

Sustainability Skills | 2016-17

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

March 2018

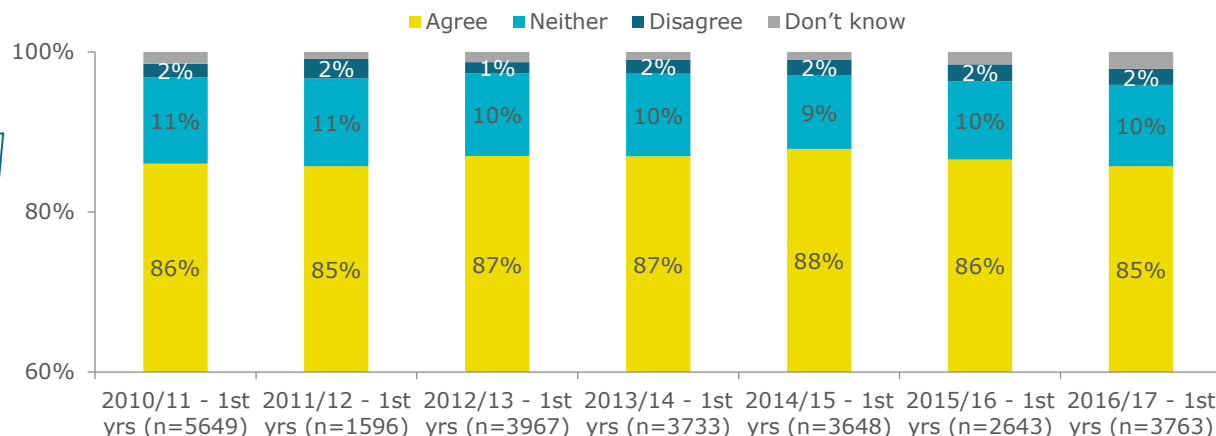
Sustainability Skills | 2017

A national online survey was completed by over 12,000 students in October 2017 to build on the data gathered through six years of previous research¹, 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.

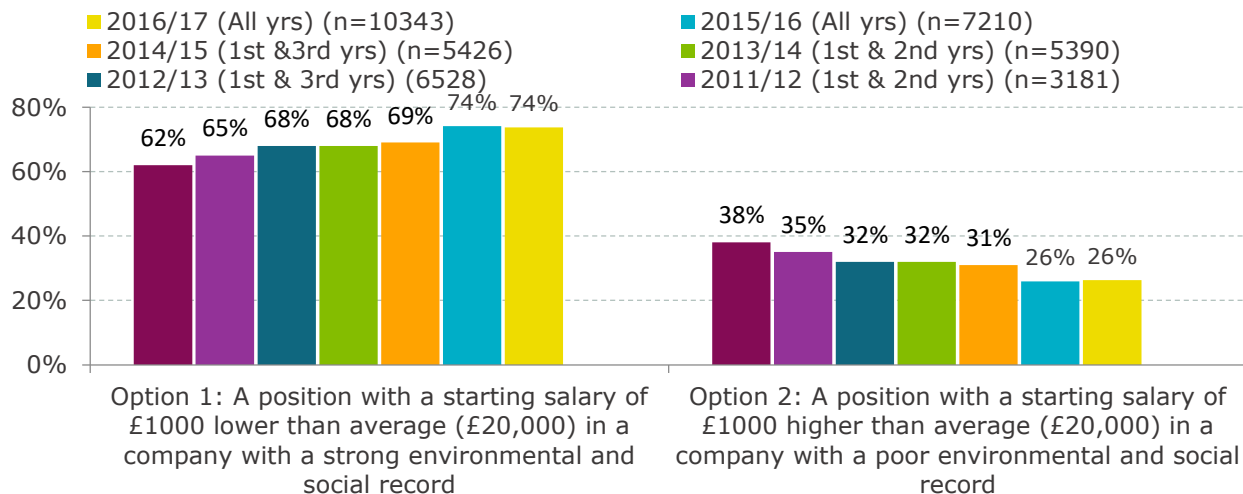
Tracking longitudinal trends in higher education – 2010/11 to 2016/17

- As with the six previous years of research completed with HE students, there is **overwhelming agreement amongst 2016/17 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=10,315) saying they agree with this statement.
- In 2016/17, **58% agree that sustainable development is something they would like to learn more about** (n=4439). This broadly matches the historic data gathered since 2010, though is significantly lower than other years of research, peaking in 2010/11 and 2014/15 at 63%.
- 2016/17 respondents remain **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 to the research from 2010/11 to 2014/15 (e.g. 74%, n=5388 respondents in 2015/16 compared with 69% (n=3728) respondents in 2014/15). It is however worth noting the difference in years of study included in the research at each round.
- A range of sustainability skills continue to be seen as important when entering employment. Whilst the skills researched since 2015/16 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, 89% (n=9205) rank "communicating complex information clearly and effectively to different types of people" as important, whereas 55% (n=5685) rank "understanding how human activity is affecting nature" as important to their future employers.

Sustainable development is something which universities should actively incorporate and promote... [1st year respondents only]



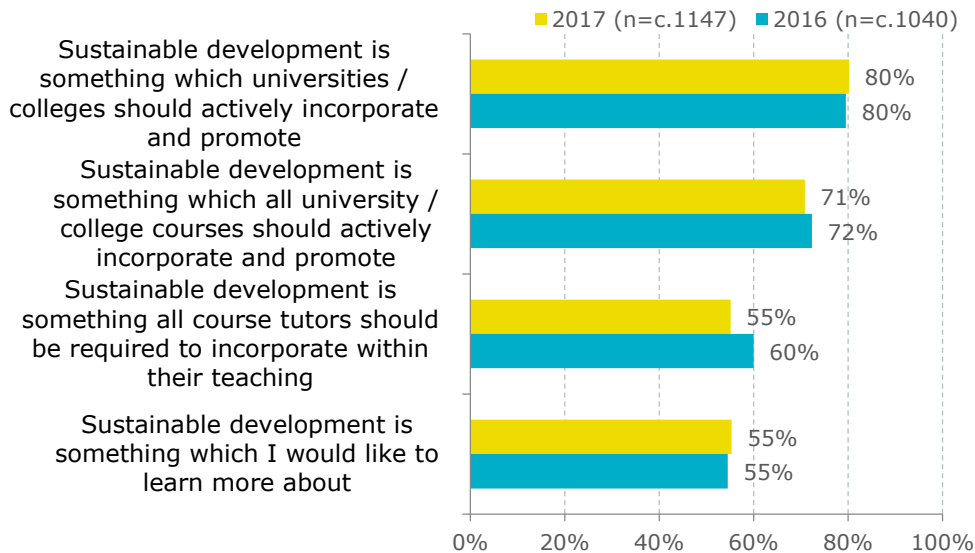
Assuming all other factors are equal, which option would you choose?



¹ Details of the previous research can be found at: <https://sustainability.nus.org.uk/our-research/our-research/skills-and-sustainable-development>

Sustainability Skills | 2017

FE Respondents: To what extent do you agree that...

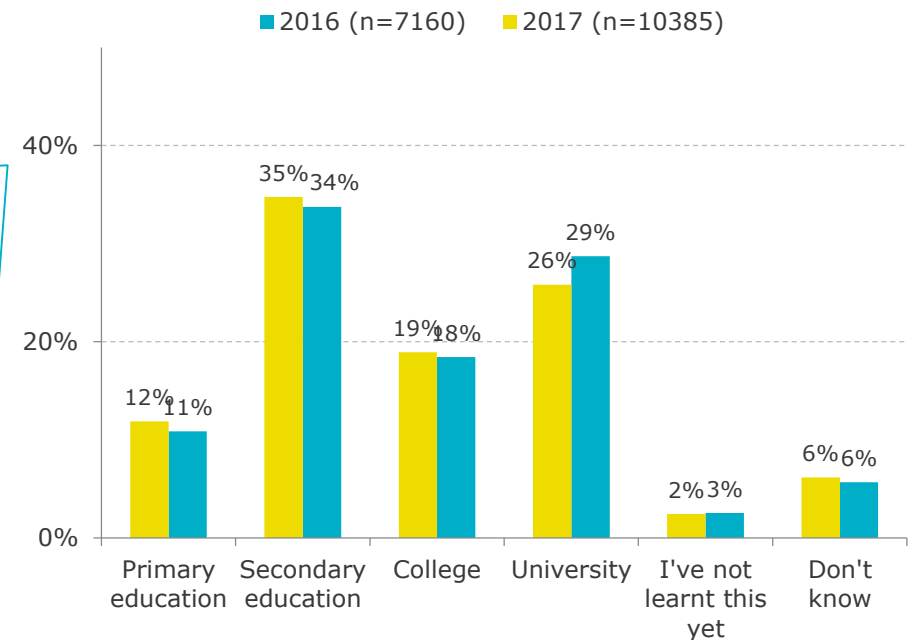


Uncovering trends in further education – 2015/16 and 2016/17

- 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 and this remains constant across the two years of research** (80%, n=919).
- Almost three quarters of FE respondents (71%, n=811) 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=635).
- **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** (73%, n=837) and **over half say they would sacrifice £3000 from their starting salary** to work in a company with these credentials (57%, n=655).
- **Exposure to teaching on the the most overtly sustainability-focused skills is reported as lowest by FE respondents**, for example 29% (n=310) say they have experienced teaching on 'understanding how human activity is affecting nature' and 30% (n=322) say they have experienced teaching on 'looking at global problems from the perspective of people from around the world'. There are no significant changes across the two years of research.

New insight further and higher education – 2015/16 and 2016/17

- 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 think and act the most to help the environment and other people in both years of the research** (43%, n=484 FE respondents and 35%, n=3565 HE respondents). University is reported as being the strongest influence for around a quarter of HE respondents (26%, n=2646).
- 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 (31%, n=3179) however this is a significant decrease compared to 2015/16 responses (35%, n=2480). 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 however again this is a decrease compared to 2015/16 responses (38%, n=446 2016/17 and 43%, n=429 2015/16).
- **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, 72% (n=817) FE respondents say climate change was covered during their time in secondary school and 73% (n=7449) 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.



HE Respondents: 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 six years of previous research and continues to track changes in demand amongst students across the UK. In 2016 the research was updated to include new areas of questioning on student experiences of learning about key topics encompassed by sustainability, as well as understanding in better detail their experiences of accumulating skills that can contribute to sustainability. This was repeated in 2017 and this report shows the results across the 2 surveys.

A national online survey was completed in October 2017 by students across the UK. Whilst in previous years the research has been focused on students in higher education, as in 2016 this year's survey was also distributed to students studying at further education institutions. Over 12000 respondents completed the survey in 2017, 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. Where significant differences exist between the two years of data, these are show with the following symbol: 

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

Example of 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

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.

Sustainability skills

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

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

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

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

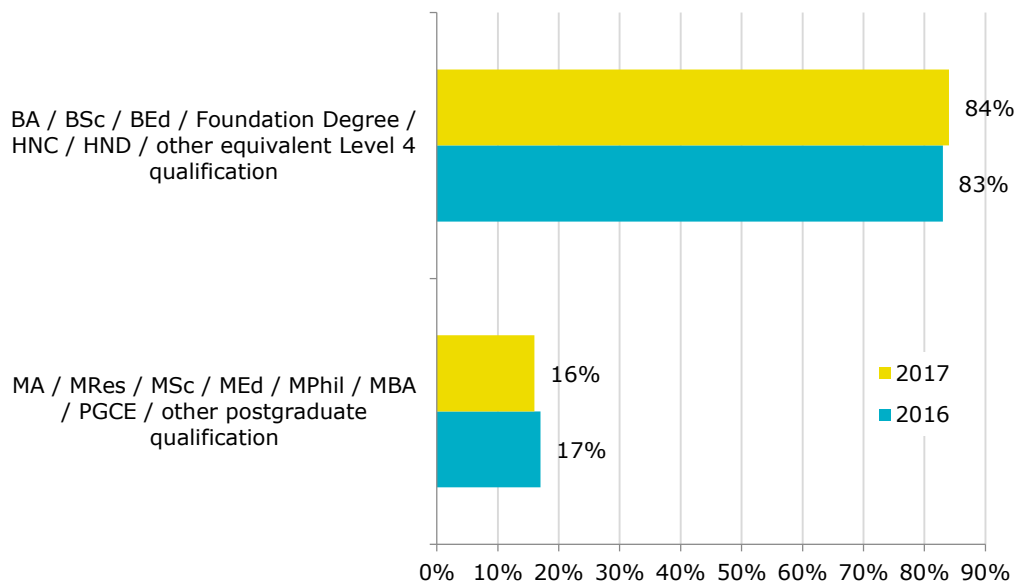
Looking at a problem using information from different subjects or disciplines

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

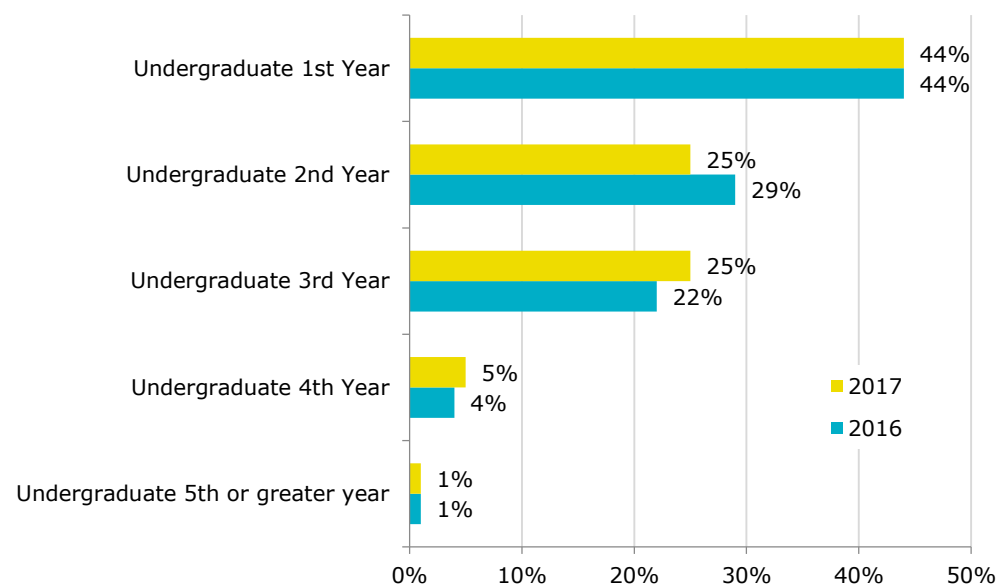
2. The respondents

Respondent demographics

Level of study

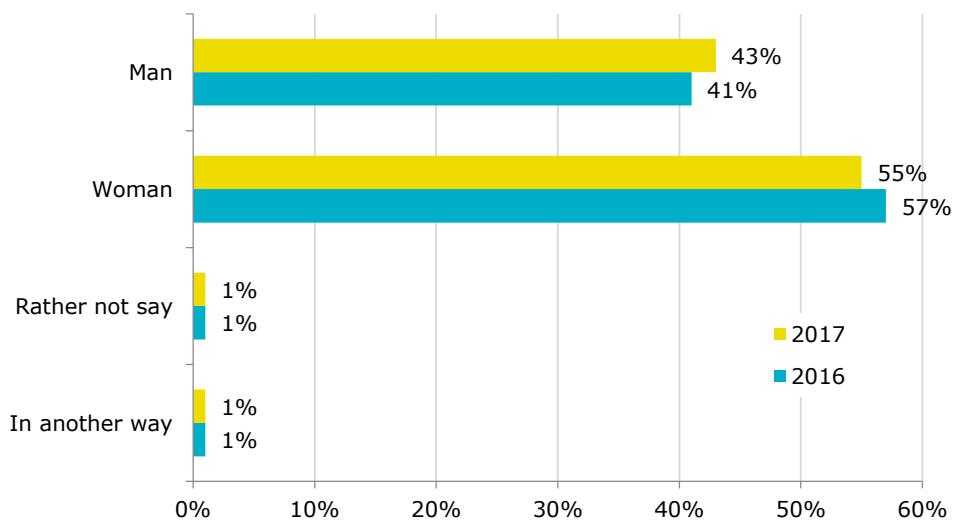


Year of study (Undergraduates)

