by future employment prospects than undergraduate 3<sup>rd</sup> years (89% (n=2345) compared with 83% (n=1297)).
- FE respondents who are women are more likely to say the reputation of the college was an important influence on their choice than FE respondents who are men (86%, n=403 compared with 78%, n=421).

# What factors influence choice over place of study?

Higher education

Respondents were asked to identify how important a range of factors were to their decision on where to apply to study. Mirroring the responses from FE respondents, HE respondents include reputation of their course and institution, employment prospects on completion of their course and the teaching methods used. However, over a third (39%, n=2822) of HE respondents were influenced by the action their place of study takes on environmental issues. Around a fifth of respondents report to be motivated by how seriously their university or college takes global development issues, for example 41% (n=2991) HE students.



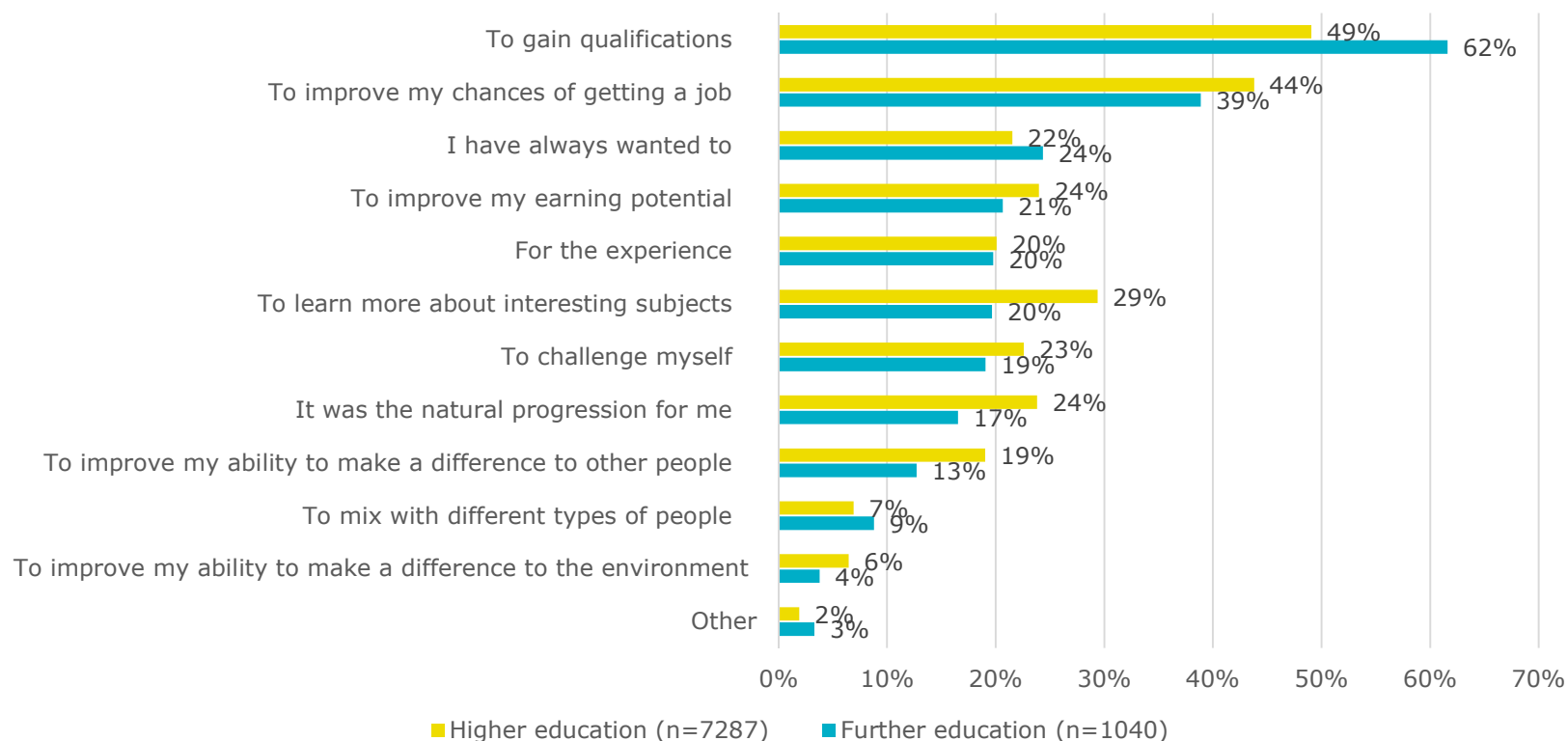
## Differences by respondent characteristics

- HE respondents who are men are more likely to say how seriously the university takes global development issues than women HE respondents (44%, n=1309 compared with 39%, n=1608).
- Women HE respondents are more likely to say they were influenced by the A level or equivalent grades demanded than HE respondents who are men (73%, n=2983 compared with 65%, n=1942).
- International HE respondents are most likely to say they chose their place of study based on the position of the institution in league tables (e.g. 80%, n=73 compared with 65%, n=508 UK HE respondents).

## Differences between previous years of research

- When looking at these comparisons it is important to note that the category of 'employment prospects after completing the course' was added during the 2015 research.
- HE respondents in 2015 are significantly more likely than all other research years to say that how seriously their university or college takes global development issues influenced their choice of where to study (e.g. 34.3% (n=2233) respondents in 2012 said this issue was important compared with 41% (n=2985) in 2015).
- HE respondents in 2015 are significantly less likely to say the position of the course in league tables influenced their choice of where to study (e.g. 78.1% (n=4225) said this was important in 2013 compared with 68% (n=4958) in 2015).

## What influences choice of subject or course?



Respondents were asked the main reasons they chose the course they are currently studying.

For both higher and further education respondents, the primary motivations are to gain qualifications (e.g. 62% FE respondents (n=641)) and to improve their chances of getting a job (e.g. 44% higher education respondents (n=3191)).

A relatively low 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 (e.g. 19% HE respondents (n=1386) say the main reason they chose their course was to improve their ability to make a difference to other people).

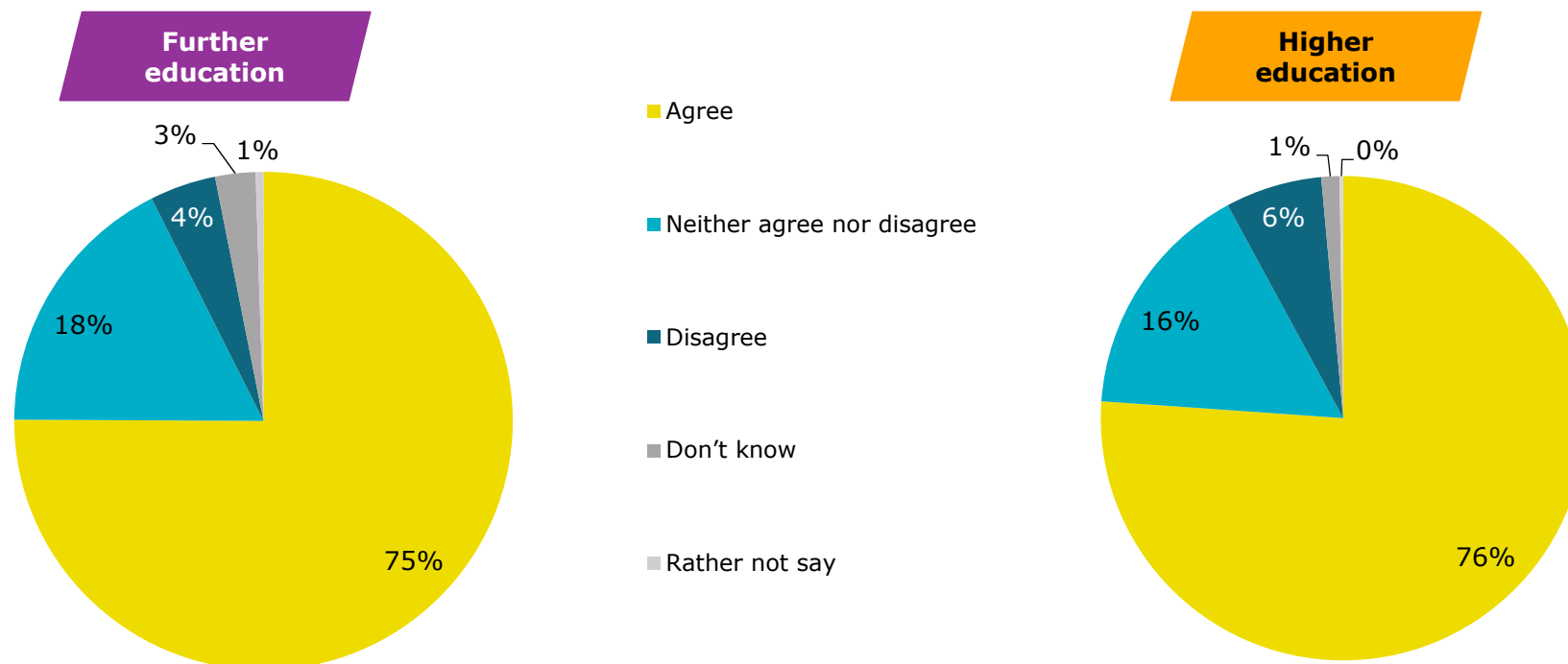
### Differences by respondent characteristics

- FE respondents are more likely to report being motivated by the opportunity to gain qualifications than HE respondents (62% (n=641) compared with 49% (n=3574)).
- HE respondents are more likely to report being motivated by the opportunity to improve their ability to make a difference to other people than FE respondents (19% (n=132) compared with 13% (n=1386)).
- HE respondents are also more likely to report being motivated by the opportunity to improve their ability to make a difference to the environment (6% (n=472) compared with 4% (n=39)).
- FE respondents who are men are more likely to report being motivated by the opportunity to improve their earning potential than FE respondents who are women (24%, n=127 compared with 17%, n=80).
- Women FE respondents are more likely to report being motivated in choosing their course by the opportunity to improve their ability to make a difference to other people than FE respondents who are men (17%, n=48 compared with 9%, n=79).
- HE respondents who are men are more likely to be taking their course to improve their earning potential than women HE respondents (28%, n=837 compared with 21%, n=885).
- Women HE respondents are more likely to say they're taking their course to improve their ability to make a difference to other people than HE respondents who are men (22%, n=921 compared with 15%, n=437).
- UK HE respondents are most like to say they're taking their course to improve their chances of getting a job (e.g. 45%, n=2567 compared with 39%, n=286 EU international students and 38%, n=37 non-EU international students).

### Q. What were the main reasons for taking the course you're currently studying?

Weighted base: (in brackets) Balance: No response

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



Overall, respondents in FE and HE agree that universities and colleges should be obliged to develop students' social and environmental skills as part of the courses they offer. In both FE and HE, three quarters agree (e.g. 75% FE respondents (n=774) and 76% HE respondents (n=5521)).

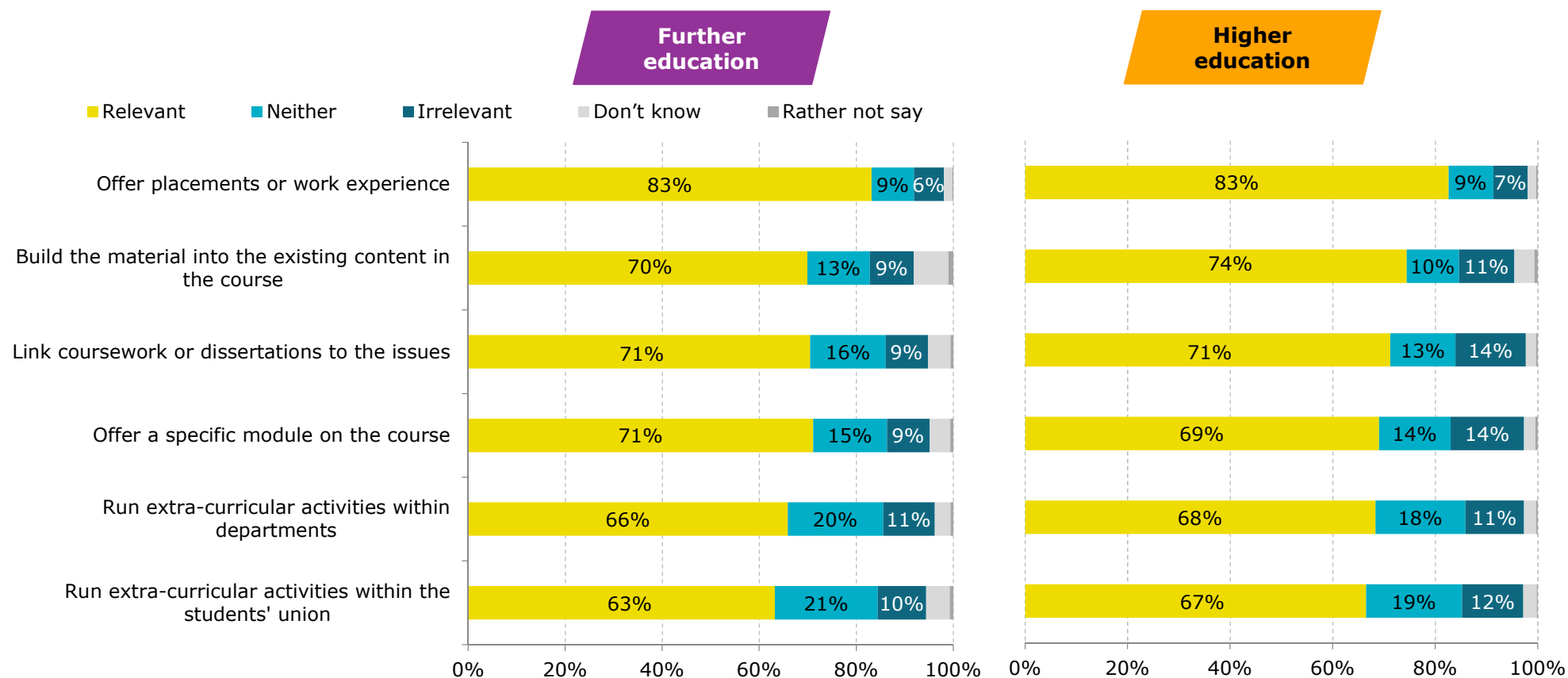
## Differences by respondent characteristics

- Within HE, international respondents who are from outside the EU are more likely to agree that universities and colleges should be obliged to develop student's social and environmental skills than those from within the EU and from the UK (e.g. 87% (n=681) non-EU respondents agreed compared to 74% (n=4154) UK respondents).
- No significant differences were seen from responses from FE students.