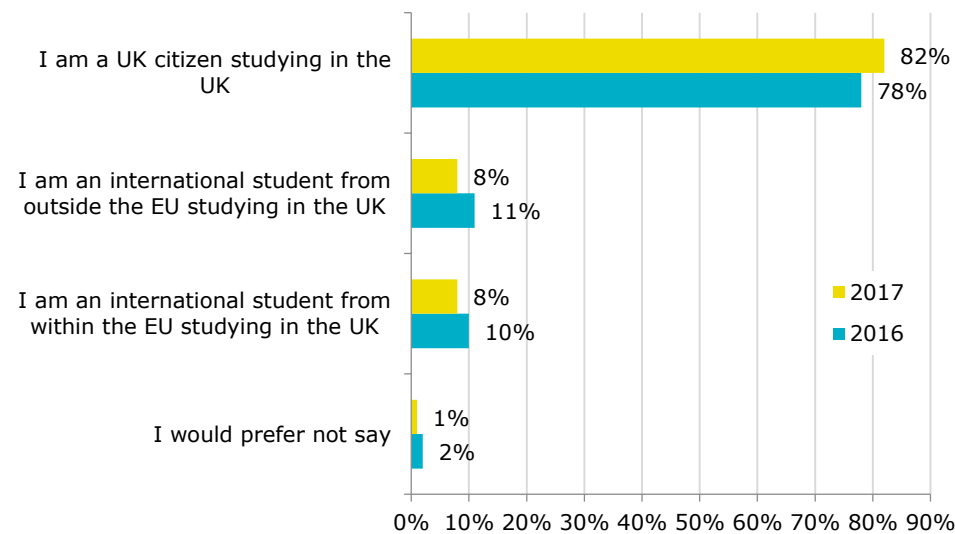


Higher education

Gender

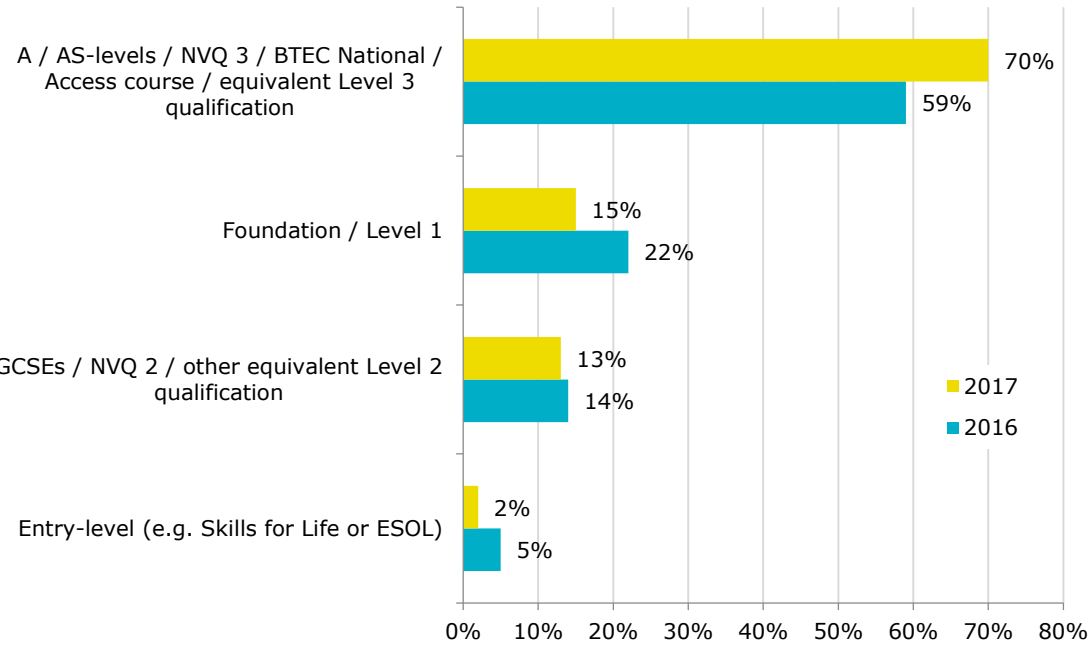


Nationality

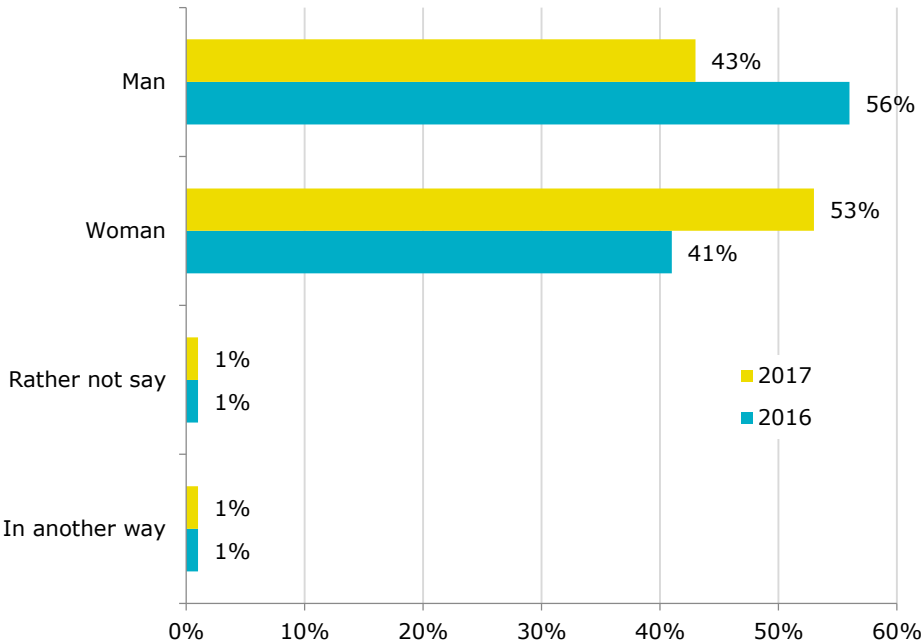


Respondent demographics

Level of study

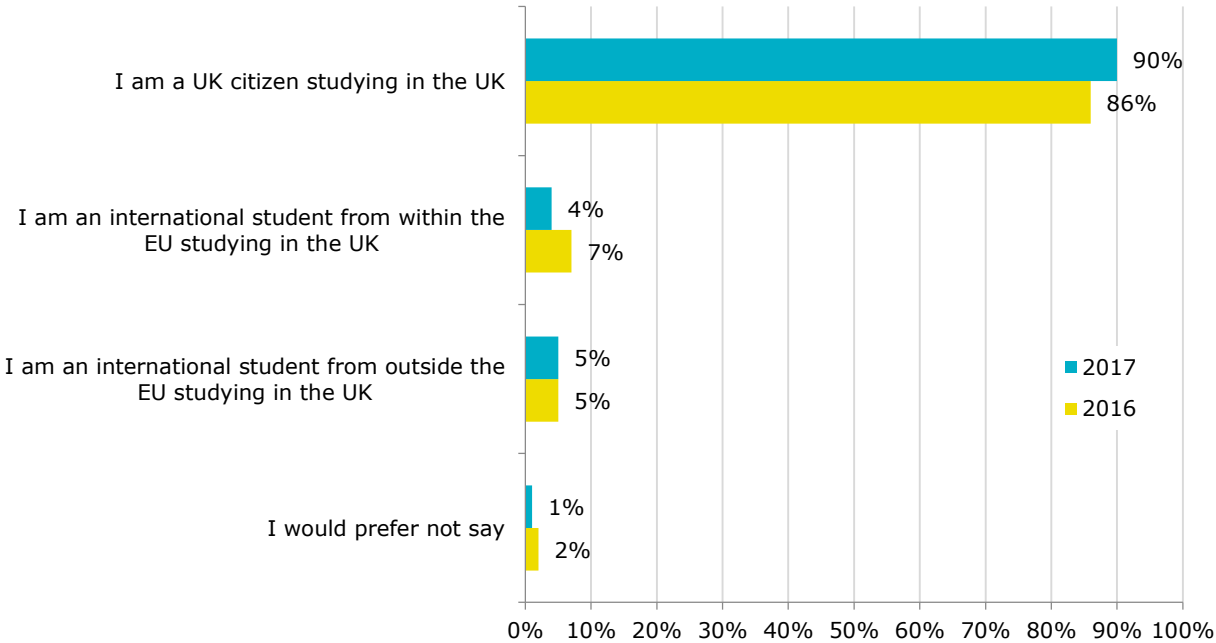


Gender



Further education

Nationality

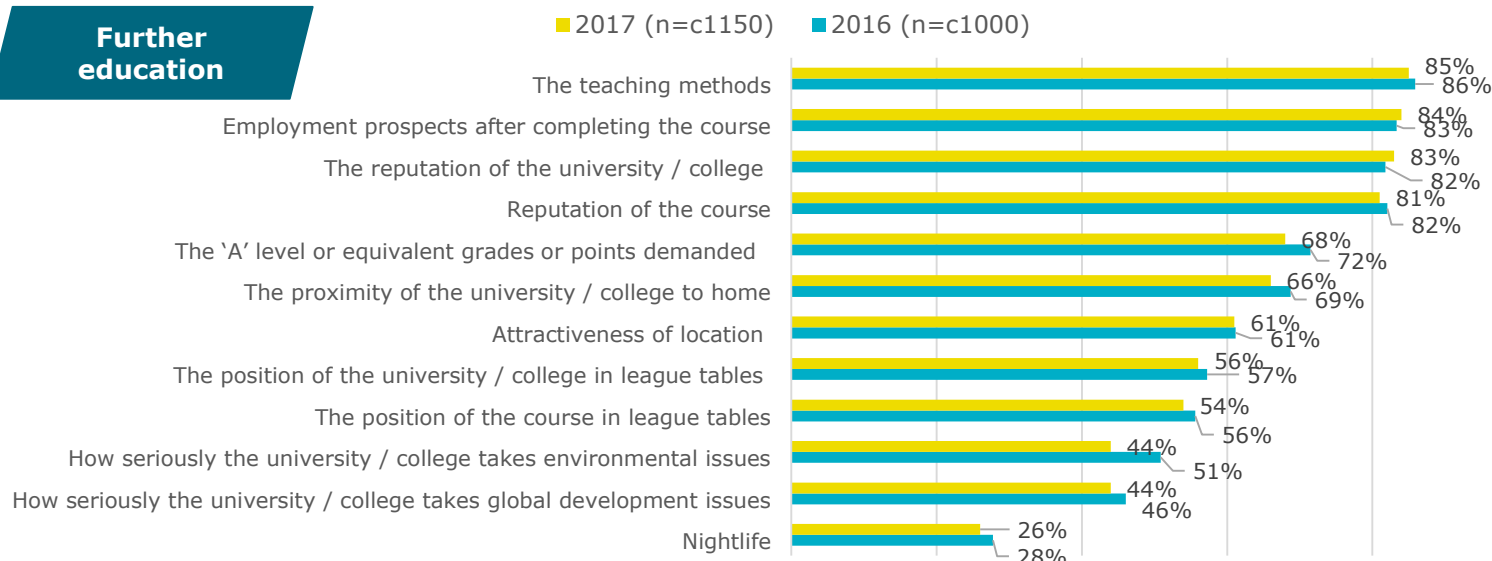


3. Expectations for teaching and learning for sustainability

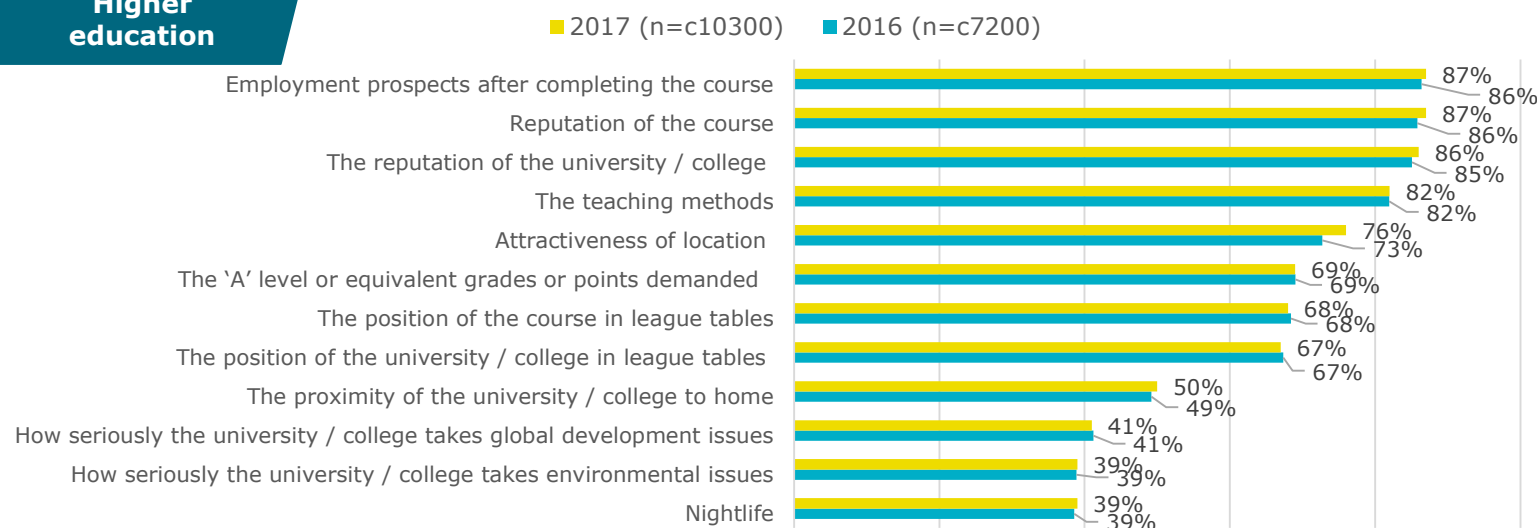
Important factors influencing choice over place of study?

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, over a third (39%, n=4007) of HE respondents and 44% of FE (n=507) respondents were influenced by the action their place of study takes on environmental issues. Around 2 in 5 respondents report they are motivated by how seriously their university or college takes global development issues, (41% (n=4253) HE students and 44% (n=502) FE respondents) said this.

Further education



Higher education



Differences by respondent characteristics (2016/17)

- FE respondents are more likely to report being motivated by how seriously their place of study takes environmental issues compared to HE respondents (44% (n=507) compared with 39% (n=4007) ranking as important).
- HE respondents are slightly more likely to report employment prospects as an important influence on their choice over where to study than FE respondents (87% (n=8978) compared with 84% (n=965)).
- 1st year undergraduates in HE are more likely to say they were influenced by future employment prospects than undergraduate 4th years (88% (n=3315) compared with 83% (n=383)).
- 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 (88%, n=538 compared with 78%, n=405).
- HE respondents who are women are more likely to say they are influenced by teaching methods than male HE respondents (86%, n=4846 compared with 78%, n=3440).
- 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 (72%, n=5673 compared with 66%, n=4447).
- 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. 76%, n=1301 compared with 65%, n=5509 UK HE respondents).

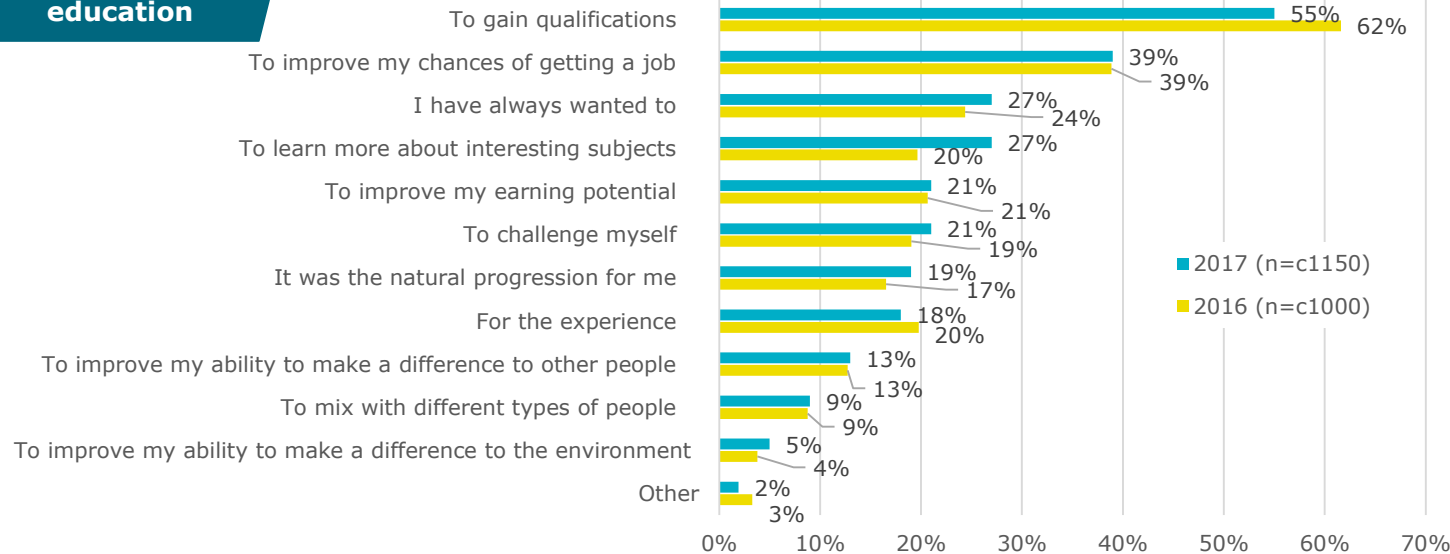
Q. How important were the following when choosing which college or university to apply to?

Weighted base: (In brackets) Balance: No response

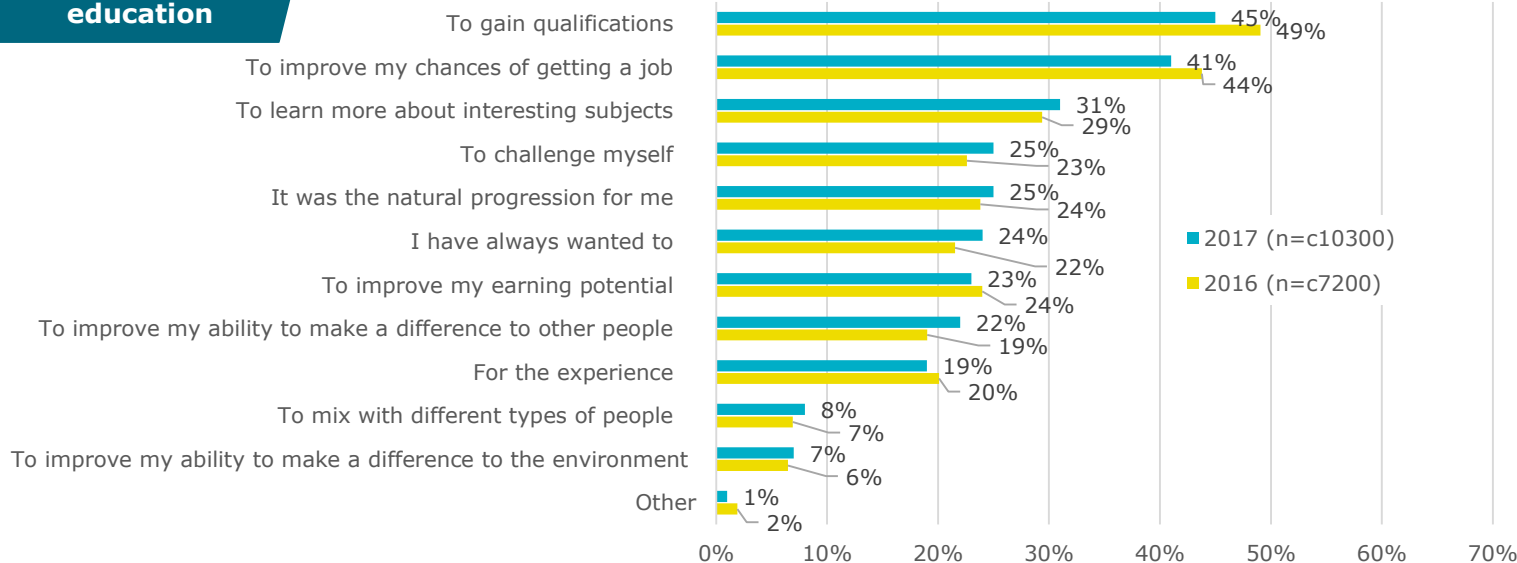
What influences choice of subject or course?