## Differences between previous years of research

- Within HE, there is increasing agreement among 3<sup>rd</sup> year respondents that universities should be obliged to develop student's social and environmental skills as part of their courses. 3<sup>rd</sup> year respondents in 2015 are significantly more likely than 3<sup>rd</sup> year respondents taking part in the 2014 and 2012 research to agree (e.g. 77% (n=991) 2015 3<sup>rd</sup> years agree compared with 73% (n=1285) 2014 3<sup>rd</sup> years and 69% (n=1744) 2012 3<sup>rd</sup> years).

# How should sustainability be included in courses?



When asked to consider the relevance of different ways of including the skills and knowledge to help other people and the environment within their courses, respondents in FE and HE showed a preference for learning through placements or work experience (e.g. 83% of FE and HE respondents (n=853 and n=5955 respectively)).

Building material into existing course content (74% HE (n=5284) and 70% (n=701) FE saw this method as relevant) and linking to coursework and dissertations (71% HE (n=5158) and 71% (n=718) FE) were also seen as relevant methods of including skills and knowledge for sustainability.

## Differences by respondent characteristics

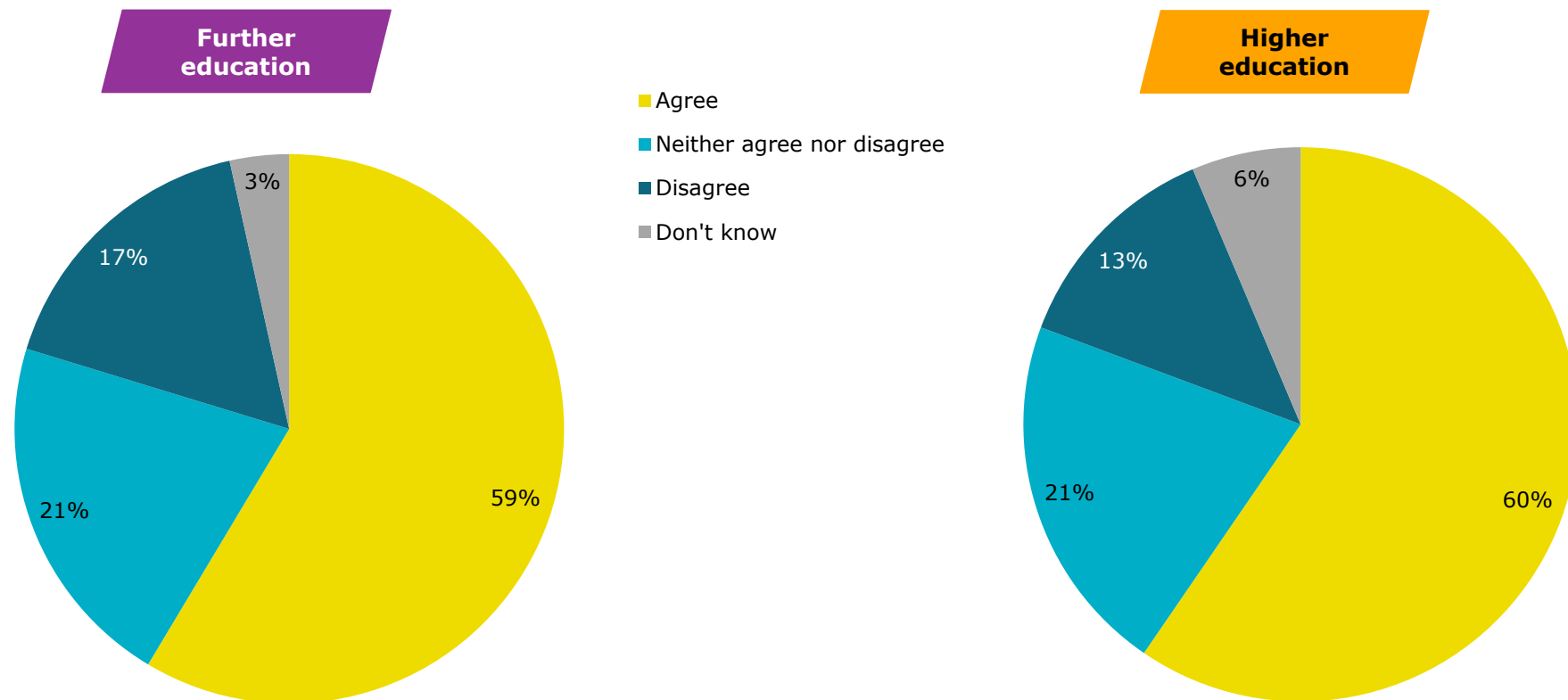
- Within HE, there were no significant differences in terms of preferences for learning about sustainability according to year of study.
- HE women respondents are more likely to report that offering placements or work experience, and running extra-curricular activities either by the students' union or within departments is relevant compared to HE respondents who are men (e.g. 71%, n=2894. HE women say extra-curricular activities within their department is a relevant way to learn about sustainability compared to 66%, n=1961 men respondents).

**Q: Imagine all university/college courses are required to include the skills and knowledge needed to help other people and the environment. What do you think the most relevant way of including the skills and knowledge needed to help other people and the environment within your own course would be?**

Weighted base: FE=c.1020 / HE=c.7200 Balance: No response



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



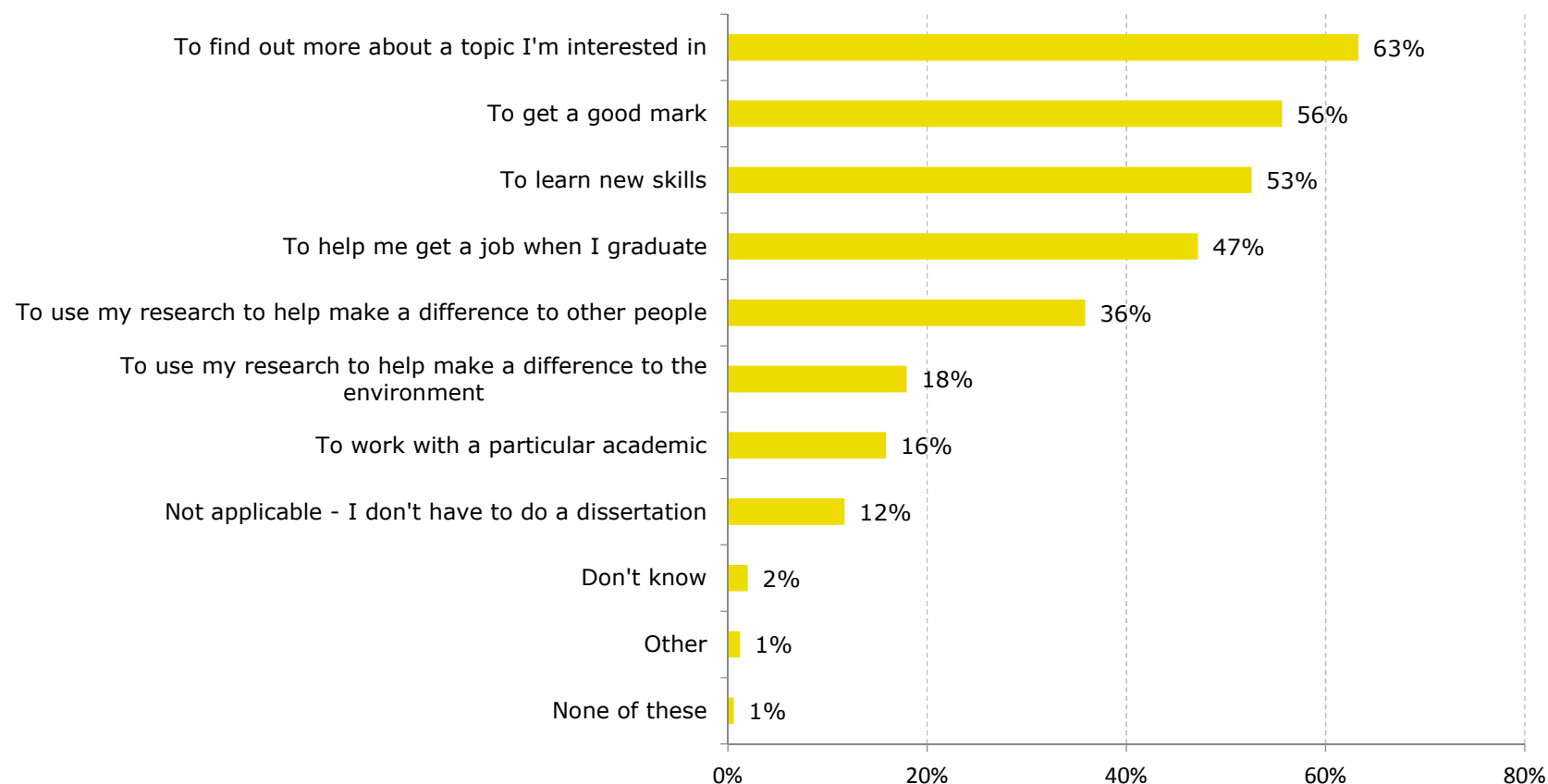
Just under two thirds of respondents agreed that they feel able to contribute to the development of the curriculum for their course (59% FE respondents (n=617) and 60% HE respondents (n=4253)).

### Differences by respondent characteristics

- No significant differences according to respondent characteristics were seen across FE or HE respondents.

# How are dissertations linked to sustainability?

Higher  
education



HE respondents were asked to consider what they hoped to get out of the opportunity to complete a dissertation.

For around two thirds of respondents (63%, n=4600) completing a dissertation is an opportunity to find out more about a topic they are interested in. Just over half see their dissertation as an opportunity to learn new skills (53%, n=3819) which will in turn help them to get a job when they graduate (47%, n=3429).

Just over a third of respondents see their dissertation as an opportunity to carry out research that will make a difference to other people (36%, n=2607). 18% reported that their dissertation is an opportunity to complete research that helps make a difference to the environment (n=1304).

## Differences by respondent characteristics

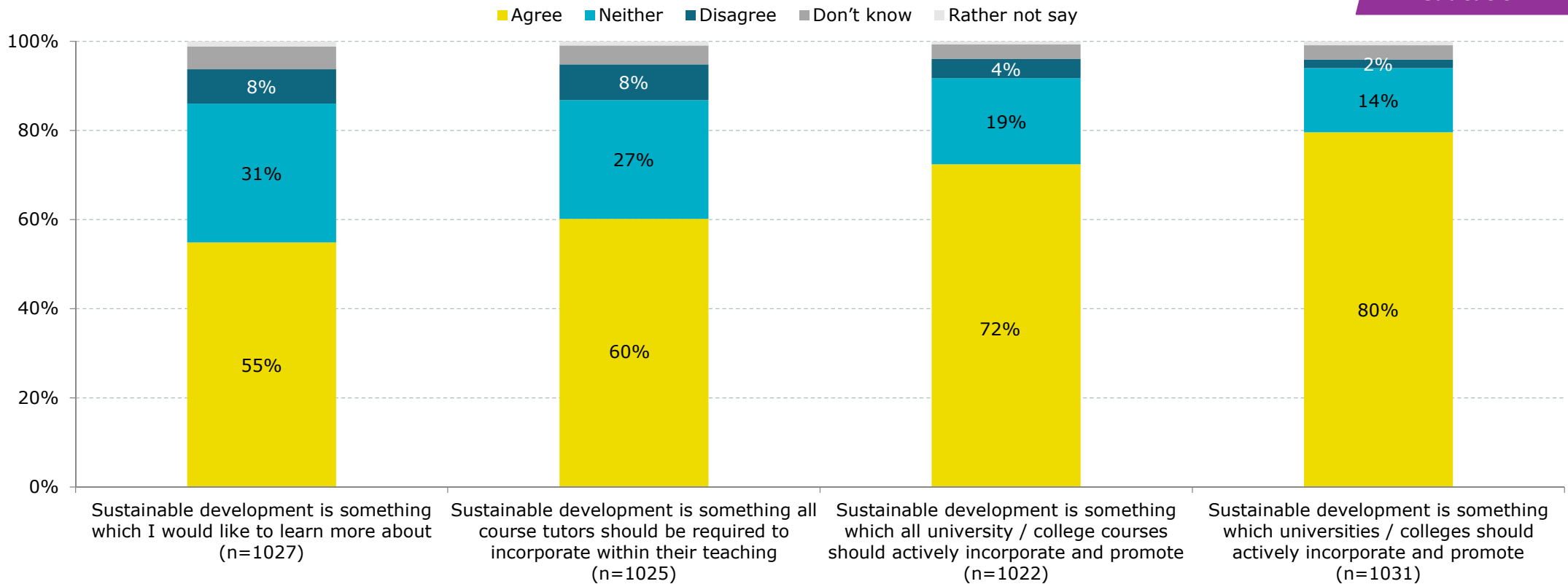
- 3<sup>rd</sup> year undergraduates are significantly less likely to see completing a dissertation as a way of helping them get a job when they graduate, compared to 1<sup>st</sup> and 2<sup>nd</sup> year undergraduates (e.g. 41% (n=528) 3<sup>rd</sup> years compared with 49% (n=858) 2<sup>nd</sup> years and 53% (n=1410) 1<sup>st</sup> years).
- Compared to 1<sup>st</sup> year students 3<sup>rd</sup> year undergraduates are more focused on their dissertation being a means to securing a good mark (e.g. 55% (n=1441) 1<sup>st</sup> years selected this option compared with 61% (n=790) 3<sup>rd</sup> years).
- Reflecting this focus on academic grades amongst 3<sup>rd</sup> years, these respondents are also less likely to report seeing their dissertation as a means of helping other people or the environment compared with 1<sup>st</sup> year respondents (e.g. 36% (n=962) 1<sup>st</sup> years want to use their research to help other people compared with 31% (n=398) 3<sup>rd</sup> years).

**Q. If your course includes completing a dissertation, what do you hope to get out of completing a dissertation?**

Weighted base: 7265 HE respondents. Balance: No response and those not in HE

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

Further education



Similar to students studying in HE, FE respondents also agree that sustainable development is something their college should actively incorporate and promote (80%, n=821).

Three quarters of FE respondents (72%, n=740) also agree that all courses should actively incorporate and promote sustainable development, and three fifths agree that course tutors should be required to incorporate sustainability within their teaching (60%, n=616).

Just over half of respondents say that sustainable development is something they would like to learn more about (55%, n=563). This is significantly lower than the proportion of HE respondents that say they would like to learn more about sustainability though may be reflective of the lower proportion of international respondents studying at FE level.

## Differences by respondent characteristics

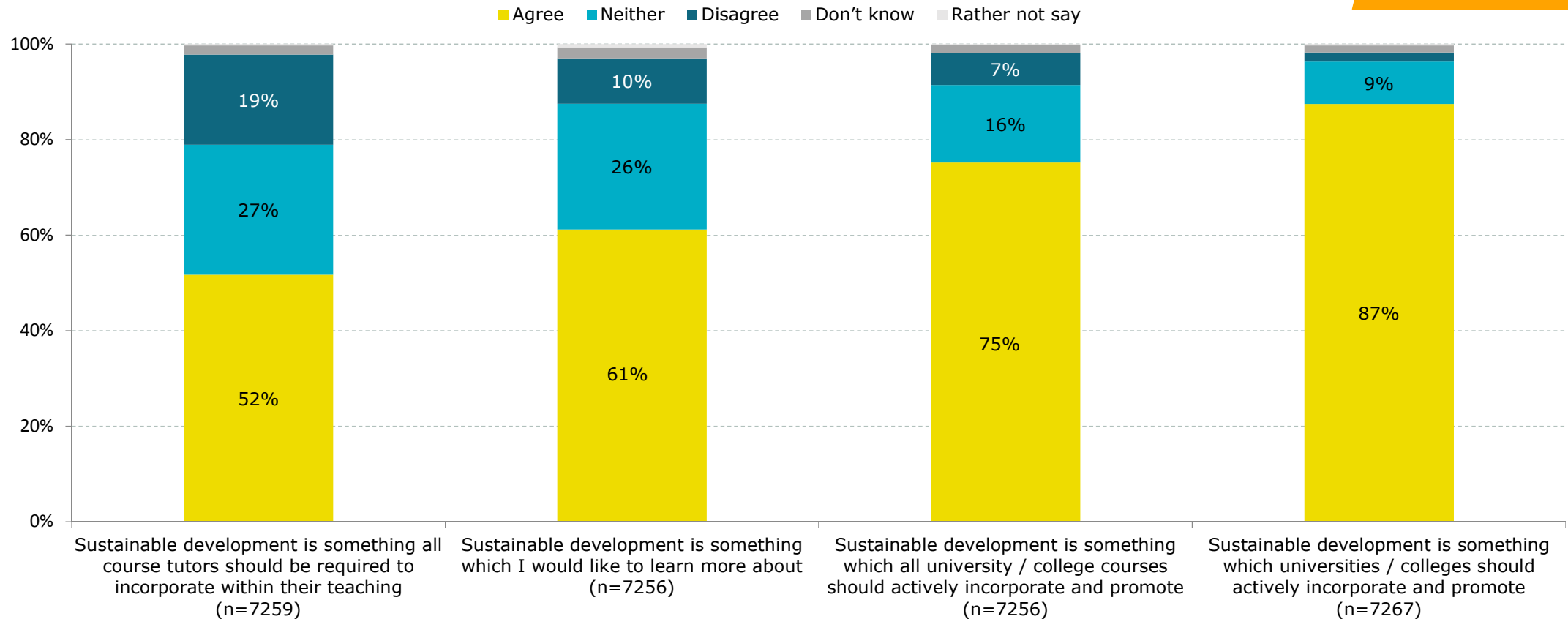
- Few significant differences can be seen between FE respondents of different characteristics.
- Women FE respondents are significantly more likely (at 95% confidence level) to say they would like to learn more about sustainable development than FE respondents who are men (59%, n=275 compared with 51%, n=269).

**Q: Taking a definition of sustainable development as: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". To what extent, if at all, would you say that you personally agree with the following statements**

Weighted base: In brackets. Balance: No response

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

Higher education



As with previous rounds of research completed with HE students, there is overwhelming agreement that sustainable development is something that universities and colleges should actively incorporate and promote with 87% (n=6357) saying they agree with this statement.

Three quarters (75%, n=5456) also agree that sustainability is something all courses should actively incorporate and promote, however just over half agree that course tutors should be required to incorporate sustainable development within their teaching (52%, n=3753).

Just under two thirds agree that sustainable development is something they would like to learn more about (61%, n=4439).

## Differences by respondent characteristics

- International respondents from outside of the EU are more likely to agree with all statements than UK respondents and international respondents from within the EU. EU international respondents are also more likely to agree with all statements than UK respondents.
- For example, international respondents from outside the EU are more likely to agree that sustainable development is something universities and colleges should actively incorporate and promote (e.g. 87% (n=4888) UK respondents agree compared with 92% (n=726) non-EU international respondents).
- UK respondents are less likely to agree that sustainable development is something they would like to learn more about compared with international respondents both from within and beyond the EU (e.g. 58% (n=3237) UK respondents agree compared with 70% (n=506) EU respondents and 79% (n=620) non-EU respondents).
- 3<sup>rd</sup> year respondents are more likely to agree that they would like to learn more about sustainable development than 1<sup>st</sup> year respondents (at a 95% confidence level) with 63% (n=811) agreeing compared with 59% (n=1553) 1<sup>st</sup> years.

**Q: Taking a definition of sustainable development as: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". To what extent, if at all, would you say that you personally agree with the following statements?**

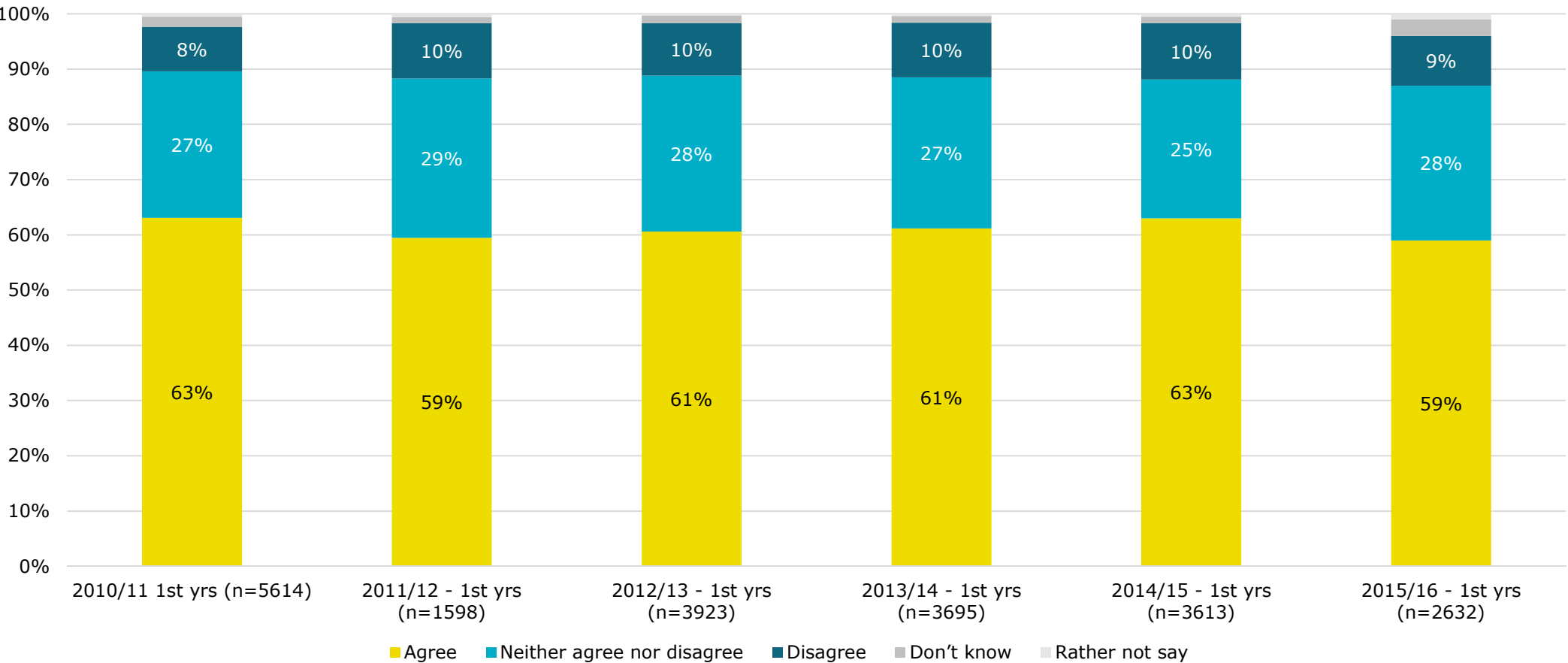
Weighted base: In brackets. Balance: No response

# Do students want to learn more about sustainability?

As mentioned previously, in 2015/16 just under two thirds agree that sustainable development is something they would like to learn more about (61%, n=4439).

The chart below focuses specifically on 1<sup>st</sup> year student responses and shows a relatively consistent demand for learning about sustainable development throughout the six years of research. However, there are small but significant variations in agreement that sustainable development is something that 1<sup>st</sup> year respondents want to learn more about, as identified for each research year below in the chart.

Higher education  
1<sup>st</sup> year respondents



Respondent agreement that they would like to learn more about sustainable development is...



**Q: Taking a definition of sustainable development as: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". To what extent, if at all, would you say that you personally agree with the following statements?**  
Weighted base: In brackets. Balance: No response

\* n.b. Significant to 95% confidence level. All other differences are significant at 99% confidence level.

## 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 responses from both HE and FE respondents were coded and show that the most common reason respondents reported was that they believe having an understanding of sustainability will be important for their future, beyond education. In most cases, respondents expressed a general concern about the future of the planet, whereas some directly related it to their future careers. FE respondents reported a desire to better understand the issues around sustainable development, and HE respondents indicated that it is an important concept to be aware of and understand.

### Further education

### Higher education

It's useful / important for future	103	124
To understand issues better	93	51
So I can take action in this area / make a difference	92	67
It's important to know about	68	82
So I'm aware of my own / others impact on environment	60	37
I don't know what it means	35	42
It's useful / interesting in general	26	54
Nothing/no answer/don't know	20	25

"I think, customers are interested in dealing with company's that consider sustainable development. Employers will therefore be interested in hiring employees who are aware and committed to the cause."

*Man FE respondent, EU*

"It is crucial for our future. What use is it learning an academic subject if everything we learn is going to be irrelevant because we push the world's resources to the limit?"

*Woman HE respondent, UK, 1<sup>st</sup> year undergraduate*

"Because I want to be able to ensure that I can put my ideas forward without causing any consequences for the next generation so I would like to know how sustainable my ideas are."

*Man HE respondent, UK, 1<sup>st</sup> year undergraduate*

"It makes me a better person and also more employable in the future."

*Man HE respondent, UK, 1<sup>st</sup> year undergraduate*

"It is beneficial to know for future employment. and it is vital to understand within our current global situation."

*Woman HE respondent, UK, 3<sup>rd</sup> year undergraduate*

"Because I've never actually learnt anything about it and I would like it to be implemented into my course."

*Woman FE respondent, UK*

"In the future industry will have to become even more sustainable so will be a demand for engineers trained/taught more in sustainability."

*Man FE respondent, UK*

"I think it's important for everyone to know as much as possible in order to create results and help the environment."

*Man HE respondent, UK, 2<sup>nd</sup> year undergraduate*

## 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 or college take to improve its performance on sustainable development. The first 500 responses from FE and HE responses were coded and revealed that on the whole, respondents indicate uncertainty over specific actions they want to see their institutions take. In some cases this was attributed to a lack of knowledge on what is currently going on, asking for further communications in this area. Respondents in HE and FE in particular reported being keen to see sustainability incorporated further into both courses and wider life at college or university. HE respondents were clear that they wanted to see more activities and interventions which encourage people to take action. Respondents also highlighted a desire for institutions to reconsider how resources (including funding) were allocated, with a number of respondents in HE calling for divestment of funding from the fossil fuel industry.