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. 55% FE respondents (n=661)) and to improve their chances of getting a job (e.g. 41% higher education respondents (n=4410)). 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 (e.g. 22% HE respondents (n=2317) say the main reason they chose their course was to improve their ability to make a difference to other people).

Further education



Higher education



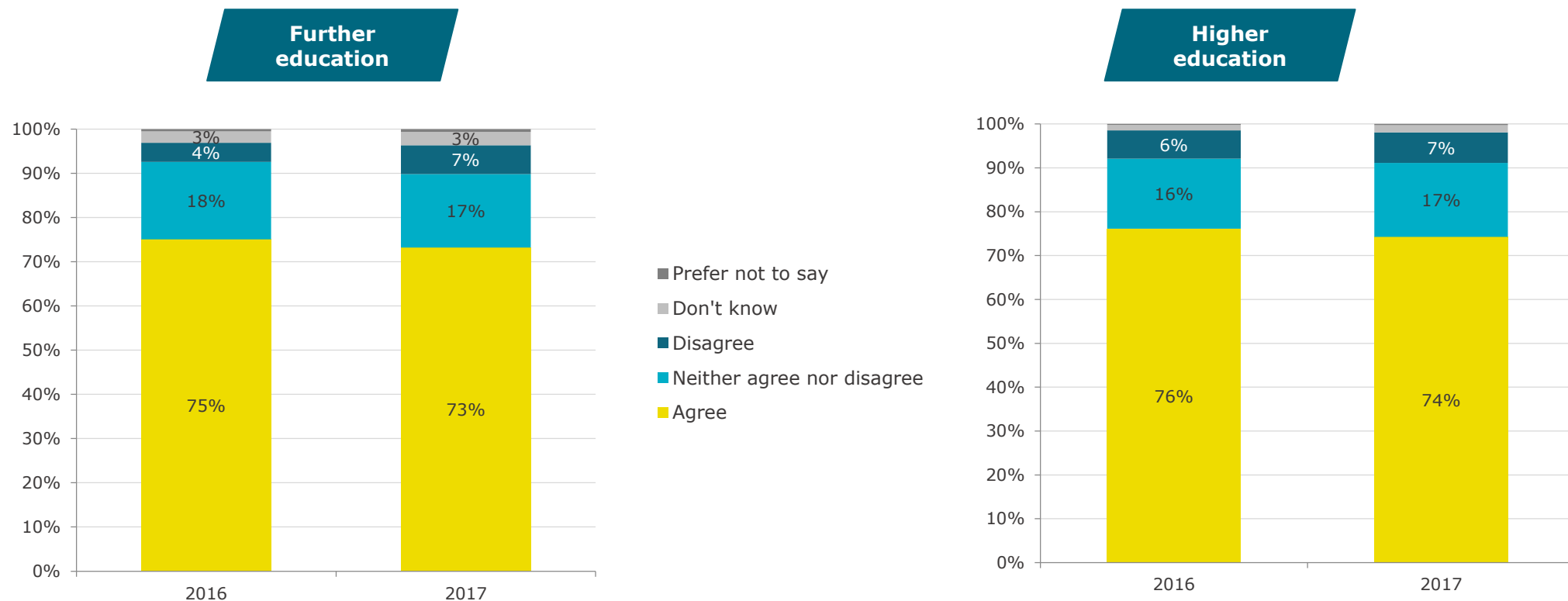
Differences by respondent characteristics (2016/17)

- FE respondents are more likely to report being motivated by the opportunity to gain qualifications than HE respondents (55% (n=661) compared with 45% (n=4846)).
- 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 (22% (n=2317) compared with 13% (n=156)).
- HE respondents are also more likely to report being motivated by the opportunity to improve their ability to make a difference to the environment (7% (n=748) compared with 5% of FE respondents (n=64)).
- 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 (25%, n=142 compared with 16%, n=100).
- Male FE respondents are also more motivated in choosing their course by improving their chances of getting a job than female FE students (44%, n=249 compared with 34%, n=210).
- HE respondents who are men are more likely to be taking their course to improve their earning potential than women HE respondents (26%, n=1252 compared with 20%, n=1139).
- 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 (25%, n=1403 compared with 18%, n=865).

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?

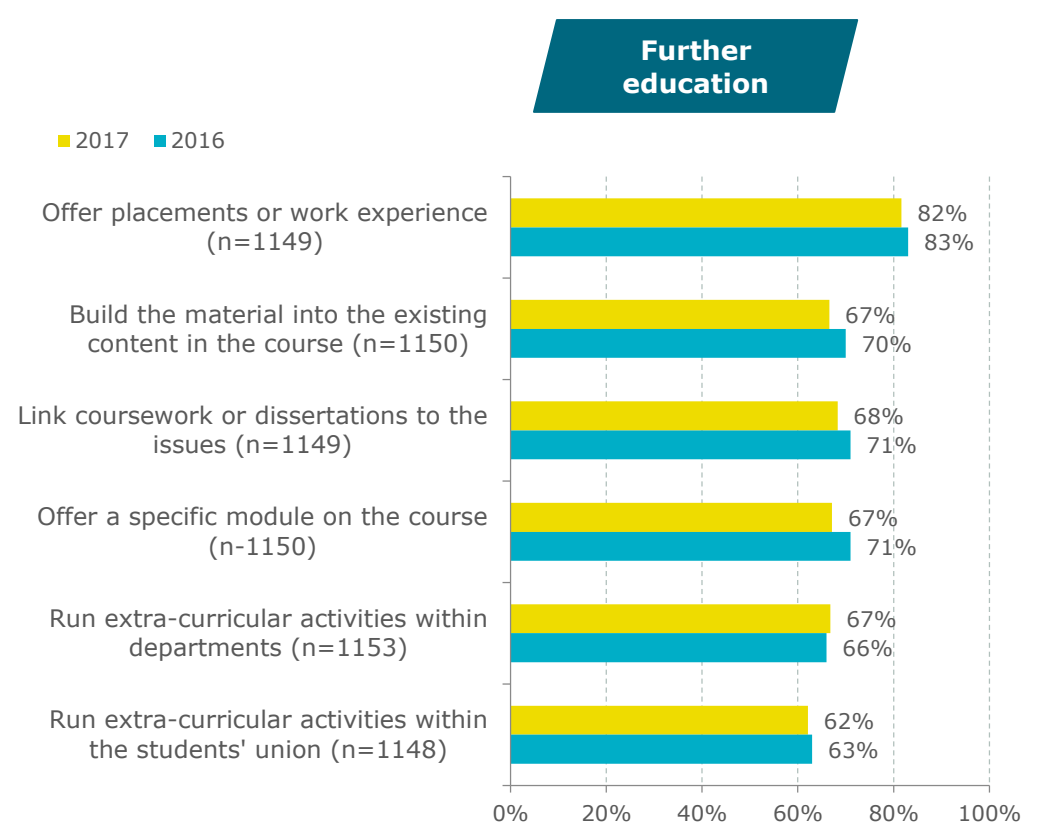
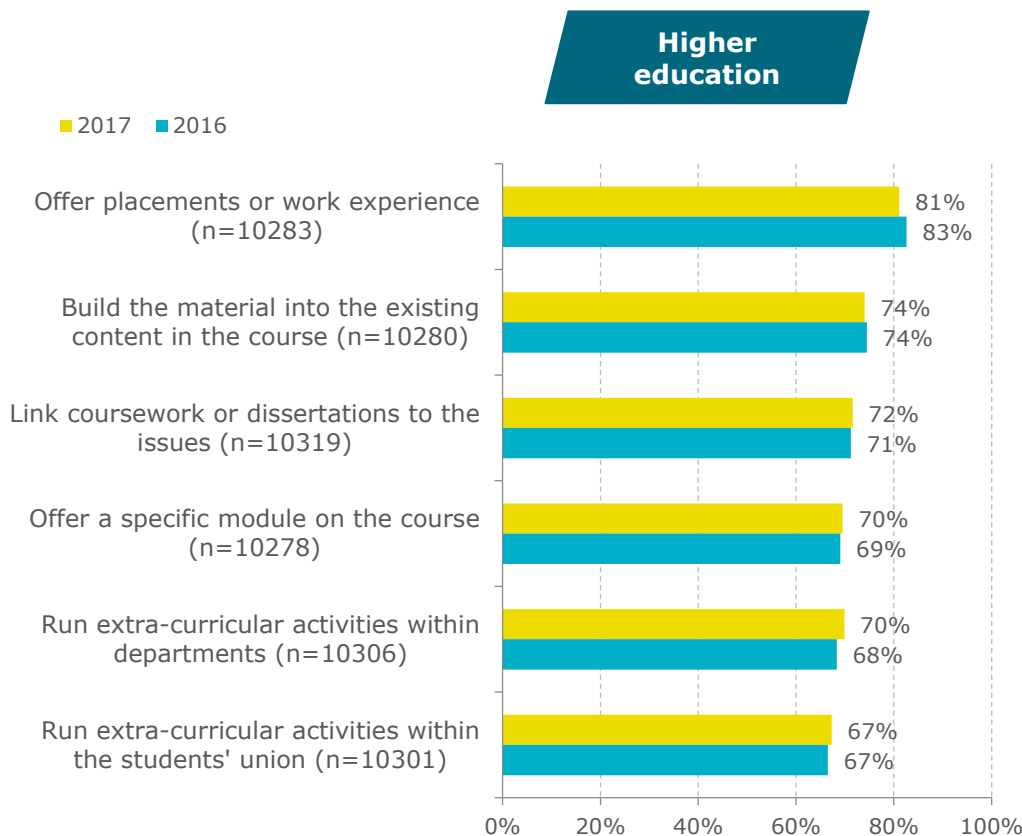


Overall, respondents in FE and HE agree that universities and colleges should be obliged to develop students' social and environmental skills as part of the courses they offer. In both FE and HE, three quarters agree (e.g. 73% FE respondents (n=869) and 74% HE respondents (n=7909)).

Differences by respondent characteristics (2016/17)

- 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. 82% (n=741) non-EU respondents agreed compared to 73% (n=2578) UK respondents).
- No significant differences were seen from responses from FE students.

Relevance of sustainability being 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. 81% of HE and 82% of FE respondents (n=8340 and n=844) respectively).

Building material into existing course content (74% HE (n=7608) and 67% (n=765) FE saw this method as relevant) and linking to coursework and dissertations (72% HE (n=7387) and 68% (n=784) FE) were also seen as relevant methods of including skills and knowledge for sustainability.

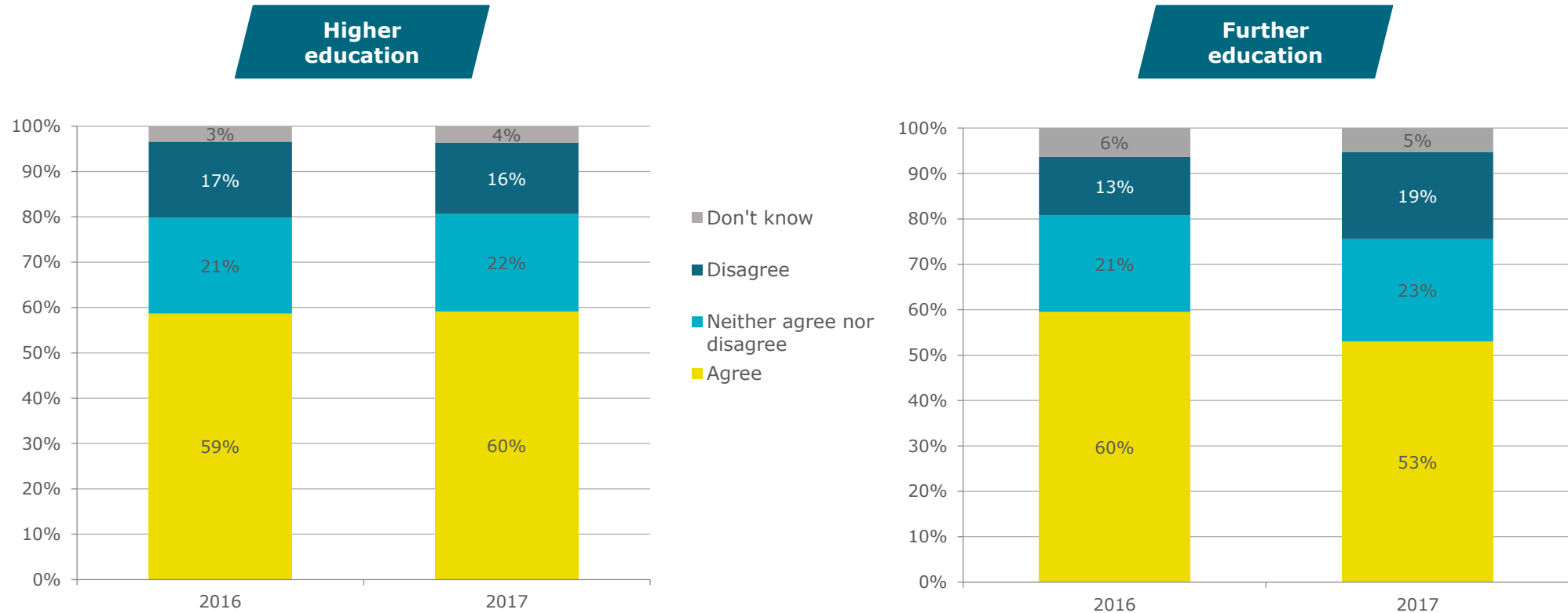
Differences by respondent characteristics (2016/17)

- Within HE, there were no significant differences in terms of preferences for learning about sustainability according to year of study.
- HE women respondents (85% (n=4778)) are more likely to report that offering placements or work experience is relevant compared to HE respondents who are men (77% (n=3661)). 74% of HE women (n=4155) say extra-curricular activities within their department is a relevant way to learn about sustainability compared to 66% (n=3120) 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: 2017 in brackets Balance: No response

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



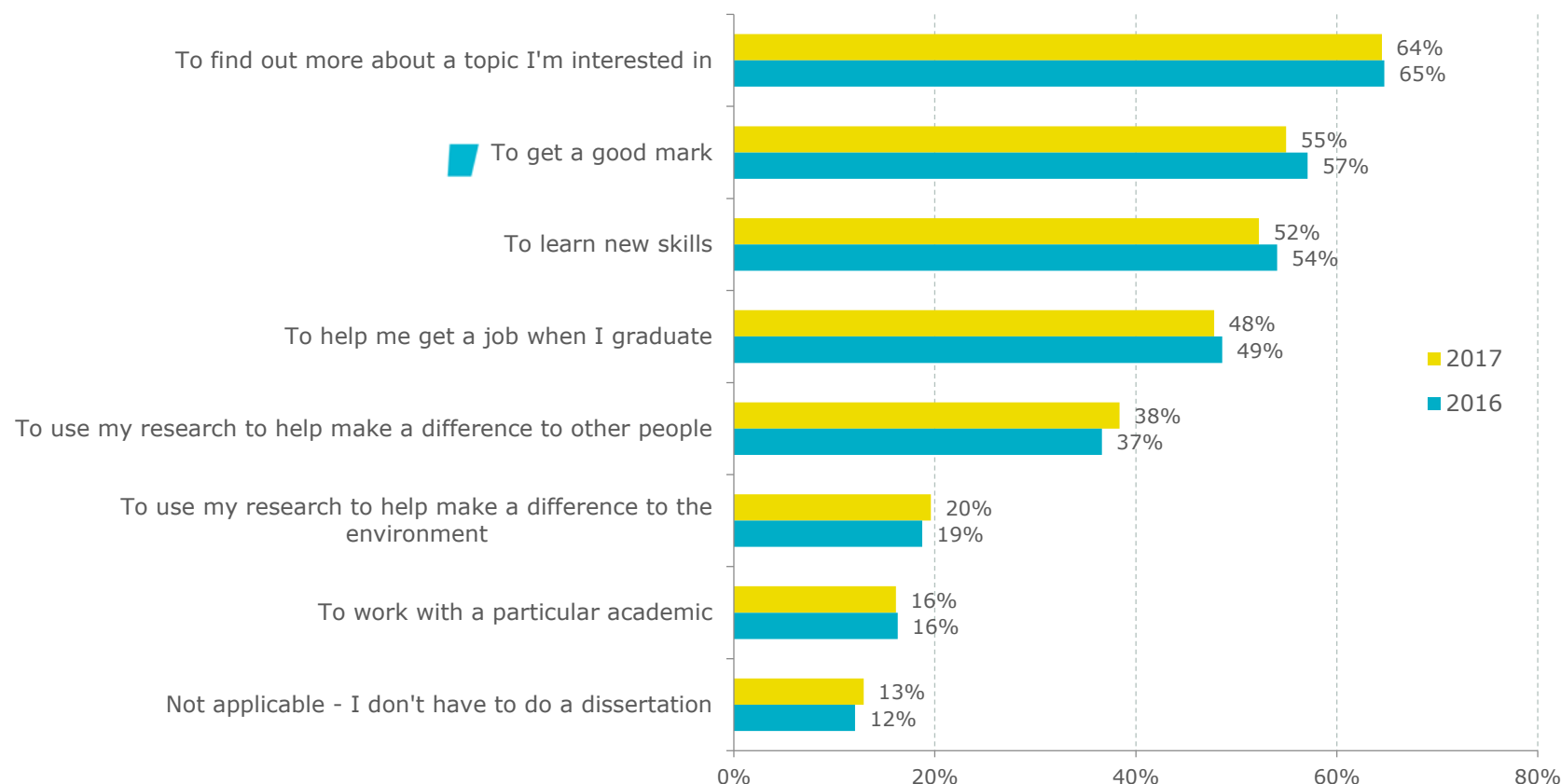
Fewer FE respondents this year felt they were able to contribute to the development of the curriculum for their course (53% in 2017 (n=614)) compared to 60% in 2016 (n=625). There was little change in the proportion of HE respondents this year who said they felt able to influence their curriculum.