### Further education

### Higher education

Response	Number of responses	
Not sure / Don't know	198	208
More awareness / information generally on sustainability and what the college / university is doing	66	52
Incorporate it into the course/student life	102	57
More activities and interventions which encourage people to be more environmentally friendly / take action	69	106
Changes to how resources (including funding) are used and prioritised	17	29

"If they're going to spend millions on new buildings those buildings could at least be energy efficient for starters."  
*Woman FE respondent, UK*

"I do not know what their current performance is. Not a topic that has been communicated to me."  
*Woman FE respondent, UK*

"Better and more comprehensive recycling facilities, less packaging and disposable waste used in food outlets on campus, stop using fossil fuels for the university's energy."  
*Woman HE respondent, UK, Postgraduate*

"Maybe have a business tutor come in every other week for an hour to discuss this topic."  
*Woman FE respondent, UK*

"Our university had several social enterprises. Bring those back!"  
*Man HE respondent, UK , 3<sup>rd</sup> year undergraduate*

"The university is active, but louder communication as to how individuals can contribute or provide their own suggestions is needed."  
*Woman HE respondent, UK, Undergraduate 2<sup>nd</sup> year*

"Visibly endorse actions that improve sustainability, teachers can be role models in changing behaviour, for example, by cycling or walking to college."  
*Woman FE respondent, UK*

"Make the teaching of sustainable development compulsory and make sure students think about it in their daily lives - i.e. compulsory recycling and composting in halls, busses available from all halls to avoid cars and taxis, car share schemes, etc."  
*Woman HE respondent, UK , 2<sup>nd</sup> year undergraduate*

"Just a training day once a term to advance our skills and knowledge in this area."  
*Woman HE respondent, UK, Undergraduate 2<sup>nd</sup> year*



## 4. Experiences of sustainability in education



## What do students understand the term sustainable development to mean?

When asked to define sustainable development in their own words, the word clouds below summarising the responses from FE and HE respondents, show a close similarity with the Brundtland definition of sustainable development – “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”. This matches the definitions offered by respondents studying in HE in the five previous years of research on this subject. Please note that respondents were not provided with a definition of sustainable development within the survey until after completing this question. Similarly, the term sustainable development is not used until this point.

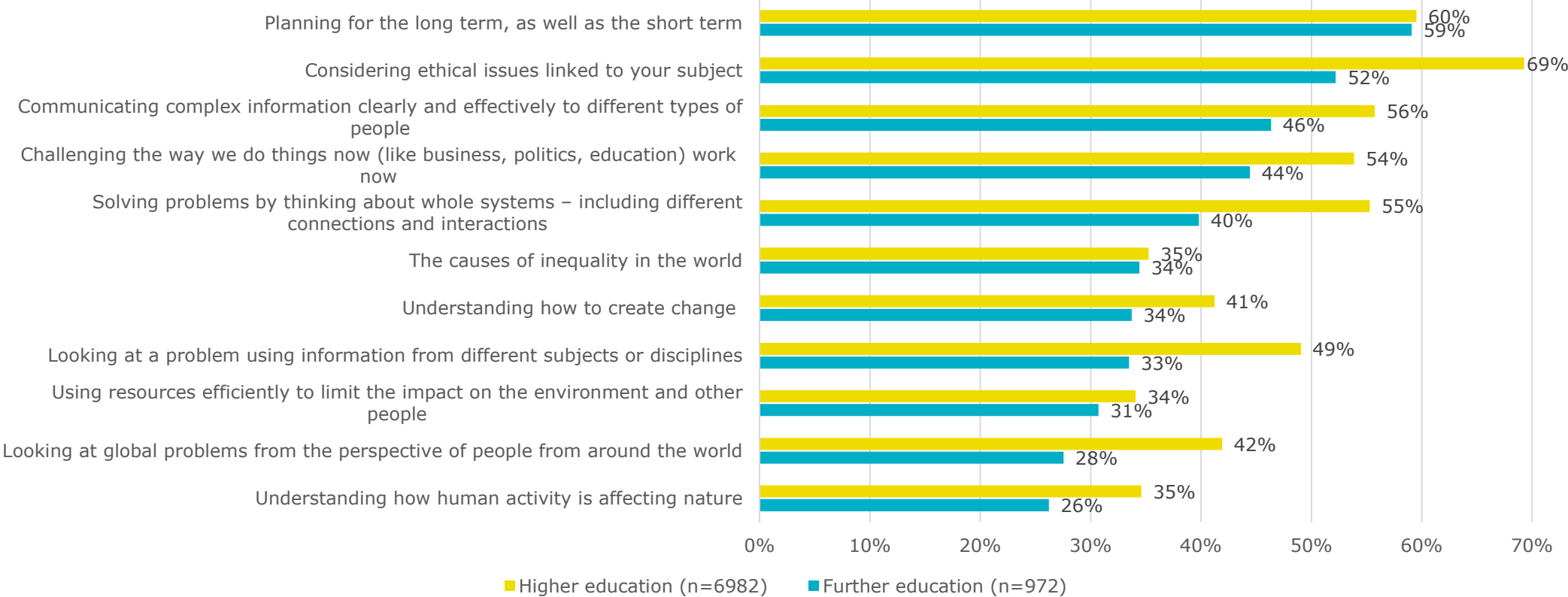
### Further education



### Higher education



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



Respondents report mixed coverage of a range of skills and knowledge associated with sustainability. In general, respondents in HE are significantly more likely to report coverage thinking about the teaching at their current place of study though there are some exceptions, for example 'planning for the long term as well as short term' and 'understanding the causes of inequality' show no difference between level of study.

Most commonly, HE and FE respondents report coverage of 'considering the ethical issues linked to their subject' (69%, (n=4838) HE respondents and 52% (n=507) FE respondents) and being 'able to plan for the long term as well as the short term' (60% (n=4156) HE respondents and 59% (n= 574) FE respondents).

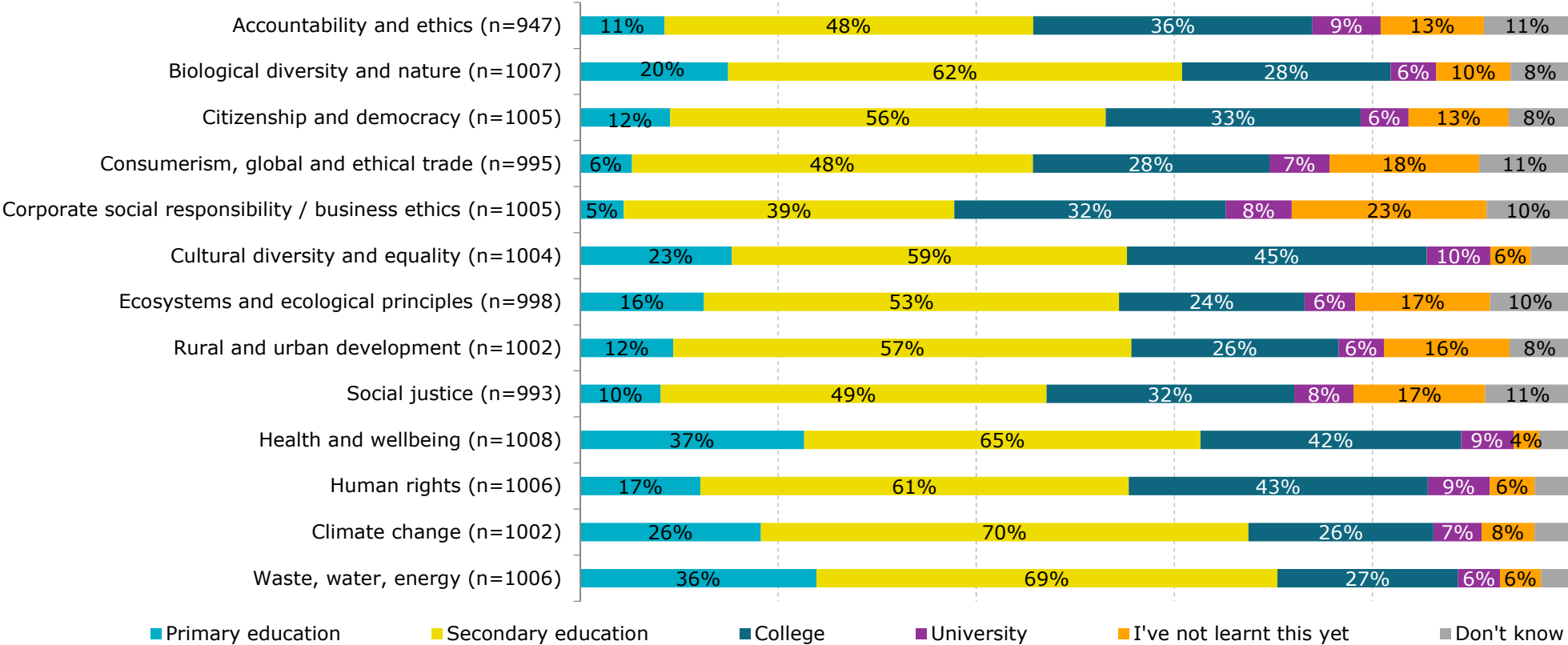
As with previous years of research with HE respondents, understanding the links between humans and nature is ranked lowest in terms of coverage by teaching (35%, n= . FE respondents also report the same assessment of their teaching (26%, n=).

Differences by respondent characteristics

- Across the range of skills, HE undergraduate 3<sup>rd</sup> years are significantly more likely to report coverage of the skills and knowledge for sustainability than HE undergraduate 1<sup>st</sup> years (e.g. 35% (n=871) undergraduate 1<sup>st</sup> years say 'looking at global problems from the perspective of people from around the world' has been covered in their teaching so far, compared with 48% (n=596) undergraduate 3<sup>rd</sup> years.
- UK HE respondents are more likely than international respondents from within and beyond the EU to say their teaching has covered communicating complex information clearly and effectively to different types of people (e.g. 58%, n=3088 compared with 52%, n=372 EU respondents and 47%, n=369 non-EU respondents).
- Within FE, women respondents are more likely to say their teaching has covered considering ethical issues linked to their subject than men (58%, n=259 compared to 48%, n=239). They are also more likely to say 'challenging the way we do things now' has been covered (50%, n=225 compared with 40%, n=119).
- HE respondents who are men, are more likely to say their teaching has covered 'understanding how human activity is affecting nature' than women HE respondents (38%, n=1081 compared with 32%, n=1274).

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

Further education



Respondents who were identified as studying at further education level also attributed most of their learning on sustainability related issues to their time in secondary school, when considering their educational career as a whole. For example, 70% (n=699) say climate change was covered during their time in secondary school, and 69% (n=697) said issues related to waste, water and energy were also covered.

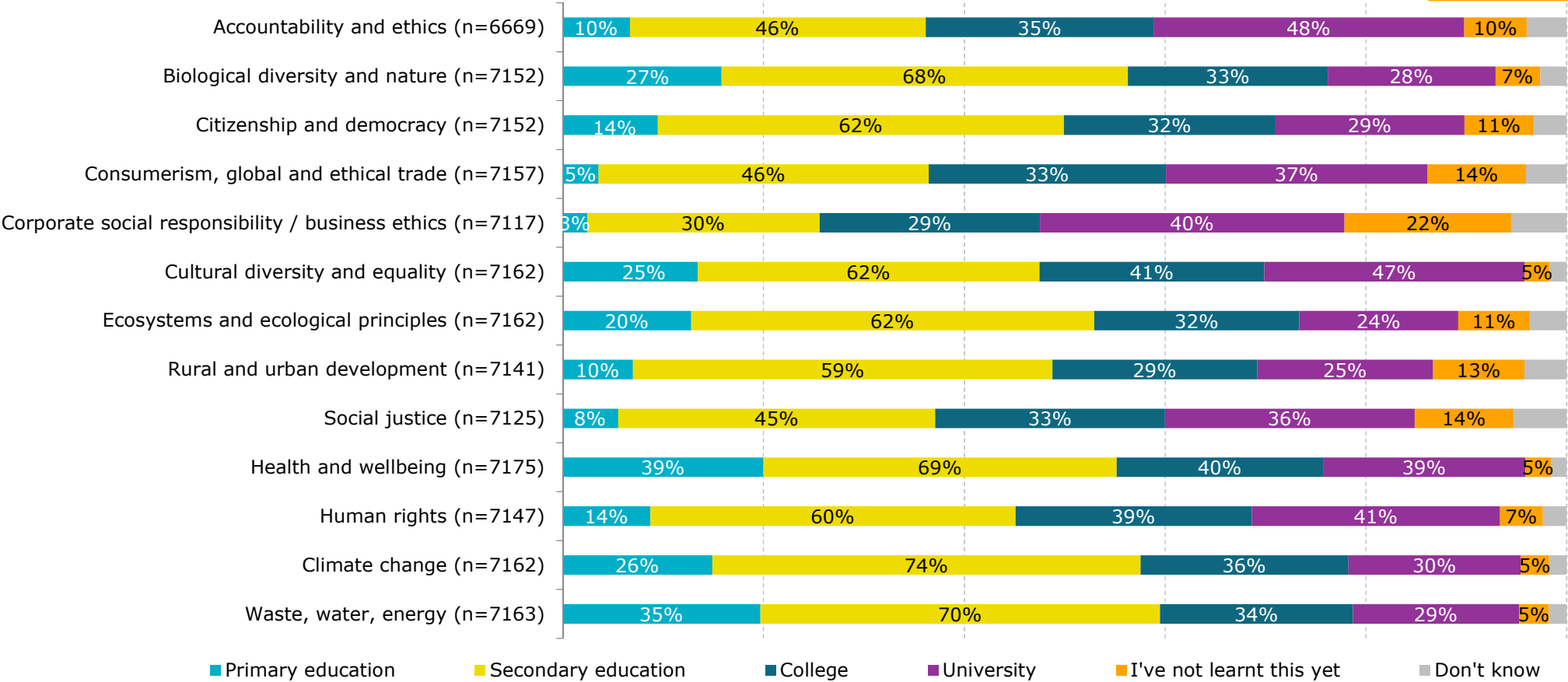
In general, between a quarter and a fifth of respondents say sustainability related issues have been covered by the teaching during their time in college. For example, 45% (n=453) say cultural diversity and equality has been covered, and 24% (n=236) say ecosystems and ecological principles have been covered.

## Differences by respondent characteristics

- In some instances, women FE respondents are more likely to state that sustainability issues have been covered during college, whereas FE respondents who are men are more likely to report coverage during secondary education, for example 53% (n=269) FE respondents who are men say social justice issues were covered in secondary education, whereas 45% (n=208) women respondents say this was covered. For the same issue, 29% (n=145) FE men respondents say their teaching at college has covered social justice, whereas 35% (n=159) women FE respondents say they have learnt about the issue at this level of education.

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

Higher education



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.

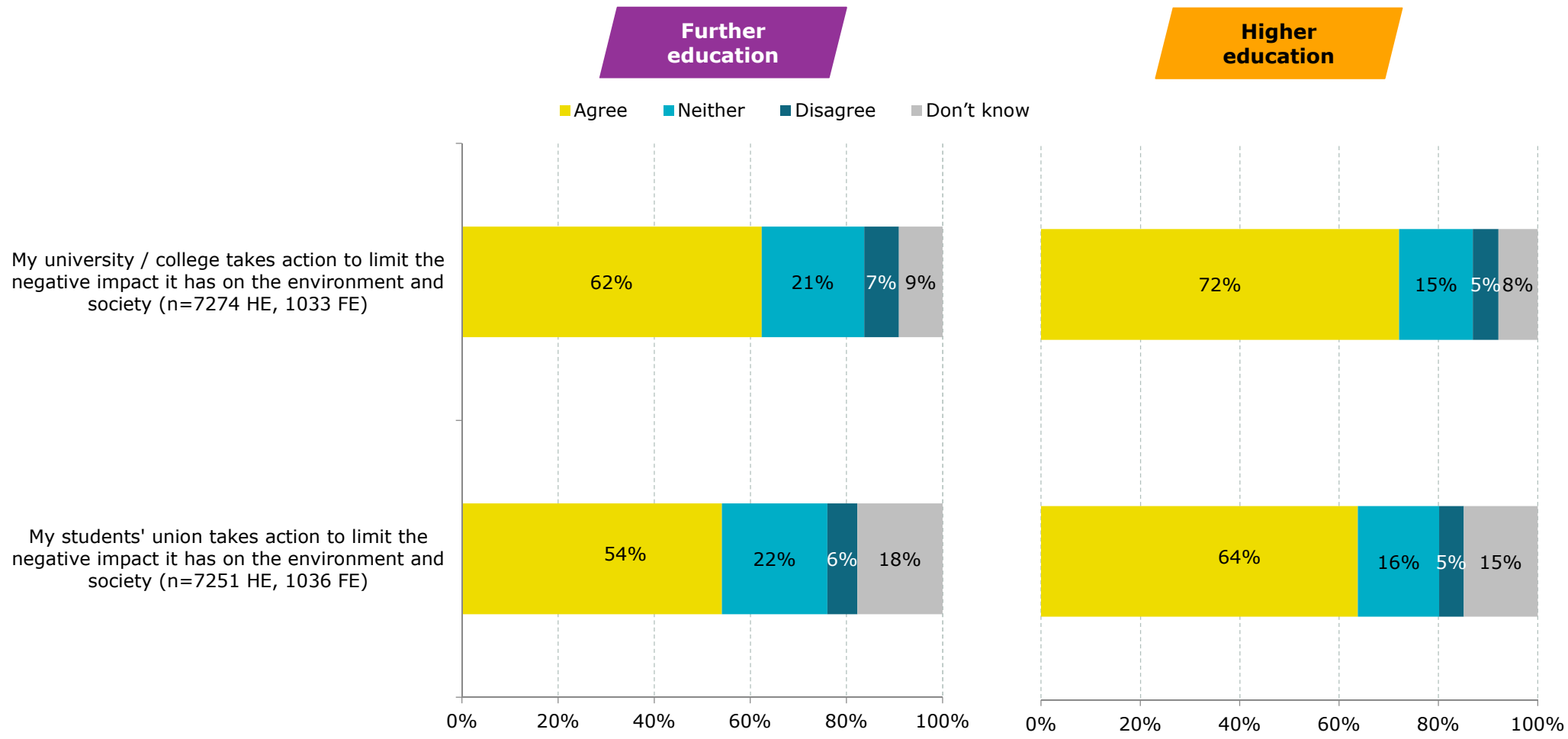
Higher education respondents report most of the teaching they have received on sustainability issues occurred during secondary education, for example 74% (n=5312) of respondents say climate change was covered at this point. However, it is worth bearing in mind that two fifths of respondents are 1<sup>st</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 (48%, n=3189) and cultural diversity and equality (47%, n=3395).

## Differences by respondent characteristics

- There are significant differences according to year of study within the responses provided by HE respondents. For example, 1<sup>st</sup> year respondents are more likely to state that they experienced teaching on a number of sustainability issues at secondary level, compared with 3<sup>rd</sup> year respondents who are more likely to indicate coverage during university. For example, 51% (n=1245) 1<sup>st</sup> years say accountability and ethics was covered during secondary education compared with 44% (n=518) 3<sup>rd</sup> years, whilst 36% (n=884) 1<sup>st</sup> years say this issue has been covered during university compared with 56% (n=658) 3<sup>rd</sup> years. Given the short time at university for 1<sup>st</sup> year respondents at the time of research this can be expected.
- International respondents from outside the EU are less likely to report coverage of these issue prior to university education compared to UK respondents (e.g. 40% (n=312) non-EU respondents say social justice was covered during secondary education compared with 47% (n=2581) UK respondents).

# 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 (72%, n=5244) agree that their university is taking action in this area, however just over half of FE respondents share this belief (54%, n=644).

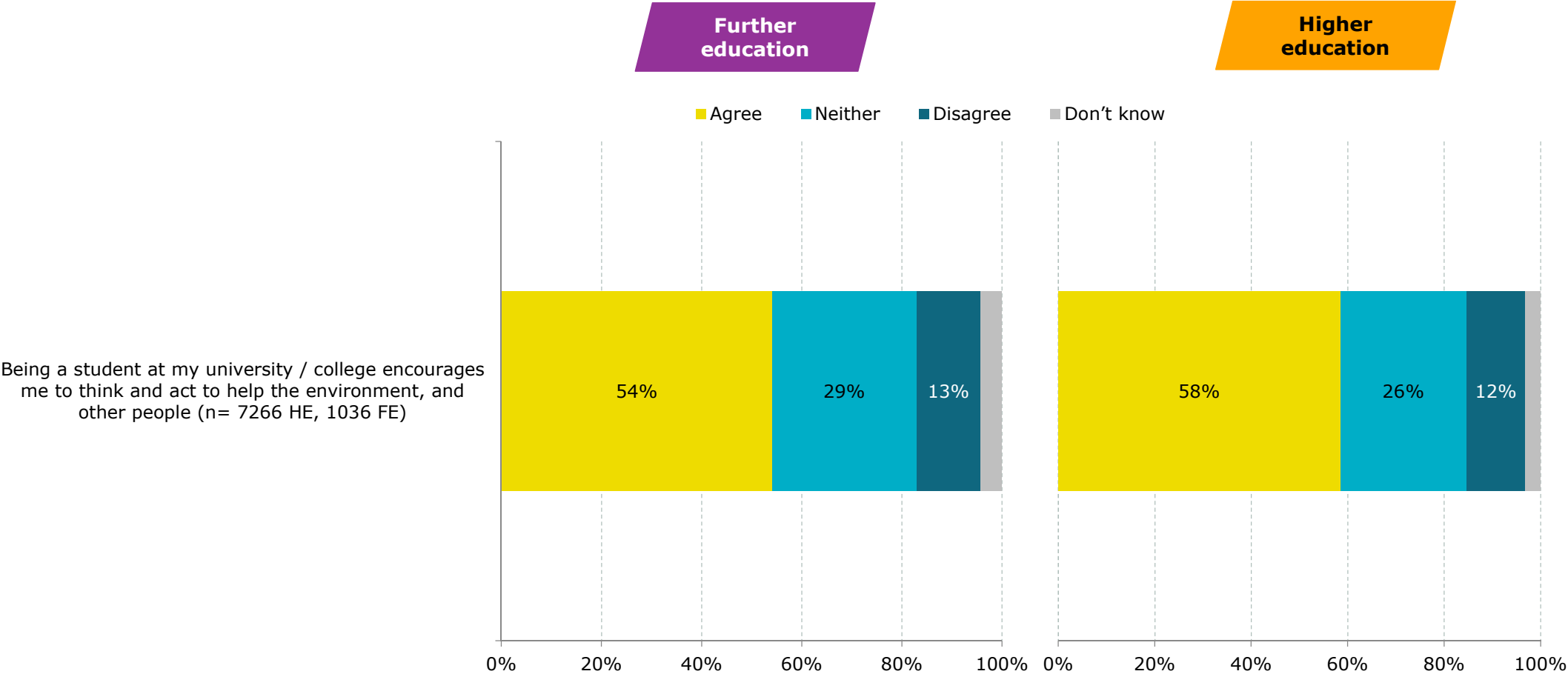
Around two thirds of respondents, in both HE and FE, see their students’ union taking action to address it’s negative impact on the environment and society (64%, n= 4626 and 62%, n=560 respectively).

Differences by respondent characteristics

- No significant differences are reported between respondents with varying characteristics in terms of agreement or disagreement that their university, college or students’ union is taking action to address its impact on the environment or society.



# What impact is students' current place of study having on their attitudes and behaviours for sustainability?

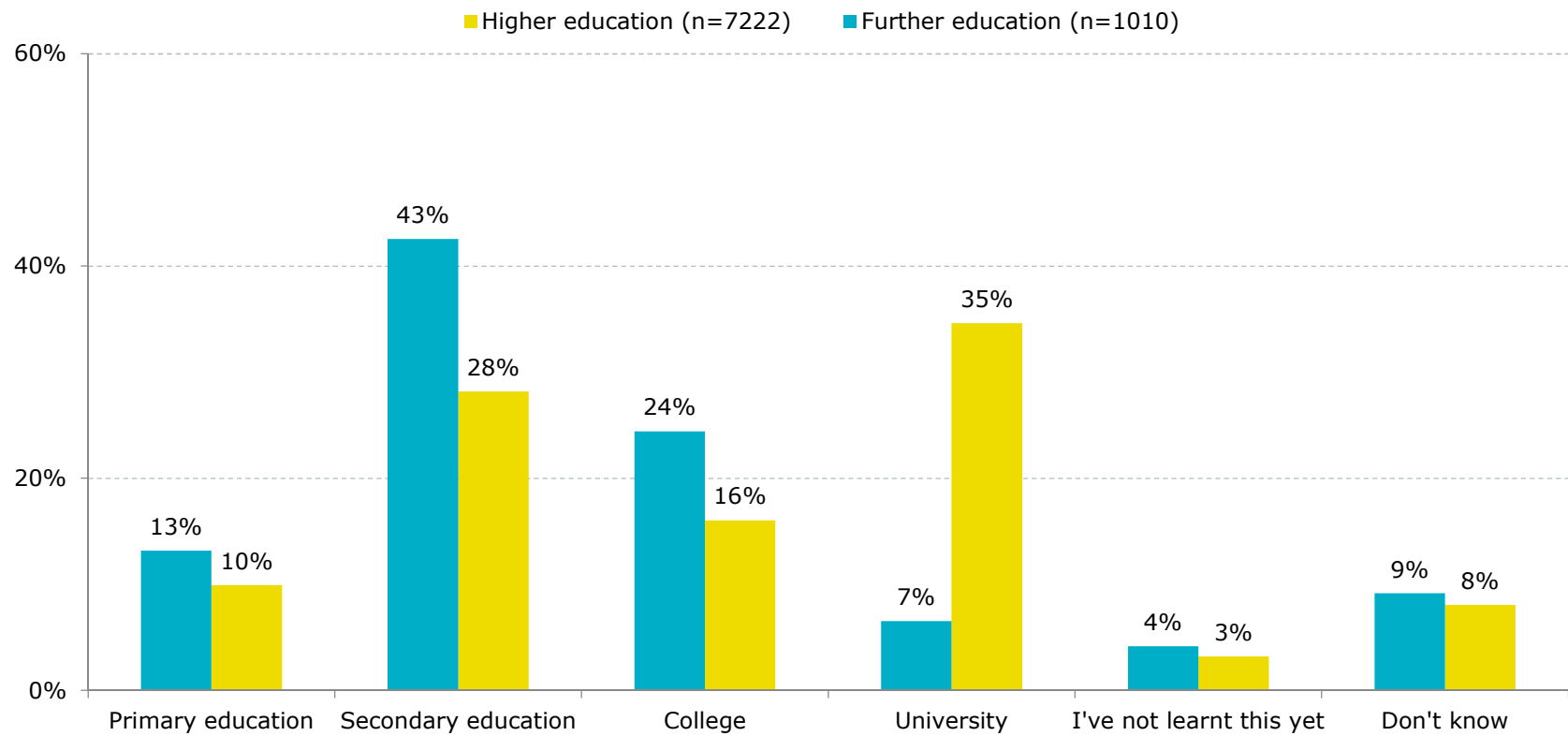


Just over half of respondents in FE (54%, n=560) and HE (58%, n=4248) agree that being a student at their university or college encourages them to think and act to help the environment and other people.