Differences by respondent characteristics (2016/17)

- 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 (64%, n=6477) 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 get a good mark (55%, n=5519) and to learn new skills (52%, n=5247), which will in turn help them to get a job when they graduate (48%, n=4799).

Two in five respondents see their dissertation as an opportunity to carry out research that will make a difference to other people (38%, n=3855). 20% reported that their dissertation is an opportunity to complete research that helps make a difference to the environment (n=1970).

Differences by respondent characteristics (2016/17)

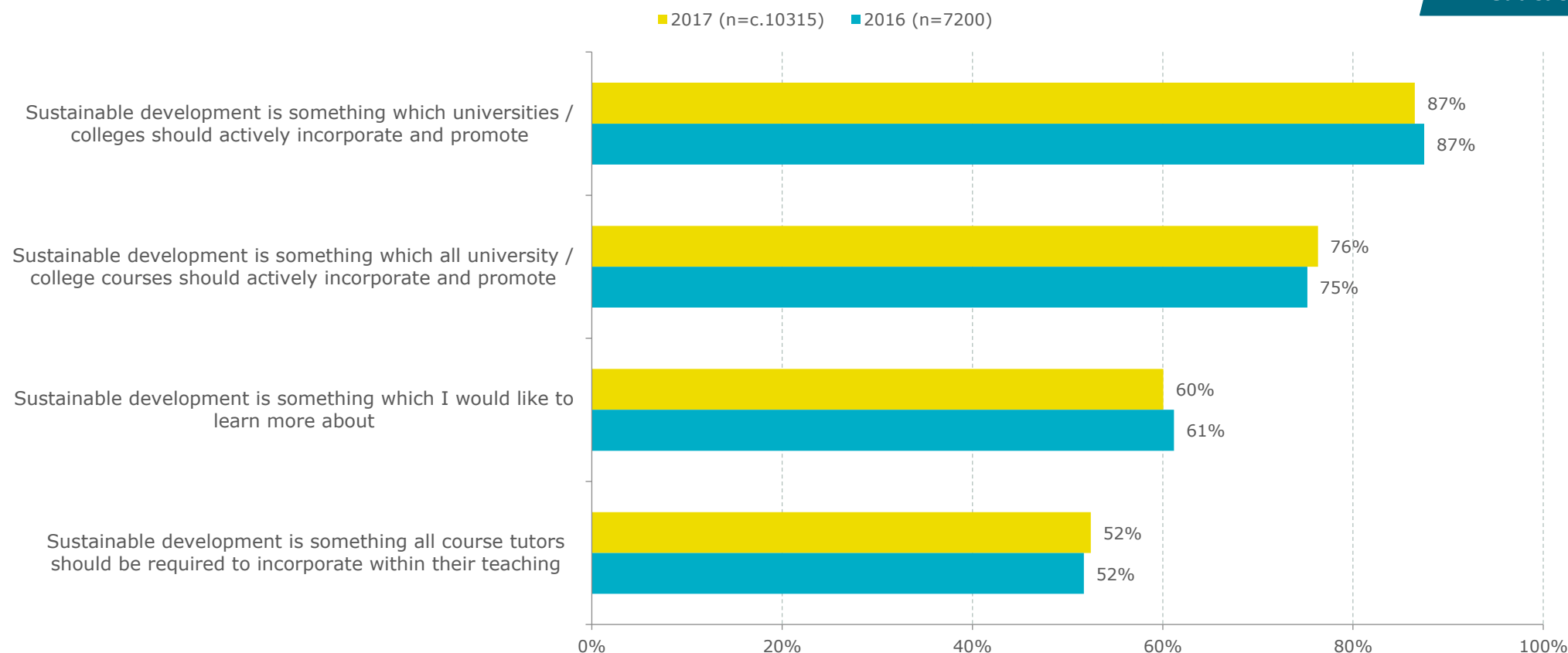
- 3rd year undergraduates are significantly less likely to see completing a dissertation as a way of helping them get a job when they graduate, compared to 1st and 2nd year undergraduates (e.g. 43% (n=949) 3rd years compared with 52% (n=1164) 2nd years and 49% (n=1911) 1st years).
- Compared to 1st year students 2nd and 3rd year undergraduates are more focused on their dissertation being a means to securing a good mark, 58% (n=1307) and 59% (n=1309) respectively, compared to 50% of 1st years selecting this option (n=1944).
- 1st yr students are more likely than 4th yrs to report seeing their dissertation as a means of helping other people (e.g. 37% (n=1455) 1st years want to use their research to help other people compared with 29% (n=134) 4th years).

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

Weighted base: 2017 10046 HE respondents. Balance: No response and those not in HE

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=9205) saying they agree with this statement.

Three quarters (76%, n=8100) 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=5570).

Just under two thirds agree that sustainable development is something they would like to learn more about (60%, n=6375).

Differences by respondent characteristics (2016/17)

- International respondents from outside of the EU are more likely to agree with all statements compared to UK respondents and international respondents from within the EU. EU international respondents are also more likely to agree with all statements compared to 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. 86% (n=7563) UK respondents agree compared with 88% (n=799) 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=5069) UK respondents agree compared with 67% (n=572) EU respondents and 73% (n=664) non-EU respondents).
- Women respondents are more likely than men to agree that they would like to learn more about sustainable development (at a 95% confidence level) with 63% (n=3562) agreeing compared with 57% (n=2698) men.

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

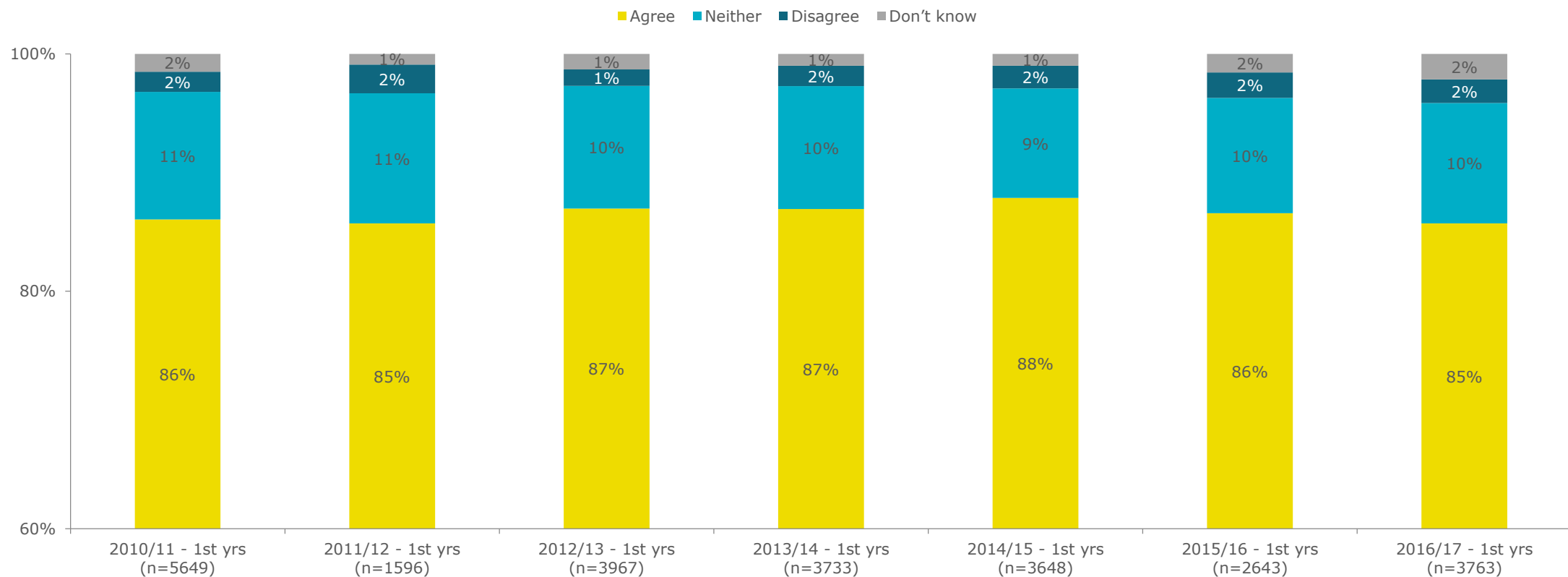
What expectations do students have for their university?

As mentioned previously, almost 90% agree that sustainable development is something they think their university or college should actively incorporate and promote.

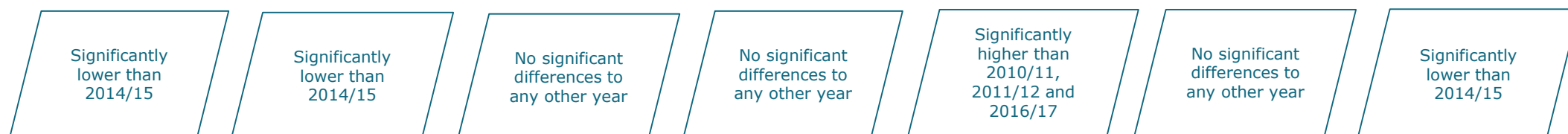
The chart below focuses specifically on 1st year student responses and shows a continuing demand for action on sustainable development by their institution throughout the seven years of research. However, there are small but significant variations in agreement, as identified for each research year below in the chart.

Higher
education

1st year
respondents



Respondent agreement that sustainable development is something that universities and colleges should actively incorporate and promote...



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

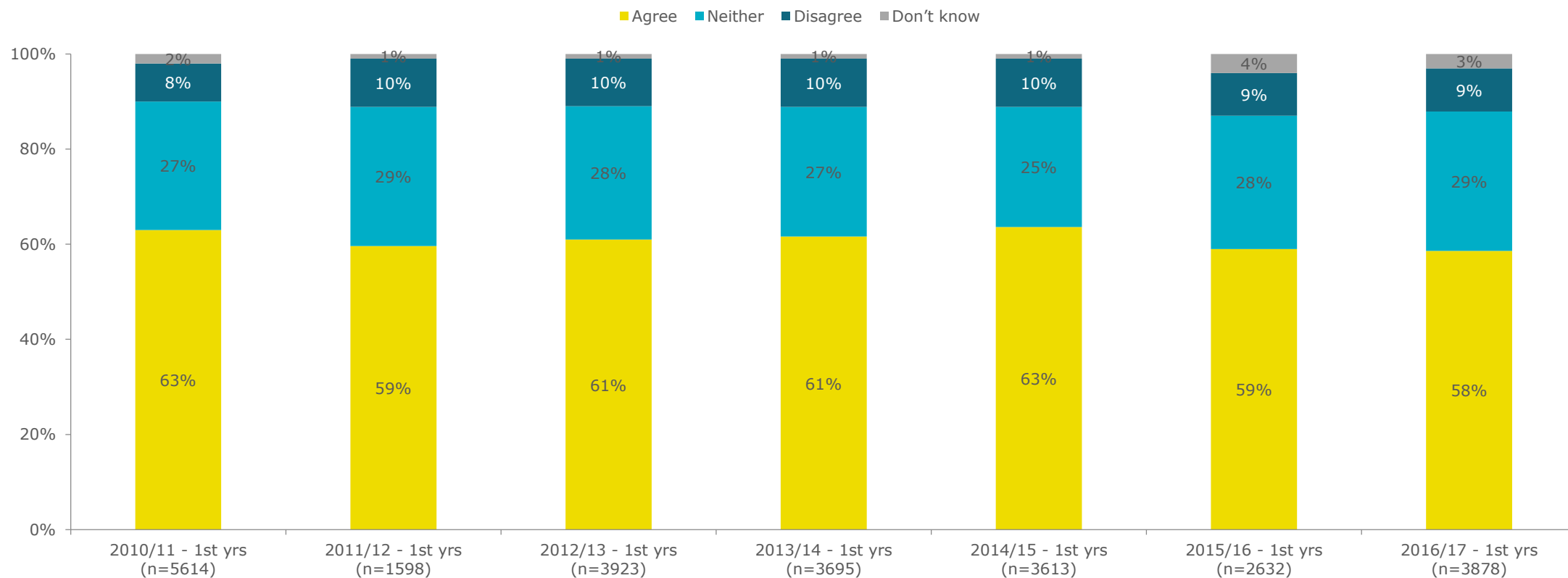
Do students want to learn more about sustainability?

As mentioned previously, just under two thirds agree that sustainable development is something they would like to learn more about (60%, n=6375).

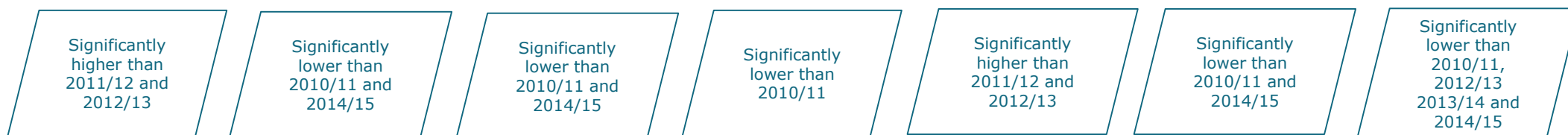
The chart below focuses specifically on 1st year student responses and shows a relatively consistent demand for learning about sustainable development throughout the seven years of research. However, there are small but significant variations in agreement that sustainable development is something that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

Higher
education

1st year
respondents



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

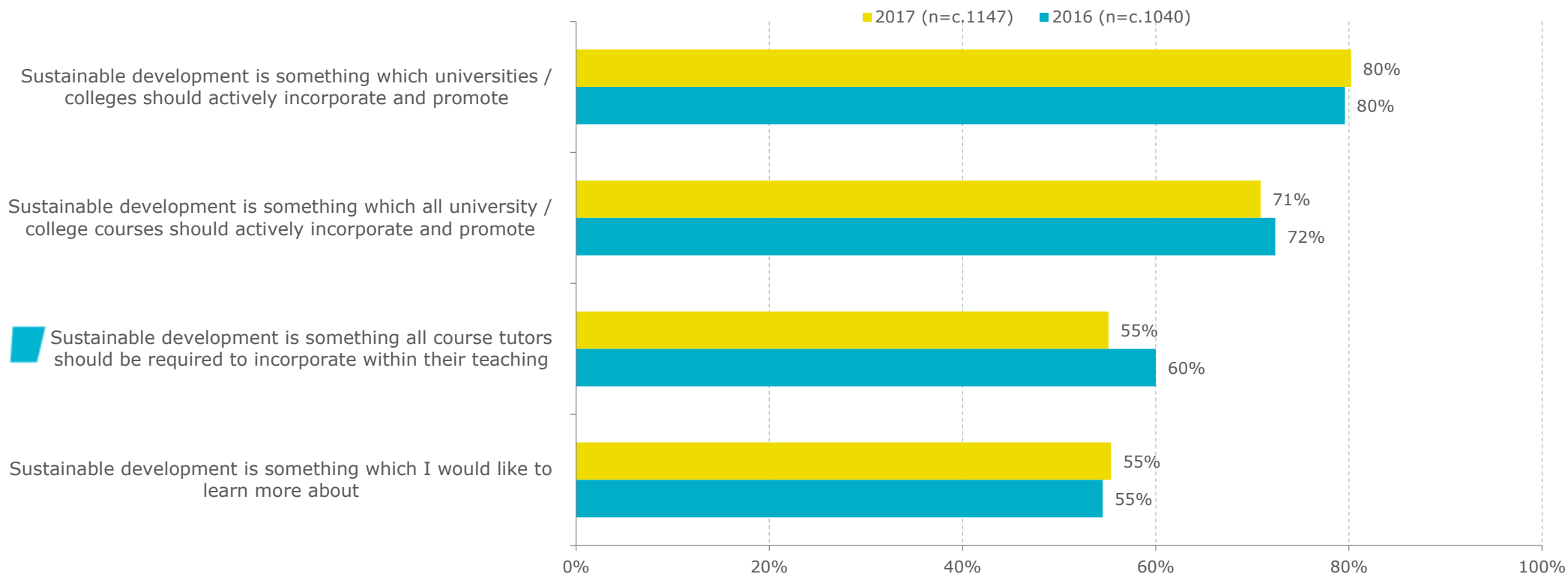


Q: Taking a definition of sustainable development as: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". To what extent, if at all, would you say that you personally agree with the following statements?

Weighted base: In brackets. Balance: No response

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=949).

Almost three quarters of FE respondents (71%, n=836) also agree that all courses should actively incorporate and promote sustainable development. Just over half agree that course tutors should be required to incorporate sustainability within their teaching (55%, n=651), this is a significant fall (at the 95% confidence level) over the 2016 survey (60%, n=1254).

Just over half of respondents say that sustainable development is something they would like to learn more about (55%, n=653). 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 (2016/17)

- 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 (60%, n=366 compared with 49%, n=272).

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

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 350 completed 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 own and their families future. 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	97	72
To understand issues better	71	53
So I can take action in this area/make a difference	64	86
It's important to know about	41	70
So I'm aware of my own / others impact on environment	36	25
I don't know what it means	21	23
It's useful / interesting in general	20	21

"It is important that we do all we can to sustain our environment and ensure the next generation have abundant resources"
Woman HE respondent, UK, 3rd year undergraduate

"It's the future priority of the world we live in."
Man HE respondent, UK, postgraduate

"Because it is important for moving forward in the world. I would like to further my understanding."
Woman HE respondent, UK, 2nd year undergraduate

"I want everything I do to go even beyond sustainable as to be positively impacting the future for generations to come"
Woman HE respondent, UK, 2nd year undergraduate

"By knowing about this subject, not only me but other students will consider how to work and consume products without putting on risk the environment and our future generation."
Woman HE respondent, EU, 1st year undergraduate

"Because I don't understand it as much as I'd like to"
Man FE respondent UK

"Because I'm not 100% sure what it is, but as an animal management student, I care about the environment"
Female FE respondent UK

"It's a unique opportunity to learn about how to make do with what we have for those that wish to follow our foot steps. It will also increase perception into world topics that we could make a difference for."
Woman FE respondent, Non EU

"With aspirations to study architecture I believe that it would be crucial for me to learn about sustainable development so it can be applied throughout my career."
Man FE respondent, UK

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 350 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.

	Further education	Higher education
Not sure / Don't know	131	122
More awareness / information generally on sustainability and what the college / university is doing	54	40
Incorporate it into the course/student life	82	67
More activities and interventions which encourage people to be more environmentally friendly / take action	60	94
Changes to how resources (including funding) are used and prioritised	23	27

"I feel that the university should use more technology such as solar panels, wind turbines to generate electricity so that it is better for the environment but also saving money at the same time."

Woman UK HE 1st year undergraduate

"We need recycling bins. I know that's very basic but we just got new bins and they don't have a recycling compartment. Baby steps. That's all it takes, and we're not doing it. Also obviously perhaps a group/ organisation dedicated to sustainable development where likeminded people can go and discuss ideas."

Man FE respondent, UK

"Guest lecturers and events to come and inspire students and show them why it's important such as recycling."

Woman HE respondent, UK, 1st year undergraduate

"Maybe have a business tutor come in every other week for an hour to discuss this topic."

Woman FE respondent, UK

"Lectures on sustainable development, getting involved with businesses and showing how the uni is changing through sustainable development."

Woman UK HE 2nd year undergraduate

"A compulsory module or at least topic within a module that links to the overall course."

Man HE respondent, UK, 2nd year undergraduate

"Putting more funding into the 'green team'."

Woman UK HE 3rd year undergraduate

"Just to embed it into everyday lessons like once a week."

Man FE respondent, UK

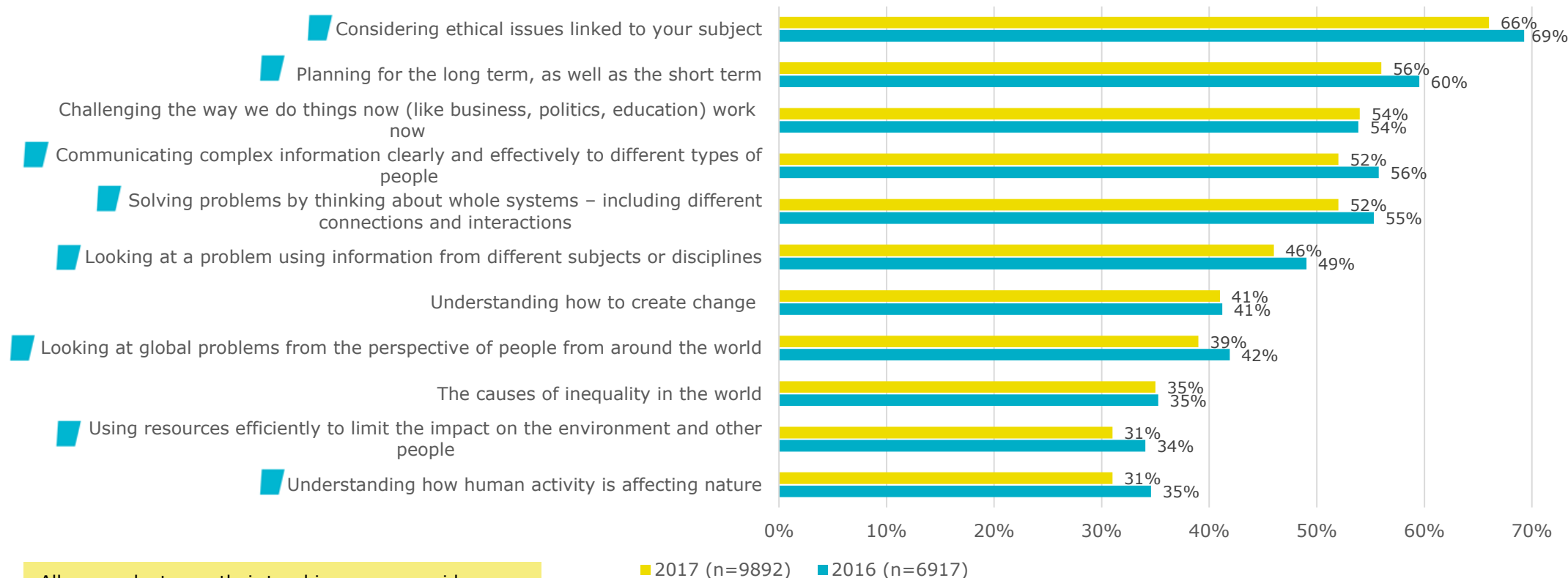
"Creating Awareness among small children for practicing sustainable development as they are the future."

Woman HE respondent, non EU, postgraduate

4. Experiences of sustainability in education

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

Higher education



All respondents say their teaching covers a wide range of skills and knowledge associated with sustainability, though in most cases respondents are less likely to report their teaching has, so far, covered these skills and knowledge compared to 2015/16 respondents. Overall, respondents in HE are significantly more likely than FE respondents to report coverage of these issues, 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.

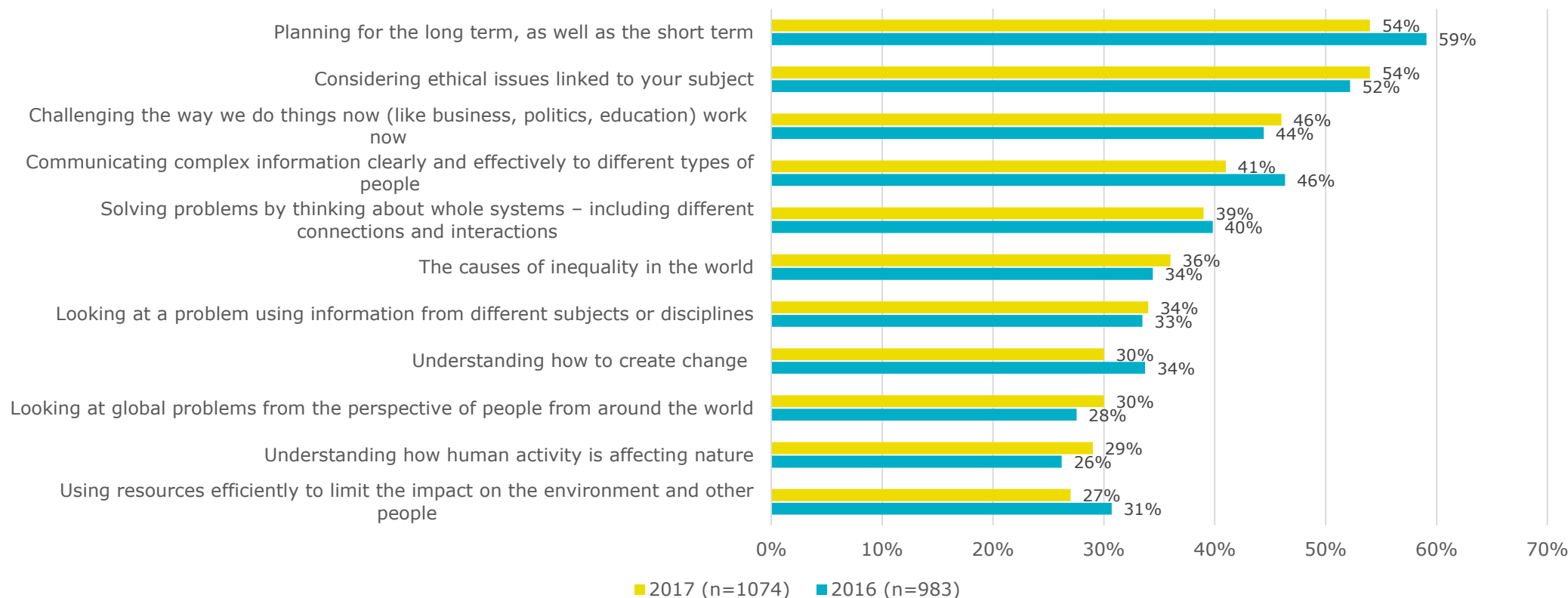
Most commonly, HE and FE respondents report coverage of 'considering the ethical issues linked to their subject' (66%, (n=6554) HE respondents and 54% (n=585) FE respondents) and being 'able to plan for the long term as well as the short term' (56% (n=5520) HE respondents and 54% (n= 579) FE respondents).

Differences by respondent characteristics (2016/17)

- Across the range of skills, HE undergraduate 3rd years are significantly more likely to report coverage of the skills and knowledge for sustainability than HE undergraduate 1st years (e.g. 31% (n=1106) undergraduate 1st 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 44% (n=918) undergraduate 3rd 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. 68%, n=5480 compared with 62%, n=505 EU respondents and 60%, n=508 non-EU respondents).
- Within HE, women respondents are more likely to say their teaching has covered 'considering ethical issues linked to their subject' than men (71%, n=3915 compared to 60%, n=2523). They are also more likely to say 'challenging the way we do things now' has been covered (57%, n=3101 compared with 51%, n=2158).
- HE respondents who are men, are more likely to say their teaching has 'used resources efficiently to limit the impact on the environment and other people' than women HE respondents (33%, n=1403 compared with 28%, n=1560).

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

Further education



All respondents say their teaching covers a wide range of skills and knowledge associated with sustainability. Overall, respondents in HE are significantly more likely than FE respondents to report coverage of these issues, 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.

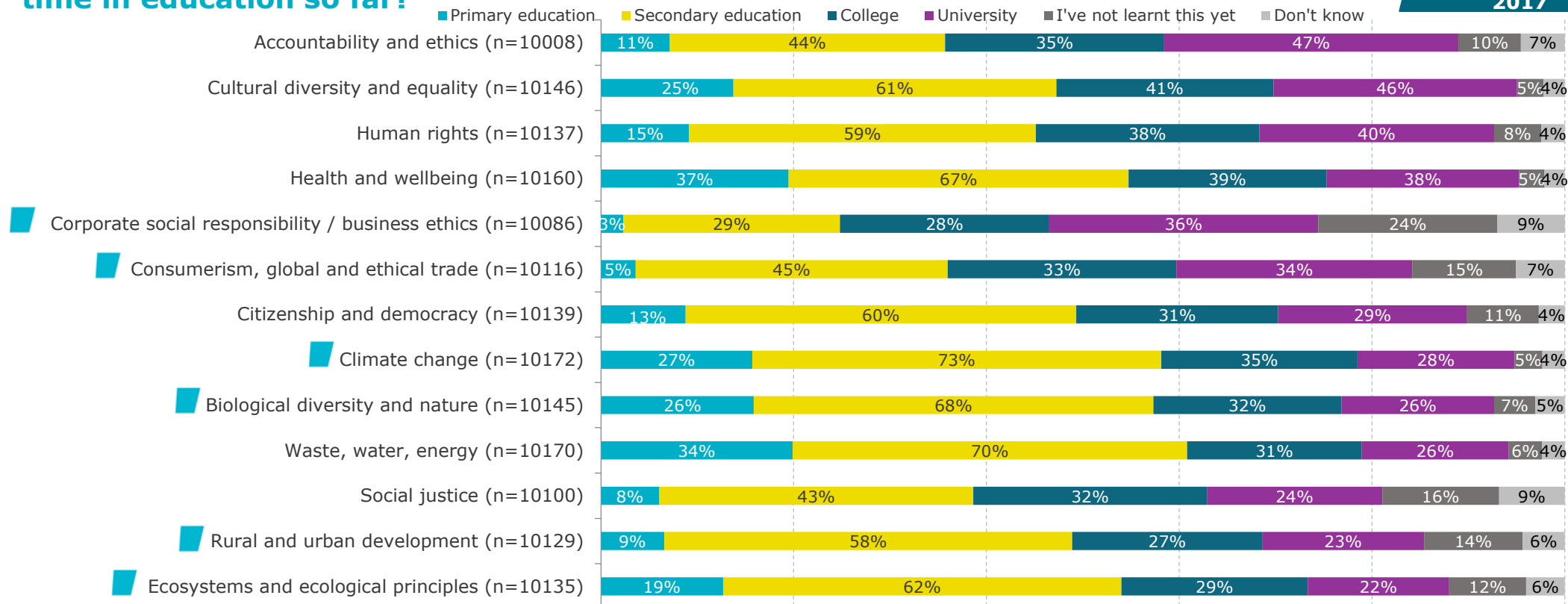
Most commonly, HE and FE respondents report coverage of 'considering the ethical issues linked to their subject' (66%, (n=6554) HE respondents and 54% (n=585) FE respondents) and being 'able to plan for the long term as well as the short term' (56% (n=5520) HE respondents and 54% (n= 579) FE respondents).

Differences by respondent characteristics (2016/17)

- Within FE, women respondents are more likely to say their teaching has covered 'considering ethical issues linked to their subject' than men (59%, n=336 compared to 50%, n=242). They are also more likely to say 'challenging the way we do things now' has been covered 48%, n=271 compared with 44%, n=211).
- Similarly UK FE respondents are more likely to say their teaching has covered 'considering ethical issues' than non UK students (57%, n=540 compared with 42%, n=21 students from within the EU and 38% n= 21 students from outside the EU).

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

Higher education - 2017



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 73% (n=7449) of respondents say climate change was covered at this point. However, it is worth bearing in mind that two fifths of respondents are 1st year undergraduates and therefore will have been exposed to limited teaching at the time of research.

Issues which are reported as having the highest level of coverage during their time at university include accountability and ethics (47%, n=4685) and cultural diversity and equality (46%, n=4636).

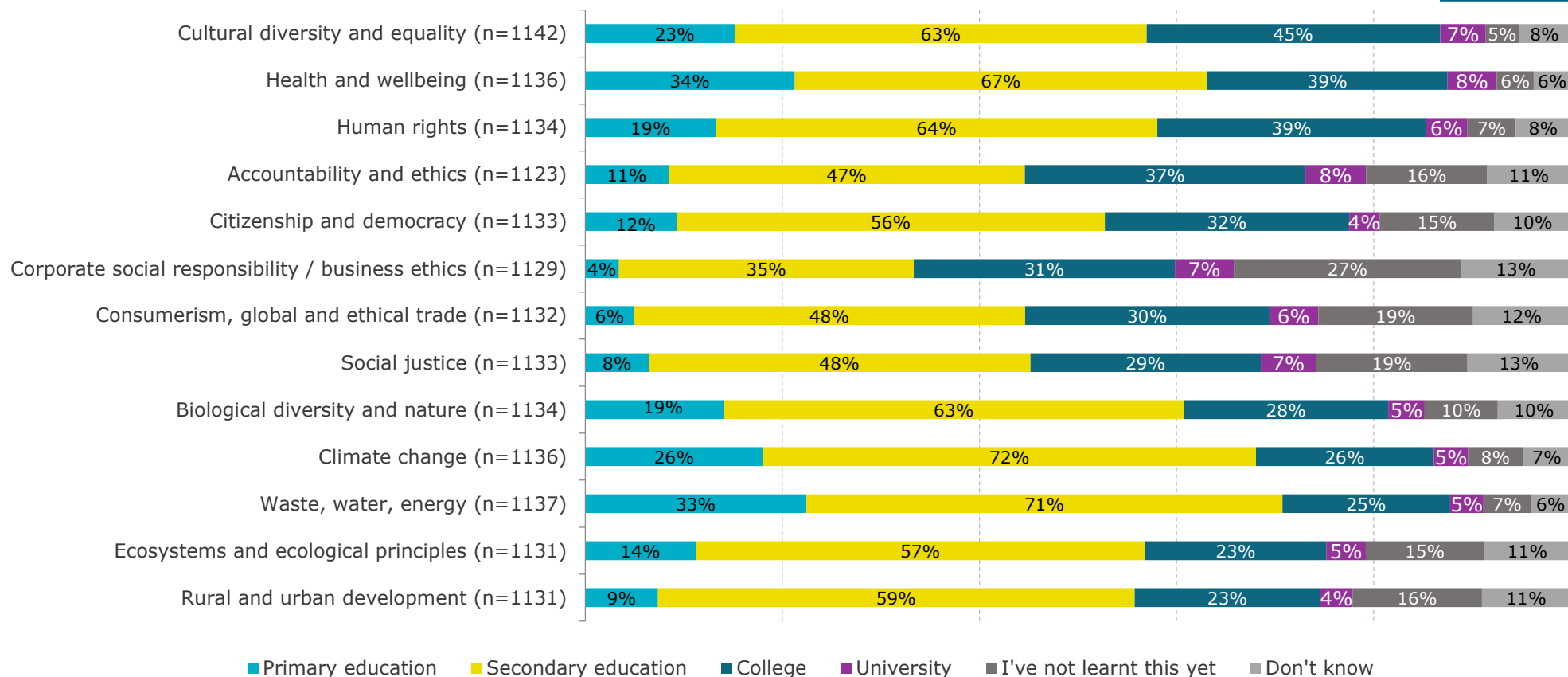
Issues highlighted with a blue symbol show a significant reduction in respondents perceptions of coverage whilst they have been at university between 2015/16 and 2016/17

Differences by respondent characteristics (2016/17)

- There are significant differences according to year of study within the responses provided by HE respondents. For example, 1st year respondents are more likely to state that they experienced teaching on a number of sustainability issues at secondary level, compared with 3rd year respondents who are more likely to indicate coverage during university. For example, 51% (n=1946) 1st years say accountability and ethics was covered during secondary education compared with 40% (n=854) 3rd years, whilst 34% (n=1269) 1st years say this issue has been covered during university compared with 55% (n=1181) 3rd years. Given the short time at university for 1st 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. 25% (n=224) non-EU respondents say corporate social responsibility/business ethics was covered during secondary education compared with 30% (n=2598) UK respondents).

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

Further education - 2017



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, 72% (n=843) say climate change was covered during their time in secondary school, and 71% (n=832) said issues related to waste, water and energy were also covered at this level of education.

In general, between a quarter and 4 in 10 respondents say sustainability related issues have been covered by the teaching during their time in college. For example, 45% (n=529) say cultural diversity and equality has been covered, and 23% (n=263) say ecosystems and ecological principles have been covered.