## Differences by respondent characteristics

- HE international respondents from within and beyond the EU are significantly more likely to report being encouraged to think and act to help the environment and other people as a result of being a student at their university (e.g. 74% (n=577) non-EU international respondents agree compared with 61% (n=443) respondents from the EU and 56% (n=3160) UK respondents).

# 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.

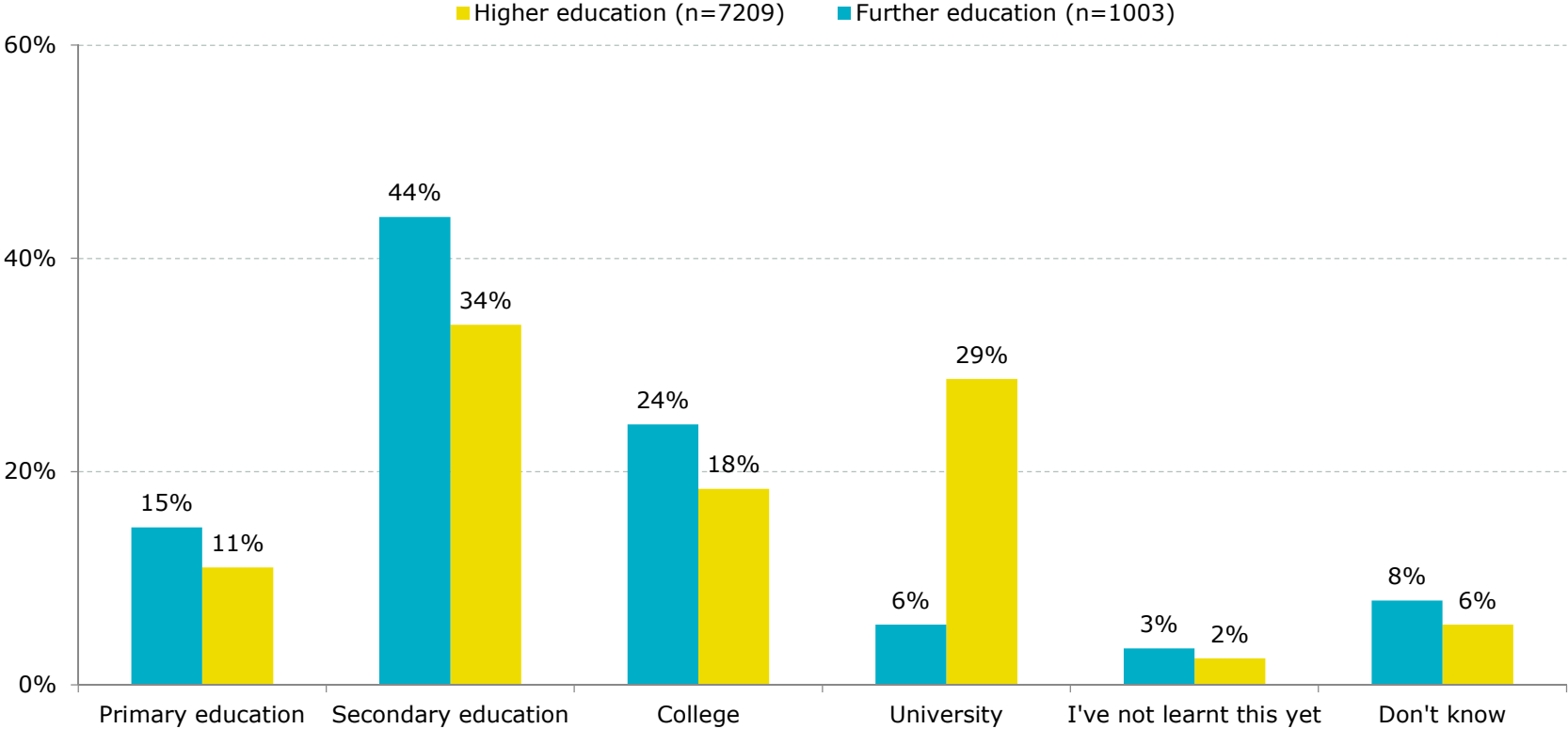
FE respondents identify secondary education as the place of study which has acted to reduce its negative impact on the environment and society the most (43%, n=429).

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 (35%, n=2500).

## Differences by respondent characteristics

- Within HE, there are significant differences in assessment of the action taken by places they have studied according to year of study, with 3<sup>rd</sup> year undergraduates most likely to report that their university has acted most to address negative impacts on the environment and society (e.g. 42% (n=427) 3<sup>rd</sup> years compared with 25% (n=532) 1<sup>st</sup> years).
- 1<sup>st</sup> year undergraduates are more likely to select both primary education and secondary education than their 3<sup>rd</sup> year counterparts (e.g. 13% (n=343) 1<sup>st</sup> years and 7% (n=112) 3<sup>rd</sup> years selected primary education as taking most action. 33% (n=995) 1<sup>st</sup> years and 24% (n=401) 3<sup>rd</sup> years selected secondary education).
- International respondents are more likely to report their college took the most action compared with UK respondents, and UK respondents are more likely to report their secondary school as taking the most action however this is potentially a result of the varying terminology used to describe stages of education in different countries.

# 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.

Both HE and FE respondents most frequently identify secondary education as the place of study which encouraged them to act the most (44%, n=440 FE respondents and 34%, n=2435).

University is reported as being the strongest influence for just under a third of HE respondents (34%, n=2069).

## Differences by respondent characteristics

- Within HE, there are significant differences in assessment of the influence of places they have studied according to year of study, with 1<sup>st</sup> year undergraduates most likely to report that their primary school has encouraged them the most to act to help the environment and other people (e.g. 13% (n=343) 1<sup>st</sup> years compared with 7% (n=112) 3<sup>rd</sup> years).
- 1<sup>st</sup> year undergraduates are also more likely to select secondary education than their 3<sup>rd</sup> year counterparts as having the most influence in terms of encouraging them to take action (e.g. 33% (n=995) 1<sup>st</sup> years 25% (n=401) 3<sup>rd</sup> years selected secondary education).
- International respondents are more likely to report their college encouraged them the most compared with UK respondents, and UK respondents are more likely to report their secondary school as encouraging them the most action however this is potentially a result of the varying terminology used to describe stages of education in different countries.

**Q. Still thinking about your experiences in education so far, what place where you have studied... Encouraged you to think and act to help the environment, and other people the most?**

Weighted base: In brackets. Balance: No response



## 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 both FE and HE respondents, learning about sustainability issues has encouraged them to think about things or do things differently. 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. Others reflected that the impact was more overarching, improving their general life skills. 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.

### Further education

### Higher education

Response	Number of responses	
Think about things / do things differently now	118	117
Helped develop my career / improve my knowledge / understanding	116	71
Improved me / life skills generally	104	108
None / No impact	94	112
Not sure / Don't know	32	41

"It has caused me to be more aware when hearing the news and it has made me want to help improve things in the future and make things as fair as possible."  
*Woman FE respondent, UK*

"I have joined the eco committee in school which helped me learn new things and make new friends."  
*Man FE respondent, UK*

"Forces me to think before I do anything. It also had me change a few things I was doing that had negative effects."  
*Woman HE respondent, non-EU, Postgraduate*

"Awareness of climate change and the level to which humans contribute to pollution levels has caused me to be more environmentally friendly, I recycle more and turn off things that use energy when they are not in use."  
*Man FE respondent, UK*

"I began to understand that I as an individual can make a difference locally and globally."  
*Man HE respondent, EU, Postgraduate*

"Changed how I view the world and its people and what direction I want to take my career in although money will still be a main deciding factor."  
*Man HE respondent, UK, Undergraduate 2<sup>nd</sup> year*

"It has made me more open minded, also given me more information about topics I didn't already know."  
*Woman FE respondent, UK*

"I actually learnt more by doing my own research and experiences about a lot of the issues listed previously, that's why I think schools and universities need to improve on the way they are teaching these issues. They were not very embedded in everyday learning but rather as one-offs. Otherwise this learning helped me thinking about these issues and wanting to know more about it and why should I care for them. I think as a result what was a value for me might become my career."  
*Defines in another way HE respondent, EU, 1<sup>st</sup> year undergraduate*

"No real effect. The issues are not covered well. It is seen as a 'free class' where you can switch off and not engage. It is like the issues themselves are unimportant."  
*Man HE respondent, UK, Undergraduate 1<sup>st</sup> year*

**Q: What impact, if any, has learning about any of the issues in the previous question had on you personally?**

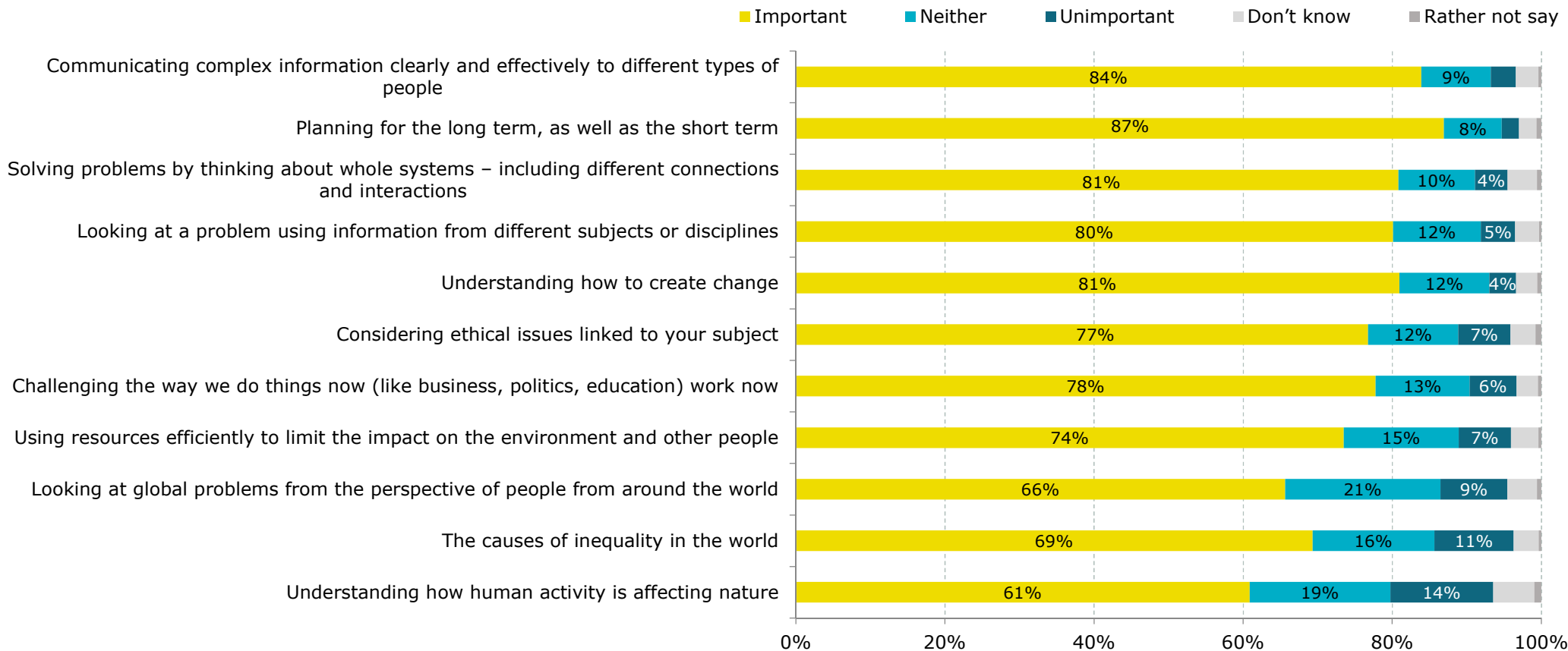
Please write your answer in the box below, thinking about how learning affected your day to day lifestyle as well as bigger changes such as your values and your aims for your future career.

## 5. Sustainability skills beyond education

# How important are sustainability skills to future employers?

Further education

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 (84% FE respondents (n=865)) and the ability to plan for the long term, as well as the short term (87% (n=893) FE respondents). FE respondents are least likely to rate having an understanding of how human activity is affecting nature as being important for future employers (61% FE respondents (n=619) rate this as important).