Differences by respondent characteristics (2016/17)

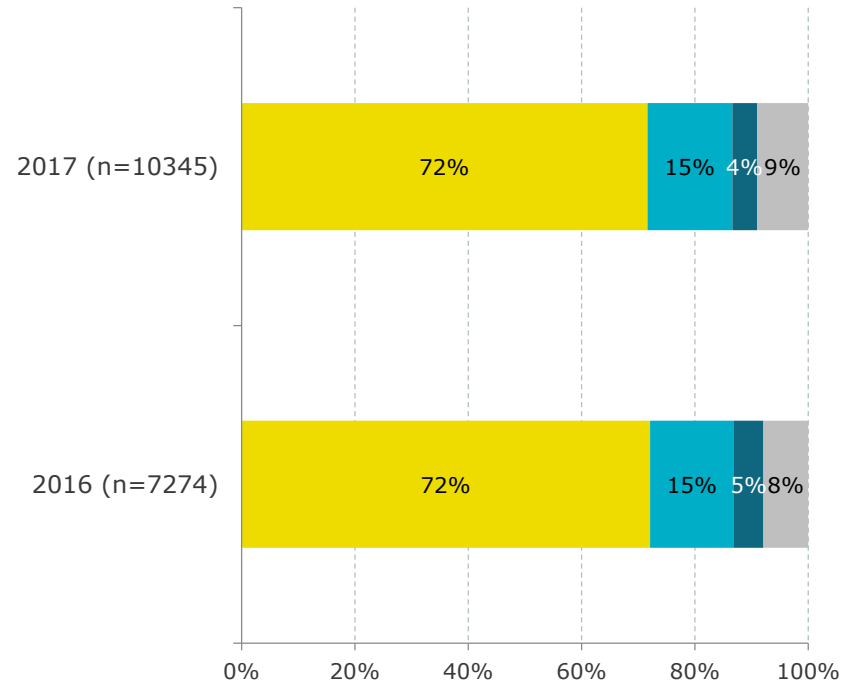
- In some instances, women FE respondents are more likely to state that sustainability issues have been covered during college, whereas FE respondents who are men are more likely to report coverage during secondary education, for example 40% (n=219) FE respondents who are men say corporate social responsibility/business ethics was covered in secondary education, whereas 31% (n=184) women respondents say this was covered. For the same issue, 35% (n=192) FE men respondents say their teaching at college has covered social justice, whereas 29% (n=172) women FE respondents say they have learnt about the issue at this level of education.

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

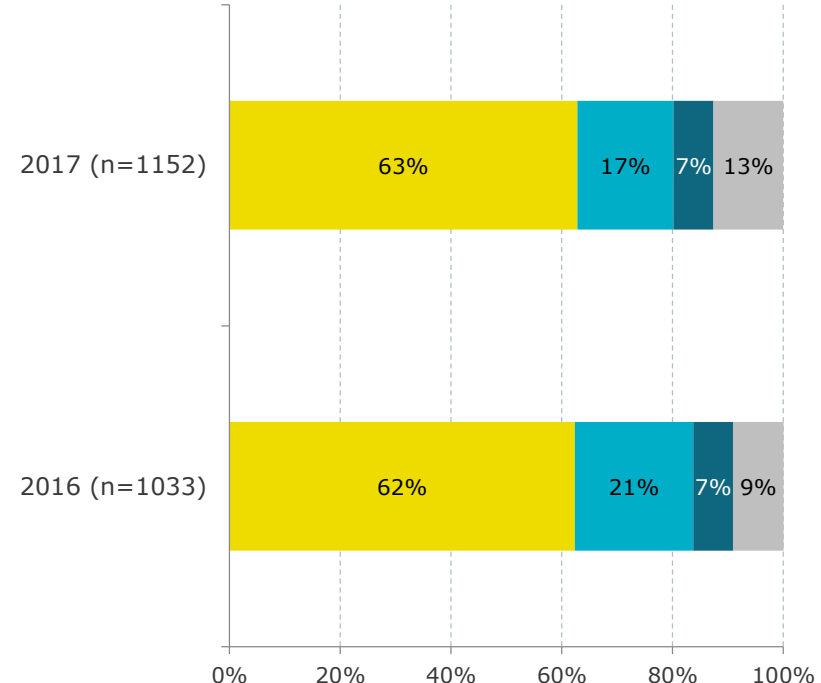
“My university/college takes action to limit the negative impact it has on the environment and society”

Higher education

Further education



Agree
Neither
Disagree
Don't know



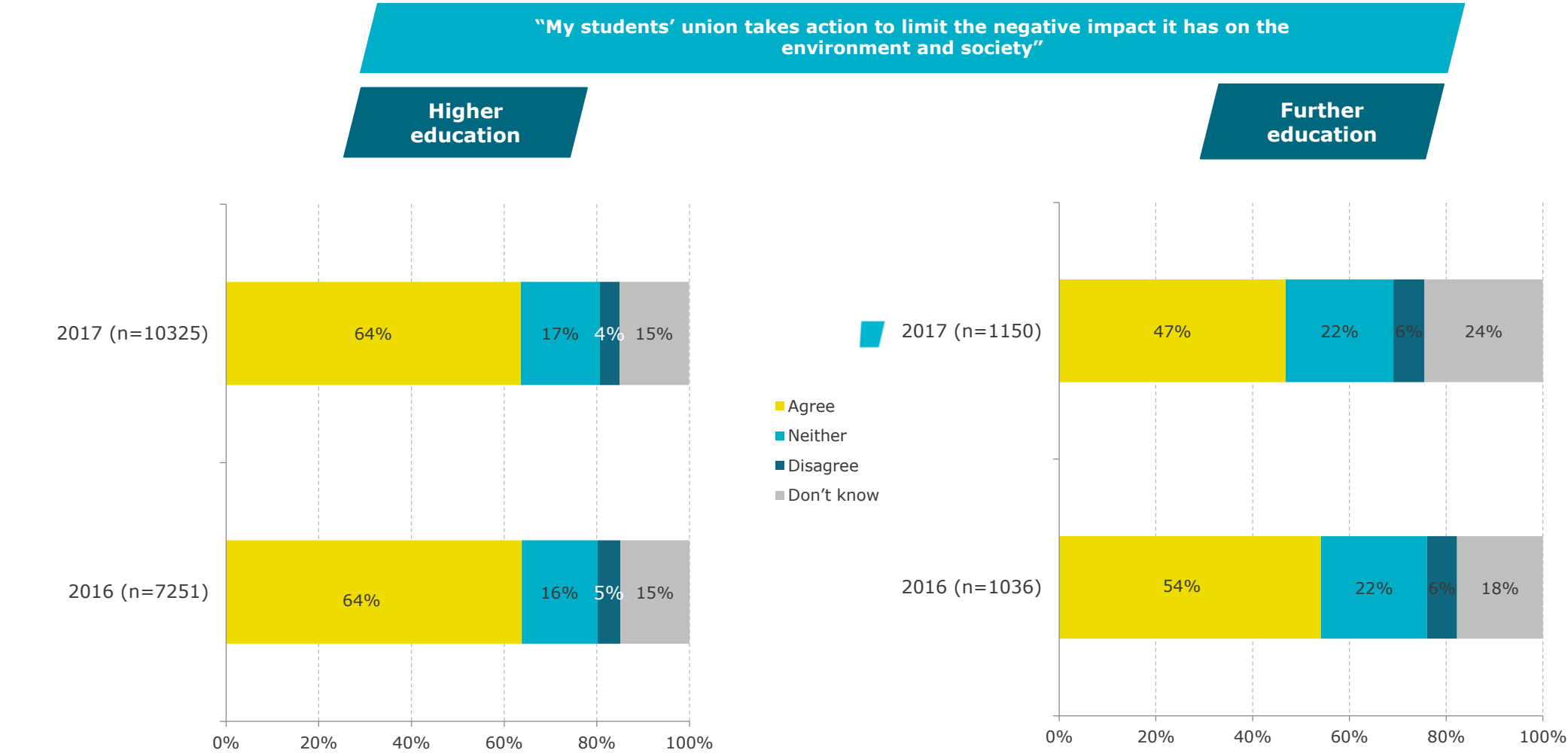
Overall, respondents have a positive view of their institutions and students' unions in terms of the action they take to reduce negative impacts on the environment and society.

Almost three quarters of HE respondents (72%, n=7409) agree that their university is taking action in this area, however around 2 in 3 FE respondents share this belief (63%, n=723).

Differences by respondent characteristics (2016/17)

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

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



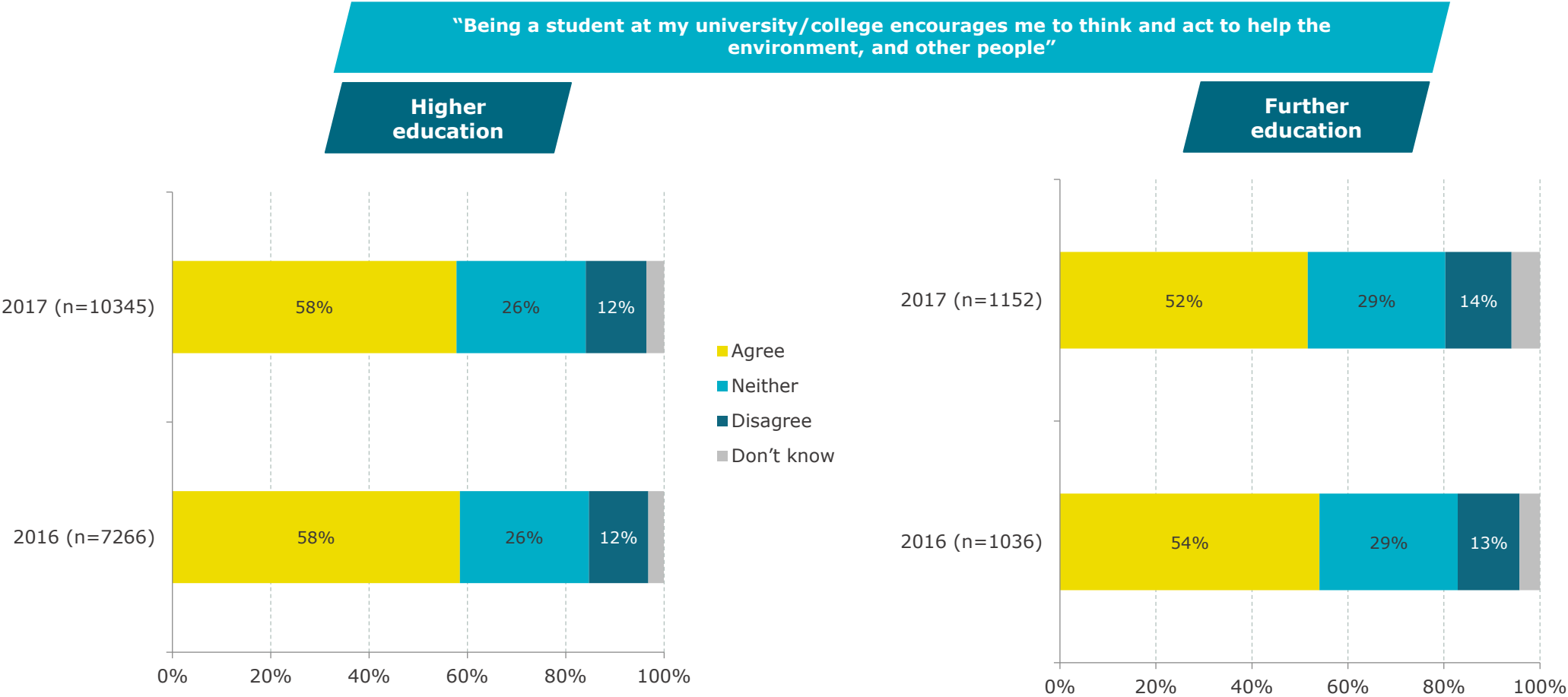
Overall, respondents have a positive view of their institutions and students' unions in terms of the action they take to reduce negative impacts on the environment and society.

Around two thirds of respondents in HE see their students' union taking action to address it's negative impact on the environment and society (64%, n= 6566). However, less than half (47%) of FE respondents believe this to be the case (n=538). This is a statistically significant decline from 2016.

Differences by respondent characteristics (2016/17)

- No significant differences are reported between respondents with varying characteristics in terms of agreement or disagreement that their 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?

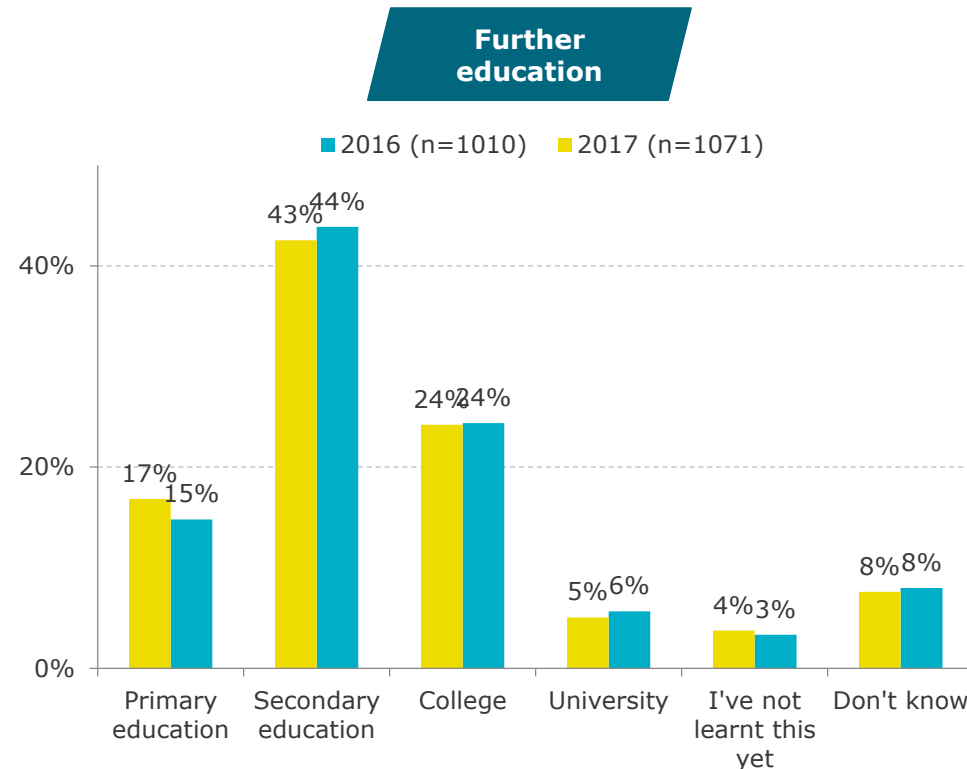
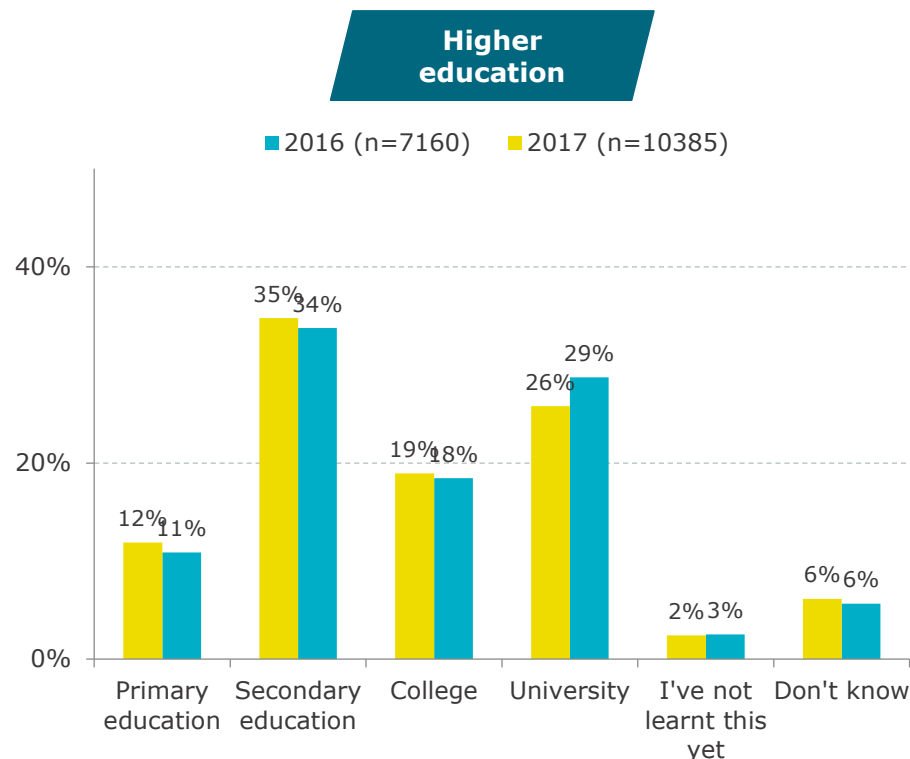


Respondents were asked to reflect on the impact their current place of study has had on their personal attitudes and actions to help the environment and other people. Just over half of respondents in FE (52%, n=595) and HE (58%, n=5975) agree that being a student at their university or college encourages them to think and act to help the environment and other people.

Differences by respondent characteristics (2016/17)

- 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. 69% (n=607) non-EU international respondents agree compared with 60% (n=501) respondents from the EU and 56% (n=4798) UK respondents. A similar trend was seen for FE respondents.

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 (43%, n=440 FE respondents and 35%, n=3565 HE respondents).

University is reported as being the strongest influence for a quarter of HE respondents (26%, n=2646).

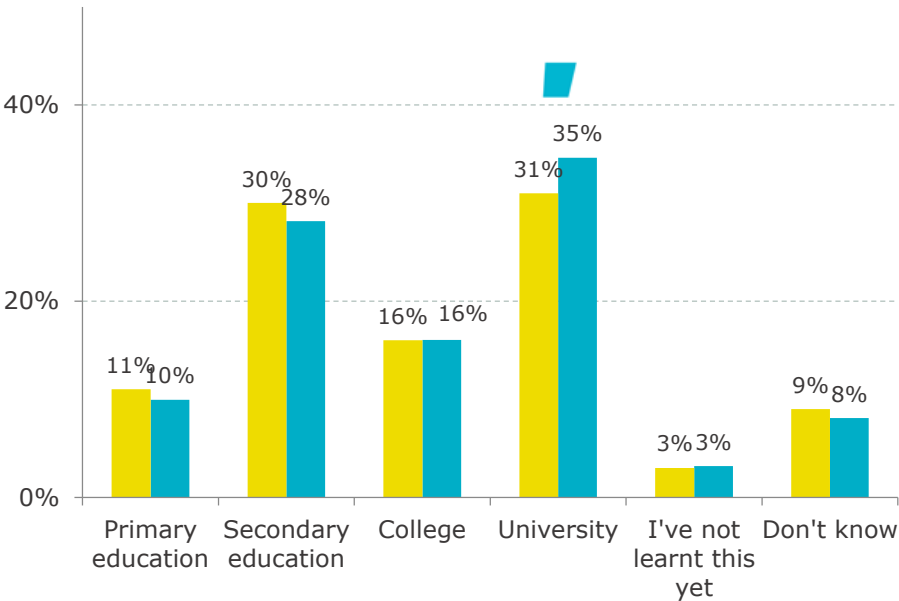
Differences by respondent characteristics (2016/17)

- Within HE, there are significant differences in assessment of which place of study has encouraged them the most to think and act to help the environment and other people, with 3rd year undergraduates most likely to report that their university encouraged them the most compared to respondents in earlier years of study (e.g. 31% (n=691) 3rd years compared with 18% (n=653) 1st years).
- 1st year undergraduates are more likely to select both secondary and college education compared to 3rd year undergraduates (e.g. 23% (n=817) 1st years selected college education as taking most action whereas 14% (n=347) of 3rd years selected this option)

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

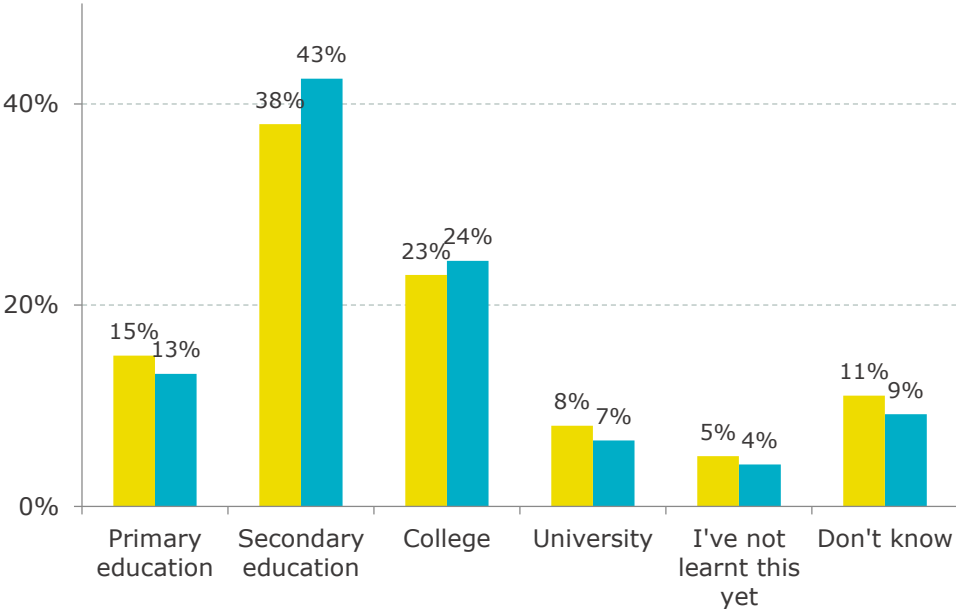
Higher education

2016 (n=7222) 2017 (n=10568)



Further education

2016 (n=1010) 2017 (n=1071)



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.

Despite a significant decline since 2016 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 (31%, n=3214).

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 (38%, n=446).

Differences by respondent characteristics (2016/17)

- Within HE, there are significant differences in assessment of the action taken by places they have studied according to year of study, with 3rd year undergraduates most likely to report that their university has acted most to address negative impacts on the environment and society (e.g. 37% (n=823) 3rd years compared with 22% (n=805) 1st years).
- 1st year undergraduates are more likely to select both primary education 10% (n=214) 3rd years selected primary education as taking most action. 35% (n=1333) 1st years and 27% (n=606) 3rd 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.
- Within FE, there are no significant differences in assessment of the action taken by places they have studied according to gender or nationality of student.

Q. Still thinking about your experiences in education so far, what place where you have studied... Acted to reduce its negative impact on the environment and society 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 350 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 and has improved them as people. Respondents also noted that learning about these issues has helped improve their knowledge and understanding, which has the potential to improve their career opportunities in the future. A number of respondents didn't feel that learning had impacted them at all, however others identified that most of their learning on the issues covered by the survey had come through general life experience rather than through formal education.

	Further education	Higher education
Think about things/do things differently now	114	102
Helped develop my career/improve my knowledge/ understanding	91	56
Improved me/life skills generally	103	121
None/No impact	36	50
Not sure/Don't know	7	21

"I feel like I can go about my day to day life making less of a negative impact on the environment or others."
Man FE respondent, UK

"I feel I am more socially aware and take more care in making decisions."
Man HE respondent, EU, 1st year undergraduate

"I make more of an effort to think about how my actions or the materials I use effect the environment"
Woman HE respondent, non-EU, 1st year undergraduate

"It's made me think more about the way I treat the environment i.e. Not dropping litter and recycling"
Woman FE respondent, UK

"It has made me think about my choices and how it may affect other people."
Woman FE respondent, UK

"It has helped to make me the person I am today, thoughtful and considerate of others and the world.."
Woman HE respondent, UK, Undergraduate 1st year

"It allows you as a person to be open minded and conscious of what is happening in the world around you"
Woman FE respondent, UK

"I am very liberal and aware of issues environmentally and societally. I would like my future career to provide help to some people and possibly highlight certain social issues"
Woman HE respondent, UK , 3rd year undergraduate

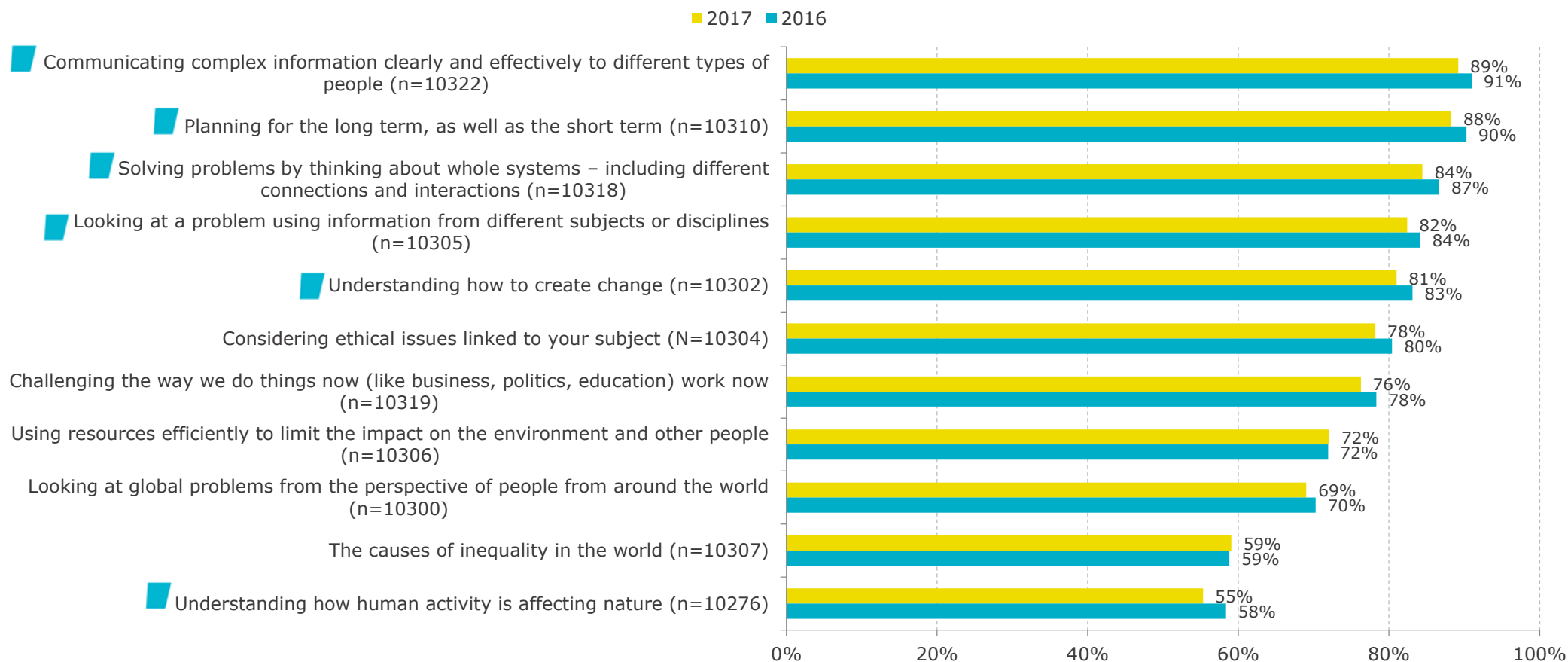
"Learning about consumerism really changed my perspective on advertising and marketing and it even inspired me to pursue a degree in that field."
Woman HE respondent, EU, Undergraduate 2nd year

5. Sustainability skills beyond education

How important are sustainability skills to future employers?

Higher
education

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% HE respondents (n=9205) and the ability to plan for the long term, as well as the short term (88% HE respondents (n=9101)). 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 (55% HE respondents (n=5685)). Respondents in 2016/17 are significantly less likely to see a number of skills as important compared to respondents in 2015/16, as identified by the blue symbol.



Differences by respondent characteristics (2016/17)

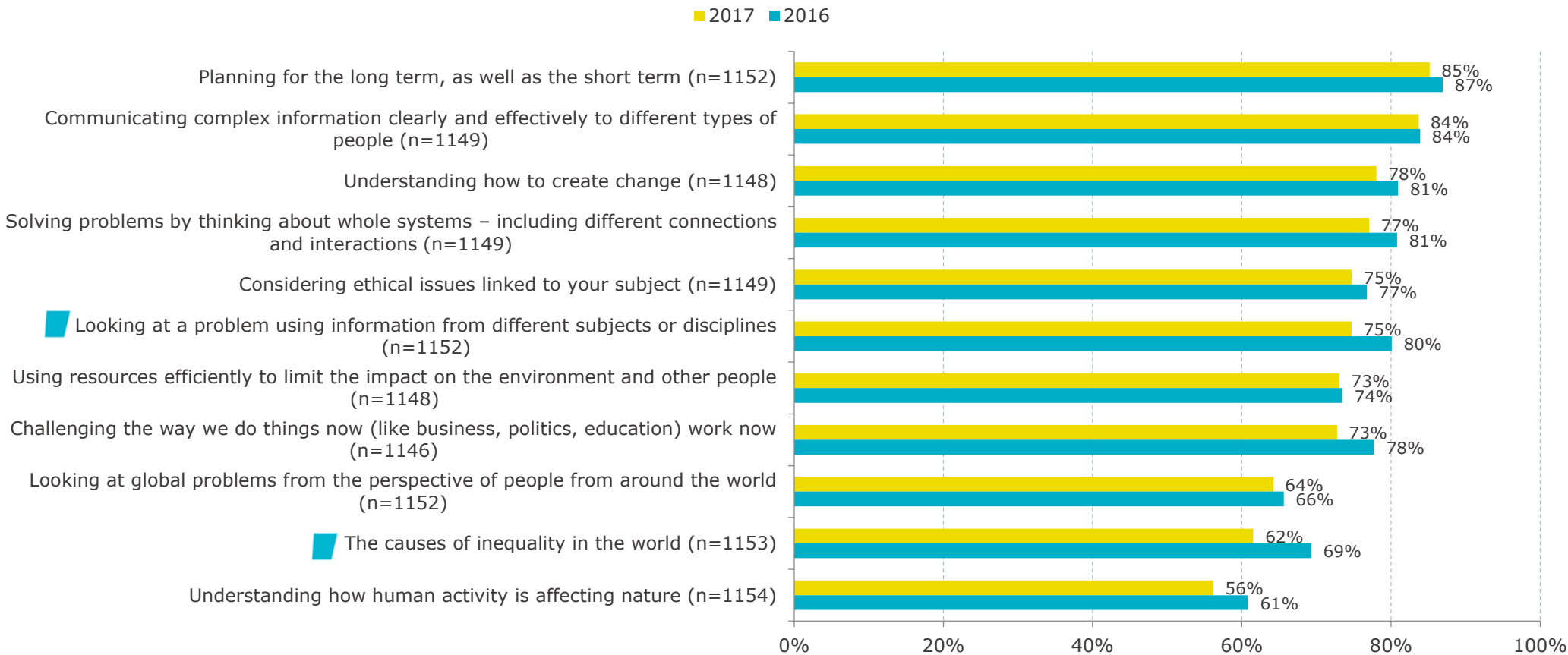
- International HE respondents from beyond the EU are more likely to think understanding how human activity is affecting nature will be important to their future employers than EU and UK respondents (64% (n=556) compared with 54% (n=556) and 55% (n=4632) respectively).
- Women HE respondents are more likely than men to think planning for the long term as well as the short term will be important to their future employers (91% (n=5151) compared with 86% (n=3785)).
- 3rd year HE respondents are more likely than 1st year respondents to identify communicating complex information clearly and effectively to different groups of people as important to future employers (91% (n=1954) compared with 88% (n=3320)).

Q: How important do you think the following skills and knowledge are to your future employers?

Weighted base: 2017 In brackets Balance: No response

How important are sustainability skills to future employers?

FE 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 able to plan for the long term, as well as the short term (85% (n=981) FE respondents and the ability to communicate complex information clearly and effectively to different types of people (84% FE respondents (n=962)). FE respondents are least likely to rate having an understanding of how human activity is affecting nature as being important for future employers (56% FE respondents (n=648) rate this as important).



Differences by respondent characteristics (2016/17)

- 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 (69% (n=424) compared with 52% (n=273)).
- 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 (80% (n=487) compared with 68% (n=355)).
- 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 (84% (n=509) compared with 71% (n=371)).

Q: How important do you think the following skills and knowledge are to your future employers?

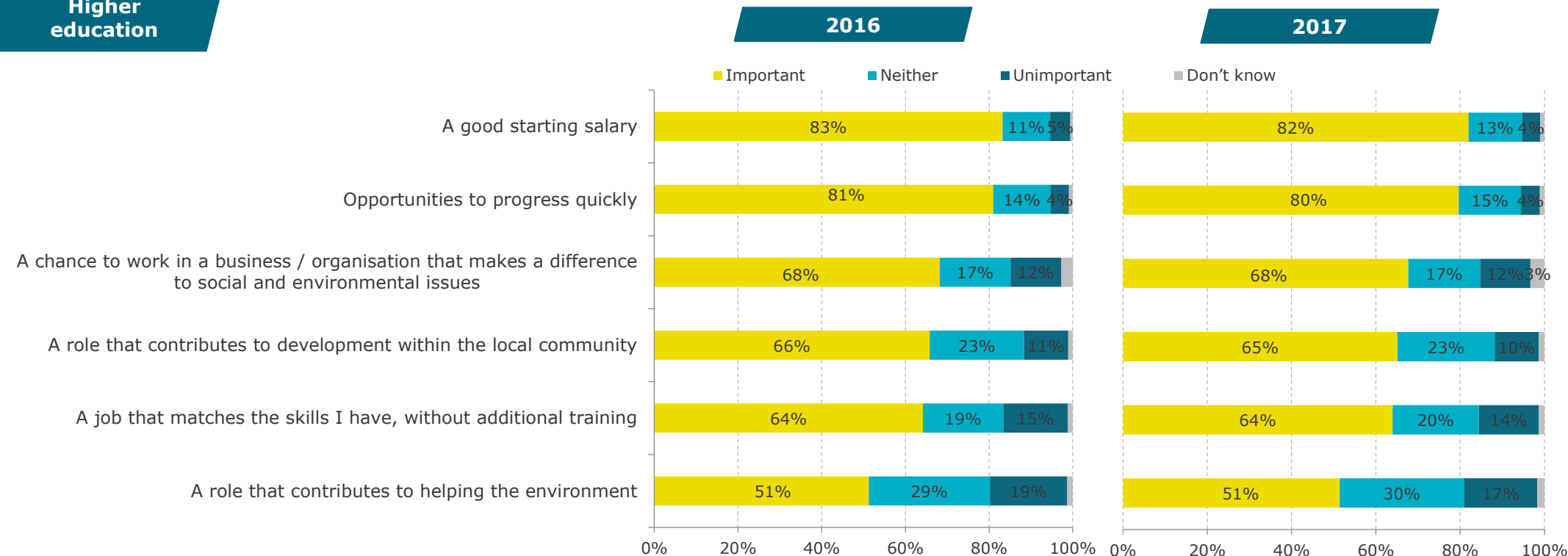
Weighted base: 2017 In brackets Balance: No response

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

Respondents to the survey reported that a good starting salary (82% HE respondents (n=8422)) and opportunities to progress quickly (80% HE respondents (n=8128)) are important factors when considering what jobs to apply for.

Two thirds of respondents in HE 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% (n=6916)). A similar proportion also reported that whether the role contributes to development in the local community would be an important consideration (65% HE respondents (n=6702)).

Higher education



Differences by respondent characteristics (2016/17)

- Women HE respondents are significantly more likely to say that working in a role that contributes to development within the local community is important when considering which jobs to apply for than HE respondents who are men (72% (n=4046) compared with 57% (n=2535)).
- International respondents from outside the EU are also more likely to say a job that contributes to development within the local community is important compared to UK and EU respondents (76% (n=666) compared with 64% (n=5466) and 60% (n=494) 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 (65% (n=566) compared with 49% (n=4176) and 57% (n=468) respectively).