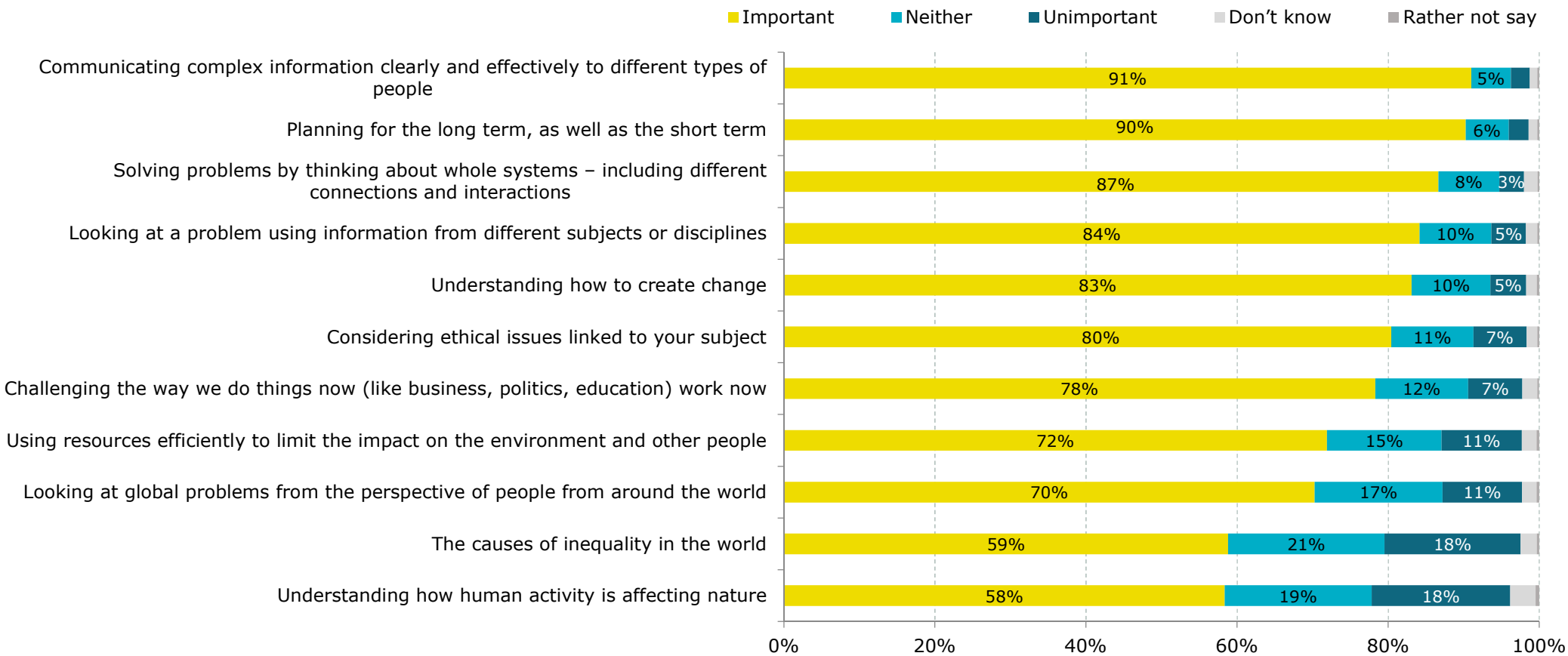
## Differences by respondent characteristics

- FE women respondents are significantly more likely to see understanding the causes of inequality in the world as important to their future employers than FE respondents who are men (76% (n=336) compared with 64% (n=356)).
- Similarly, FE women respondents are more likely to see considering ethical issues associated with their subject as important to their future employers than FE respondents who are men (84% (n=395) compared with 71% (n=380)).
- Finally, FE women respondents are more likely to see understanding how to create change as important to their future employers than FE respondents who are men (88% (n=402) compared with 80% (n=409)).

# How important are sustainability skills to future employers?

Higher education

HE respondents were also asked to consider how important sustainability related skills and knowledge are to their future employers. The most important skills are perceived as being the ability to communicate complex information clearly and effectively to different types of people (91% HE respondents (n=6603) and the ability to plan for the long term, as well as the short term (90% HE respondents (n=6550)). As with FE respondents, those in HE are also least likely to rate having an understanding of how human activity is affecting nature as being important for future employers (58% HE respondents (n=4169)).



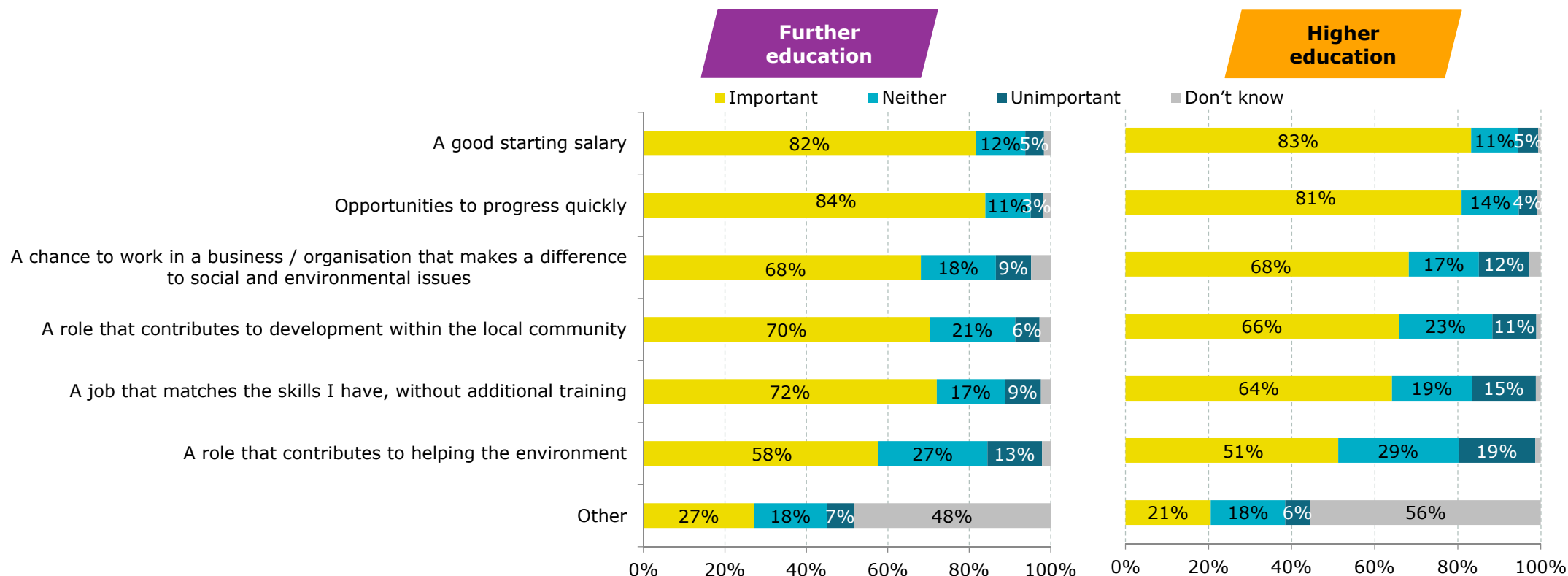
## Differences by respondent characteristics

- International HE respondents from beyond the EU are more likely to think understanding how human activity is affecting nature will be important to their future employers than EU and UK respondents (70% (n=539) compared with 56% (n=402) and 57% (n=3164) respectively).
- Women HE respondents are more likely than men to think planning for the long term as well as the short term will be important to their future employers (92% (n=3784) compared with 88% (n=2641)).
- 3<sup>rd</sup> year HE respondents are more likely than 1<sup>st</sup> year respondents to identify communicating complex information clearly and effectively to different groups of people as important to future employers (93% (n=1210) compared with 89% (n=2358)).

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

Respondents to the survey reported that a good starting salary (83% HE respondents (n=6011) and 82% FE respondents (n=831)) and opportunities to progress quickly (81% HE respondents (n=5806) and 84% FE respondents (n=854)) are important factors when considering what jobs to apply for.

Two thirds of respondents in HE and FE also reported that the chance to work in a business or organisation that makes a difference to social and environmental issues would be an important factor to consider when applying for jobs (68% HE and FE respondents (n=4822 and n=690 respectively)). A similar proportion also reported that whether the role contributes to development in the local community would be an important consideration (66% HE respondents (n=4759) and 70% FE respondents (n=722)).



### Differences by respondent characteristics

- Women HE respondents are significantly more likely to say the chance of working in an organisation that makes a difference to social and environmental issues is important when considering which jobs to apply for than HE respondents who are men (71% (n=2822) compared with 65% (n=1909)).
- International respondents from outside the EU are more likely to say a job that matches their current skills without additional training is important compared to UK and EU respondents (73% (n=567) compared with 63% (n=3537) and 64% (n=467) respectively).
- International non-EU respondents are most likely to report whether the role contributes to helping the environment as an important factor compared with UK and EU respondents (70% (n=547) compared with 48% (n=2662) and 57% (n=411) respectively).
- No significant differences were reported between different groups within the FE respondents.

**Q: Thinking about your future employer, how important, if at all, do you think the following factors will be when considering which jobs to apply for?**

Weighted base: HE c.7250 / FE c.1018. Balance: No response

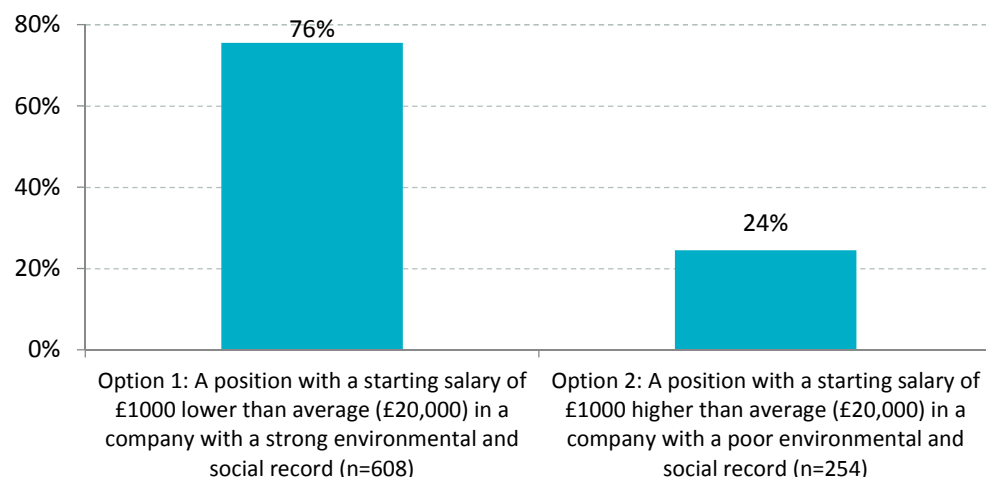
# What desire do students have to work for employers with positive social and environmental credentials?

Further education

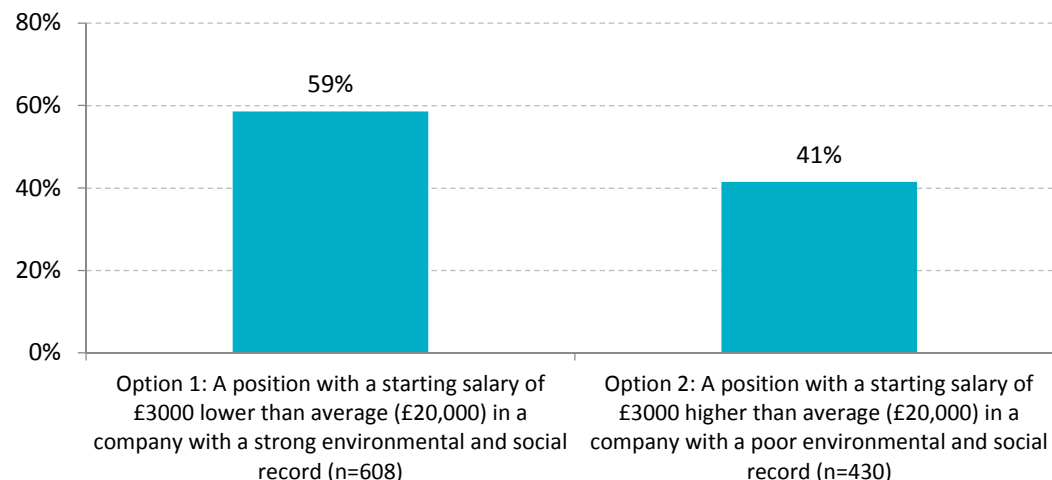
Respondents were asked to reflection on their future employers, and choose between two options in a range of scenarios. Three quarters of FE respondents say they would be willing to sacrifice £1000 from a starting salary to work for a company with a positive environmental and social record (76%, n=783). Over half say they would also sacrifice £3000 from their starting salary to work in a company with these credentials (59%, n=608).

Unlike HE respondents, there is no difference in the proportion of FE respondents who say they would be willing to make a £3000 salary sacrifice for a specific role which contributes to positive environmental and social change (59%, n=611).

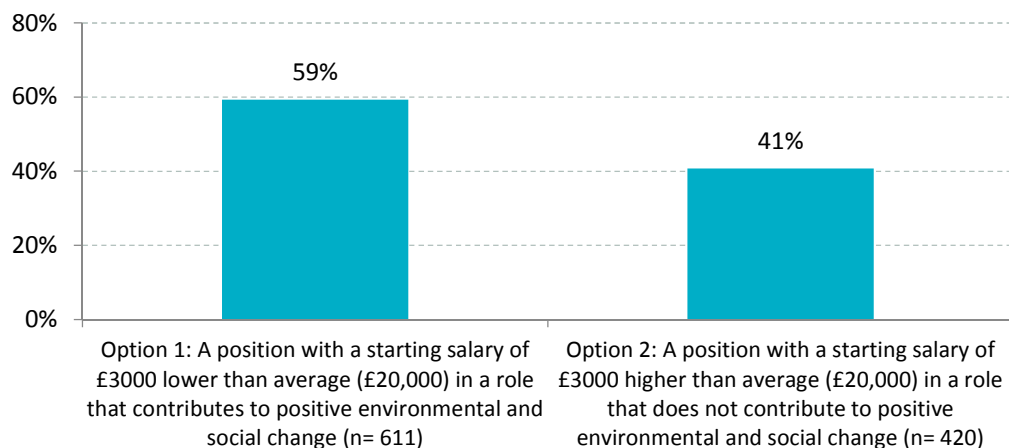
**Strong sustainability performance plus £1000 salary sacrifice vs. Poor sustainability performance plus £1000 salary gain**



**Strong sustainability performance plus £3000 salary sacrifice vs. Poor sustainability performance plus £3000 salary gain**



**Role contributing to sustainability plus £3000 salary sacrifice vs. Role with no contribution to sustainability plus £3000 salary gain**



## Differences by respondent characteristics

- In all three scenarios, FE women respondents are more likely than men to accept a salary sacrifice.
- For example, 65% (n=305) say they would accept a sacrifice of £3000 to work in a company that has a strong environmental and social record. Similarly, 67% (n=315) say they would be willing to make this sacrifice for a role that contributes to positive environmental and social change compared with 52% men (n=275).
- FE respondents are significantly more likely to say they will accept a £3000 sacrifice to work for a company with a positive record compared to HE respondents (59% (n=606) compared with 51% (n=3724)).
- The same significant difference also applies for a role that contributes to positive environmental and social change (59% (n=610) FE respondents compared with 53% (n=3848) HE respondents).

**Q: Assuming all other factors are equal, please select which option you think that you would choose.**

Weighted base: In brackets next to each question. Balance: No response

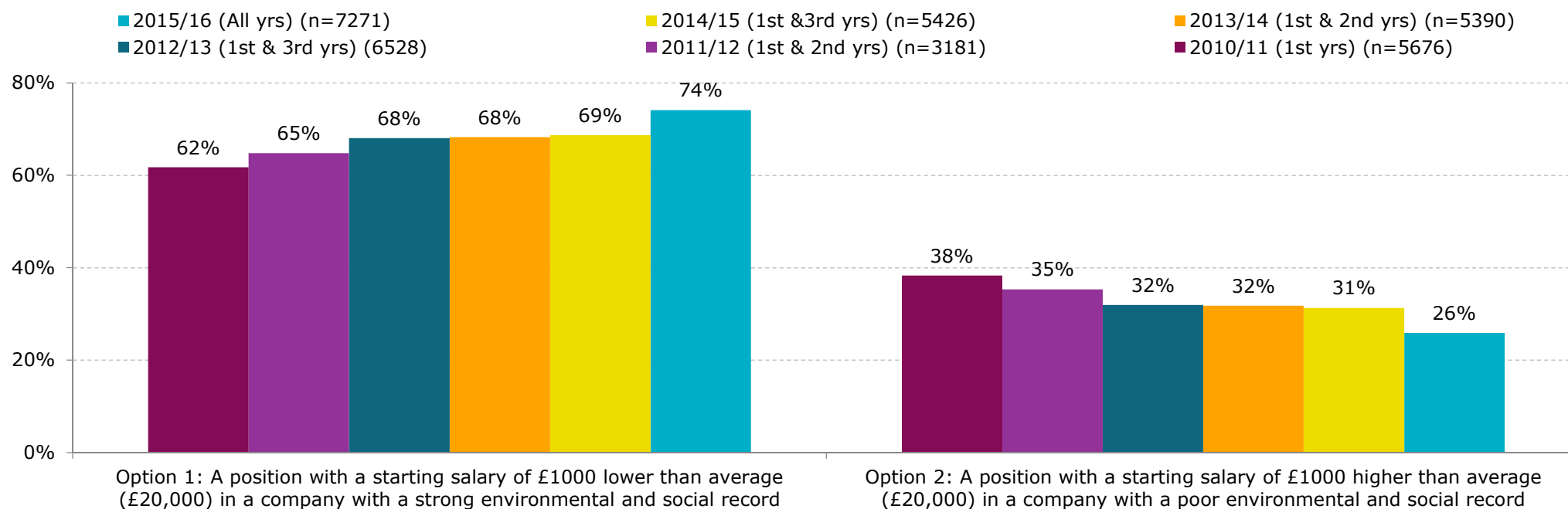


# What desire do students have to work for employers with positive social and environmental credentials?

Higher education

Respondents were presented with two options for future employment – accepting a salary sacrifice of £1000 from an average starting salary to work in a company with a strong environmental and social record, or receiving a salary £1000 higher than average for a company with a poor record in this area. Three quarters of HE respondents completing the survey in 2015/16 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 (74%, n=5388).

## Strong sustainability performance plus £1000 salary sacrifice vs. Poor sustainability performance plus £1000 salary gain



### Differences by respondent characteristics (2015/16 respondents)

- Women respondents are more likely to say they would be willing to accept a salary sacrifice of £1000 to work for a company with a strong environmental and social record compared to respondents who are men (77% (n=3189) compared with 69% (n=2087)).
- International respondents from outside the UK are more likely than UK respondents to accept the salary sacrifice (81% (n=635) compared with 73% (n=4109)).

### Differences between previous years of research

- 2015/16 respondents are significantly more likely to say they would accept a salary sacrifice of £1000 to work for a company with a strong environmental and social record than respondents in 2014/15 (74% (n=5388) compared with 69% (n=3728)).
- 2015/16 respondents are also more likely to say they would accept this salary sacrifice than all other years of research.
- Respondents in 2012/13, 2013/14 and 2014/15 and 2015/16 are more likely to say they would accept a £100 salary sacrifice than respondents in 2010/11 and 2011/12.

**Q: Assuming all other factors are equal, please select which option you think that you would choose.**

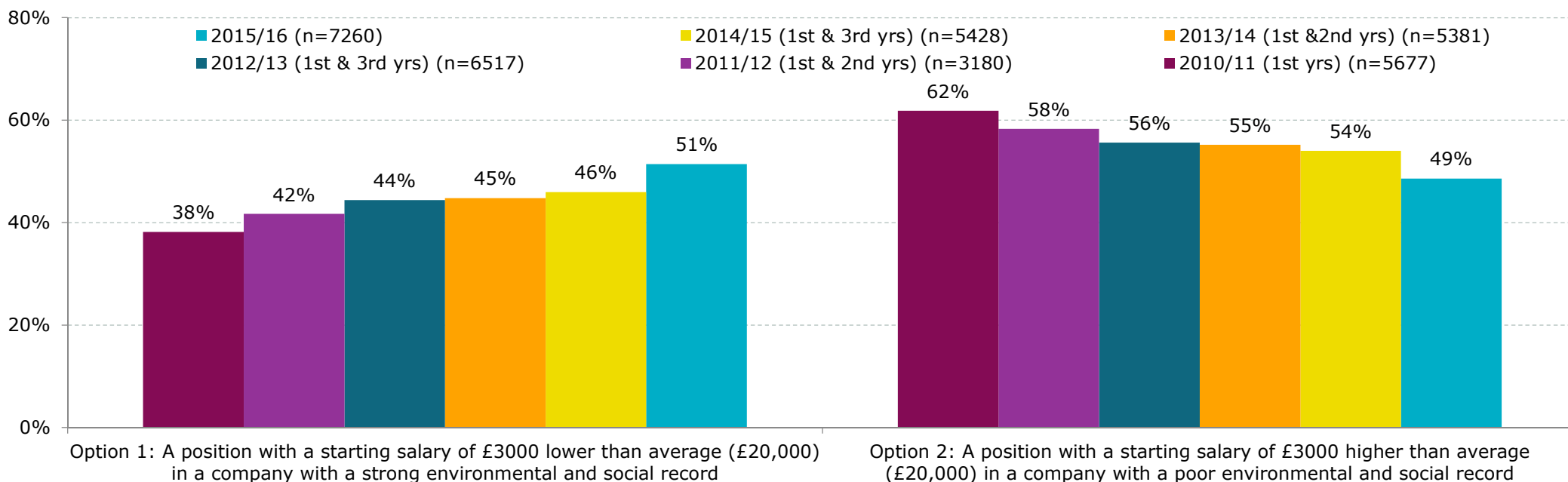
Weighted base: In brackets. Balance: No response

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

Higher education

Respondents were asked to make the same choice between two options involving either a salary increase or decrease of £3000 for a company with a poor or strong record on sustainability. Half of HE respondents (51%, n= 3732) in 2015/16 indicated they would be willing to make a sacrifice of £3000 for a position in a company with a strong environmental and social record.

## Strong sustainability performance plus £3000 salary sacrifice vs. Poor sustainability performance plus £3000 salary gain



### Differences by respondent characteristics (2015/16)

- As seen at the £1000 salary sacrifice level, women respondents are more likely to say they would make a sacrifice of £3000 from their starting salary to work for a company with a strong environmental and social record (54% (n=2223) compared with 47% (n=1422)).
- International respondents, both within and beyond the EU, are more likely to say they would make the salary sacrifice of £3000 for such a role (68% (n=530) non-EU respondents, 59% (n=433) EU respondents and 48% (n=2701) UK respondents).

### Differences between previous years of research

- 2015/16 respondents are significantly more likely to say they would accept a salary sacrifice of £1000 to work for a company with a strong environmental and social record than respondents in 2014/15 (51% (n=3732) compared with 46% (n=2496)).
- 2015/16 respondents are also more likely to say they would accept this salary sacrifice than all other years of research.
- Respondents in 2012/13, 2013/14 and 2014/15 and 2015/16 are more likely to say they would accept a £1000 salary sacrifice than respondents in 2010/11 and 2011/12.

**Q: Assuming all other factors are equal, please select which option you think that you would choose.**

Weighted base: In brackets next to each question. Balance: No response

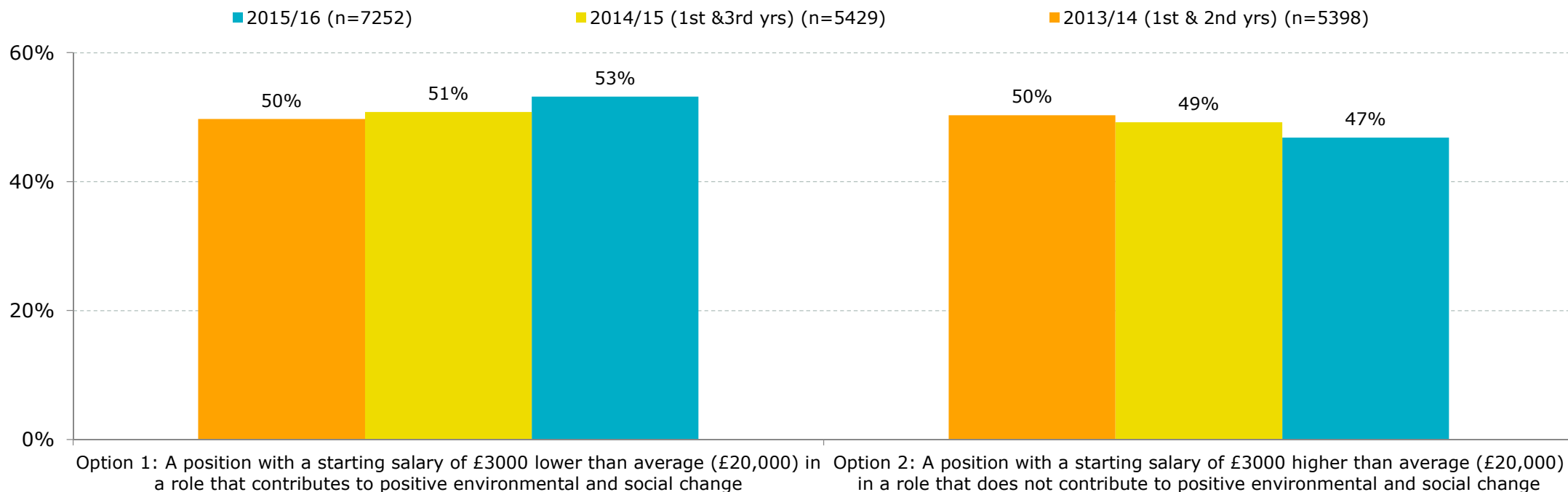


# What desire do students have to work for employers with positive social and environmental credentials?

Higher education

Again choosing between two options, around 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 (53%, n=3856). This is significantly higher than the proportion (51%, n=3732) who say they would be willing to make a sacrifice of the same amount to work for a *company* that has a positive record of working to achieve these goals rather than in a *role* that achieves change in this area (see page 36).

## Role contributing to sustainability plus £3000 salary sacrifice vs. Role with no contribution to sustainability plus £3000 salary gain



### Differences by respondent characteristics (2015/16)

- HE respondents who are men are less likely than women respondents to say they would be willing to make a salary sacrifice of £3000 to work in a specific role that contributes to positive environmental and social change (47%, (n=1405) compared with 58% (n=2360)).
- International respondents from beyond the EU are more likely than UK respondents to accept this sacrifice (62% (n=487) compared with 51% (n=2865)).

### Differences between previous years of research

- 2015/16 respondents are significantly more likely to say they would accept a salary sacrifice of £3000 for a role that contributes to environmental and social change than respondents in 2014/15 and 2013/14 (53% (n=3856) compared with 51% (n=2760) and 50% (n=2662) respectively).

**Q: Assuming all other factors are equal, please select which option you think that you would choose.**

Weighted base: In brackets next to each question. Balance: No response

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