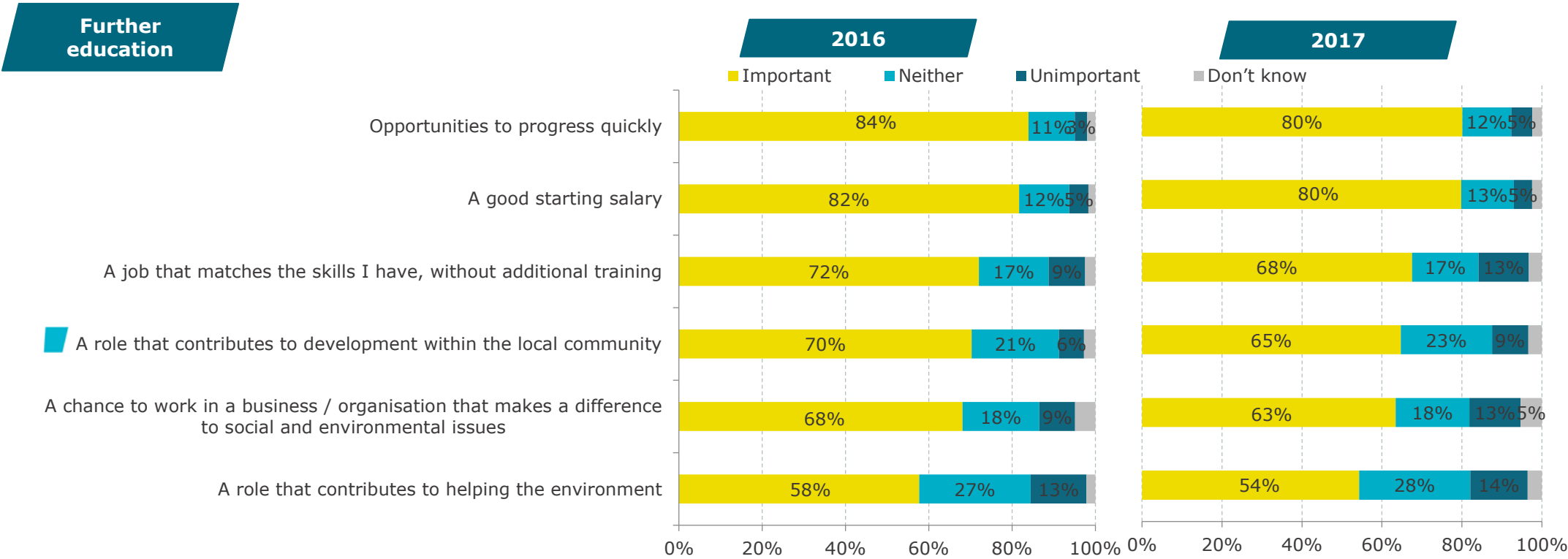
Q: Thinking about your future employer, how important, if at all, do you think the following factors will be when considering which jobs to apply for?

Weighted base: 2016 HE c.7250 / 2017 HE c.10270. Balance: No response

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

FE respondents to the survey reported that a good starting salary (80% (n=919)) and opportunities to progress quickly (80% (n=914)) are important factors when considering what jobs to apply for.

Over two thirds of respondents in FE also reported that a job that matches the skills they have, without additional training, would be an important factor to consider when applying for jobs (68% (n=777)). Compared to 2016 significantly fewer (65%) reported that whether the role contributes to development in the local community would be an important consideration (n=738).



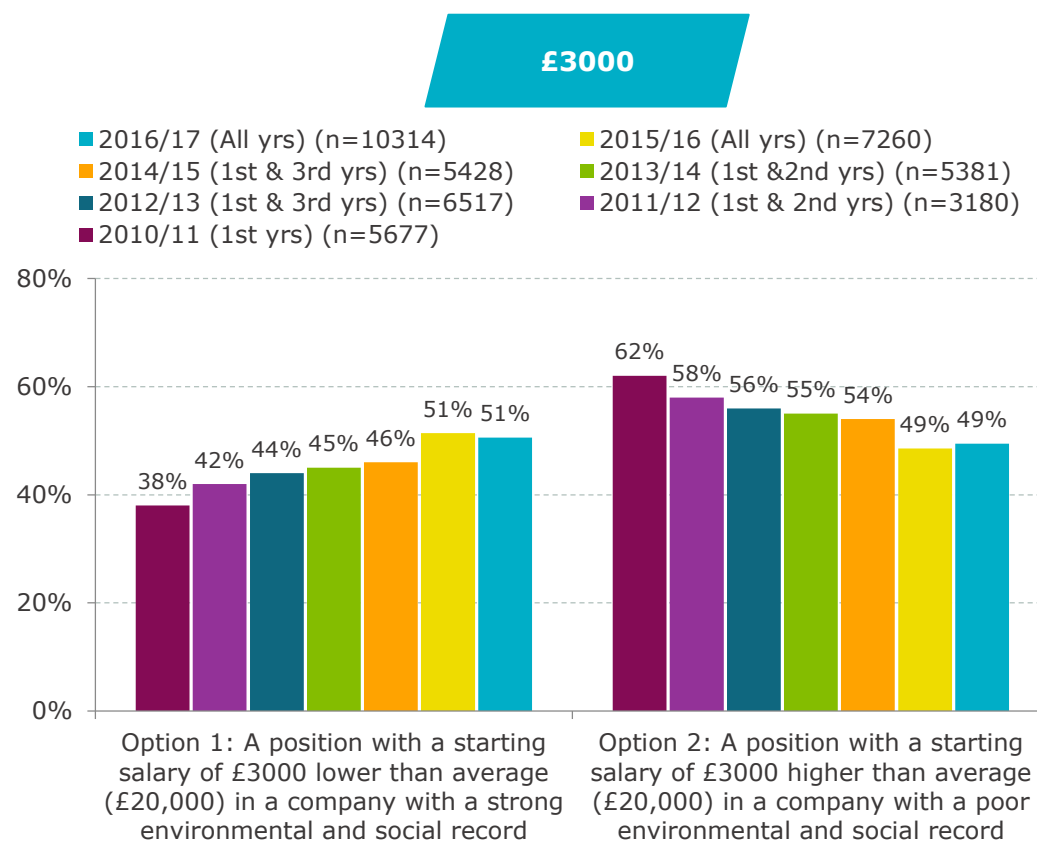
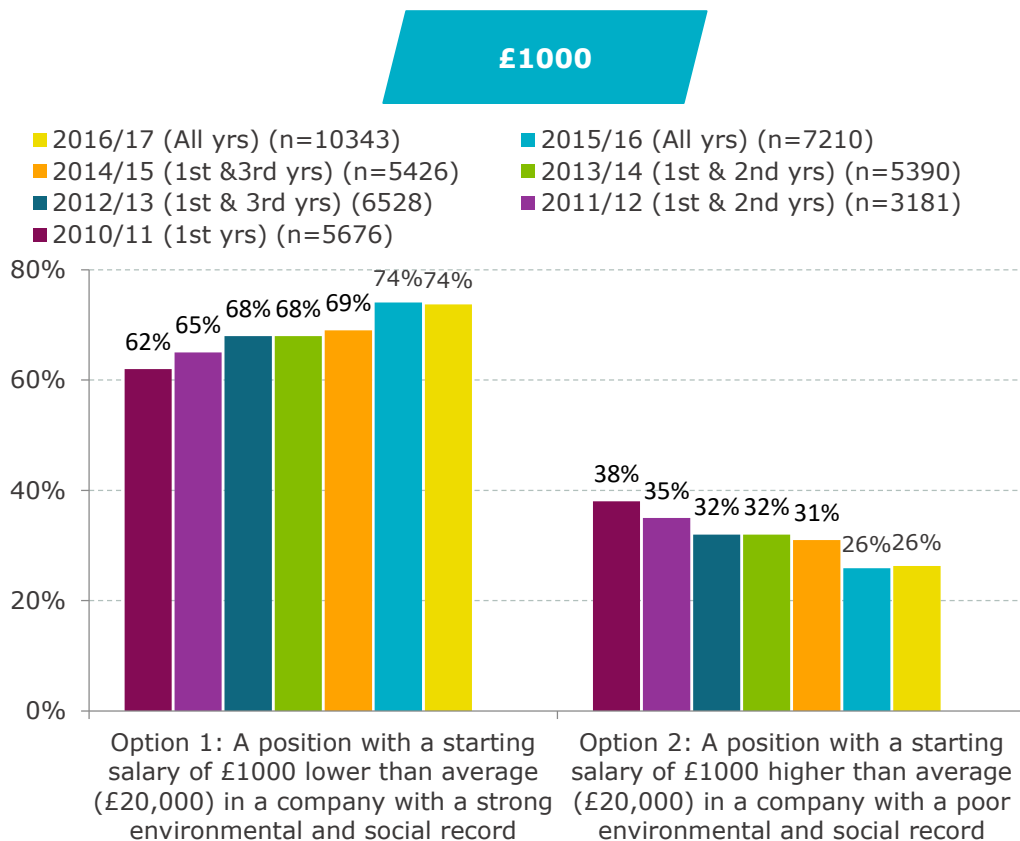
Differences by respondent characteristics (2016/17)

- Women FE 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 FE respondents who are men (68% (n=413) compared with 57% (n=297)).
- 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 (82% (n=45) compared with 67% (n=689) and 68% (n=35) respectively).
- International non-EU respondents are most likely to report whether the role contributes to development within the local community as an important factor compared with UK and EU respondents (88% (n=49) compared with 63% (n=648) and 62% (n=31) respectively).

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

Higher education

Three quarters of HE respondents completing the survey in 2016/17 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=7623), mirroring the results reported by respondents in 2015/16. When asked to consider a salary sacrifice of £3000 from an average starting salary, half of HE respondents (51%, n= 5216) in 2016/17 indicated they would be willing to make this sacrifice for a position in a company with a strong environmental and social record. Again this mirrors the results seen in 2015/16.



Differences by respondent characteristics (2016/17)

- 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 (78% (n=4462) compared with 68% (n=3009)).
- International respondents from outside the UK are more likely than UK respondents to accept the salary sacrifice (79% (n=692) compared with 73% (n=6213)).

Differences by respondent characteristics (2016/17)

- 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 (55% (n=3125) compared with 44% (n=1970)).
- International respondents beyond the EU, are more likely to say they would make the salary sacrifice of £3000 for such a role (63% (n=549)) compared to EU respondents (55% (n=455)) and UK respondents (49% (n=4145)).

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

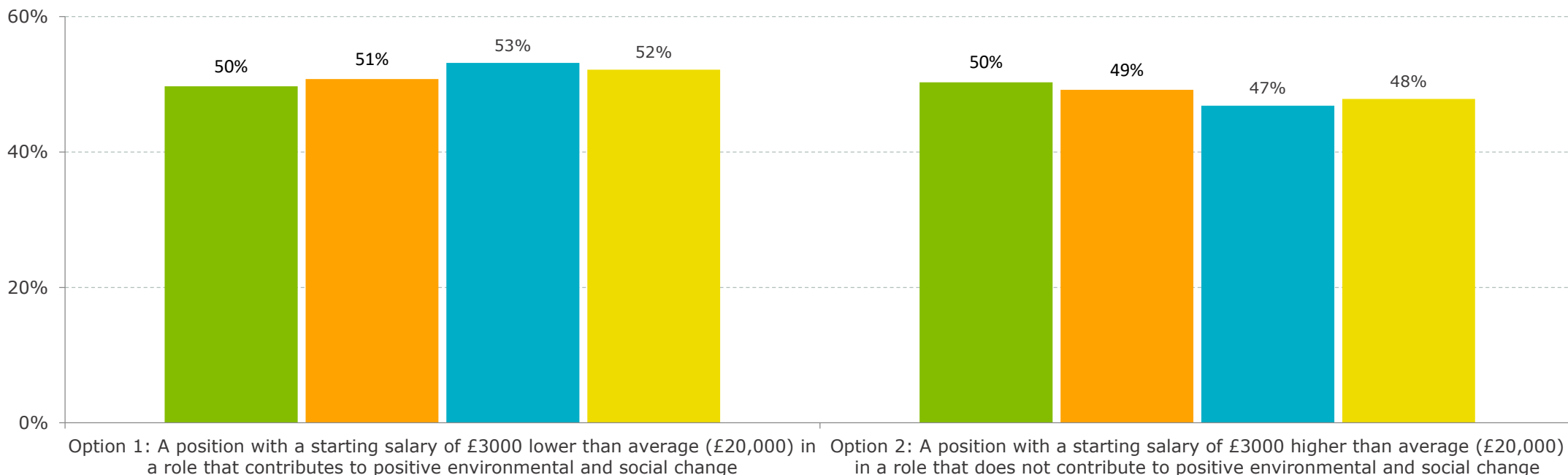
Weighted base: In brackets. Balance: No response

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

Higher education

Around half of HE respondents report that they would be willing to make a sacrifice of £3000 from their starting salary in a specific role that contributes to positive environmental and social change (53%, n=5351).

2016/17 (All yrs) (n=10259) 2015/16 (All yrs) (n=7252) 2014/15 (1st & 3rd yrs) (n=5429) 2013/14 (1st & 2nd yrs) (n=5398)



Differences by respondent characteristics (2016/17)

- 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 (44%, (n=1939) compared with 59% (n=3298)).
- International respondents from beyond the EU are more likely than UK respondents to accept this sacrifice (60% (n=526) compared with 51% (n=4312)).

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

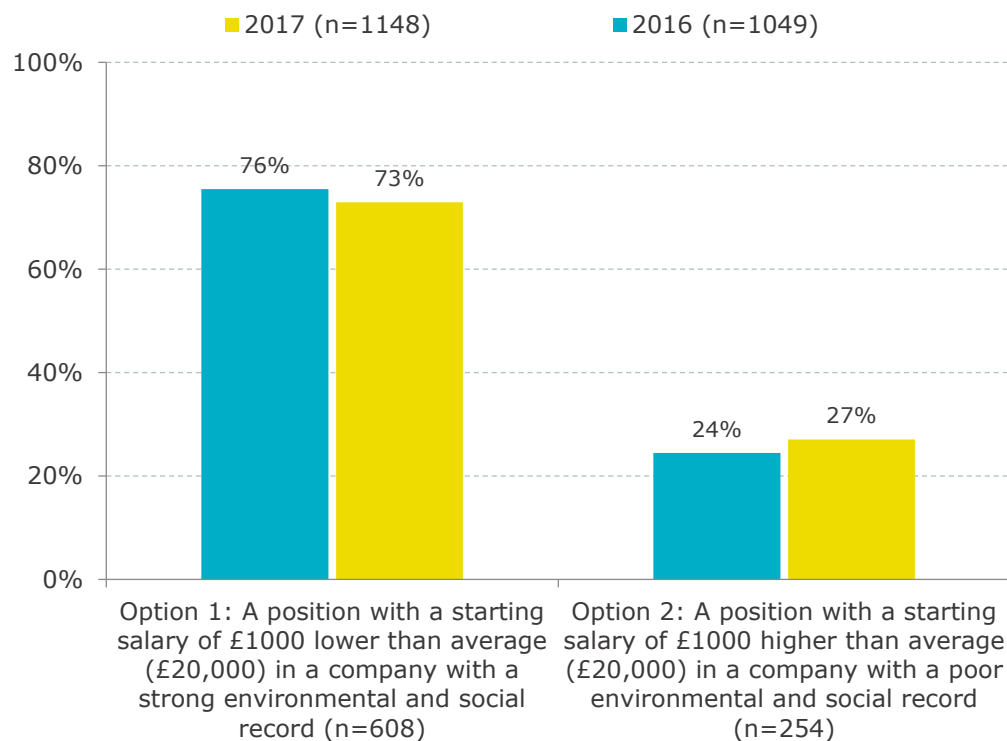
Weighted base: In brackets next to each question. Balance: No response

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

Further
education

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 (73%, n=837). This is slightly lower than the proportion in the previous survey (76%, n=783) but the difference is not statistically significant. Over half of FE respondents say they would be willing to sacrifice £3000 from a starting salary to work for a company with a strong environmental and social record (57%, n=655). This is slightly lower than the proportion saying this in 2015/2016 (59%, n=620), but again this difference is not statistically significant.

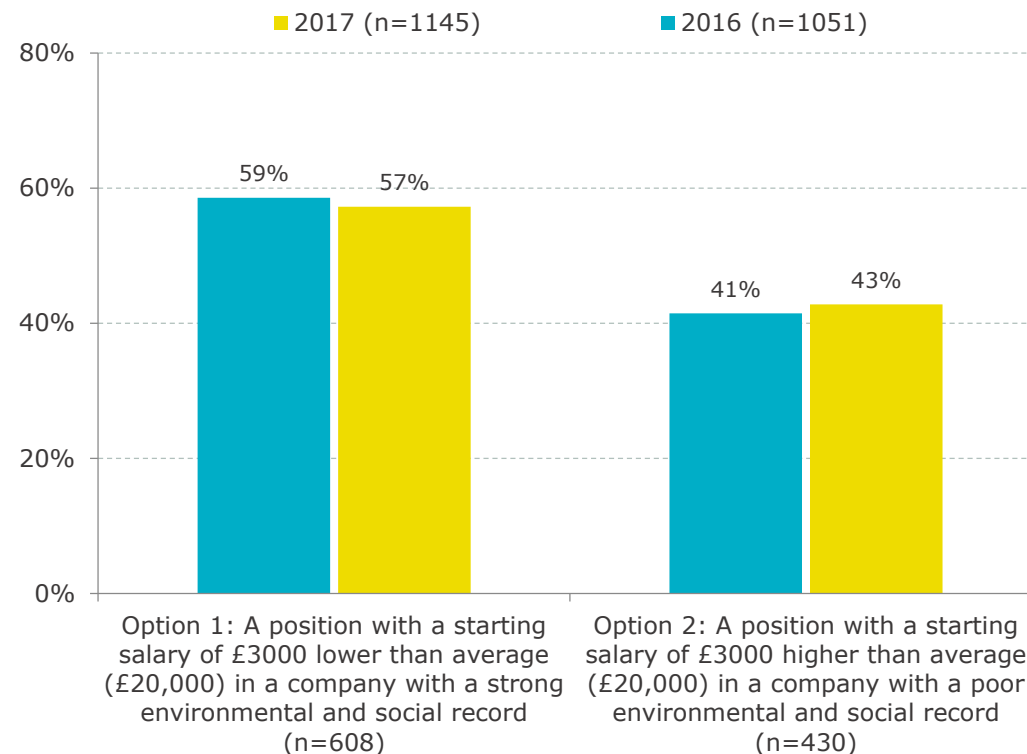
£1000



Differences by respondent characteristics (2016/17)

- FE women respondents are more likely than men to accept a salary sacrifice (79%, n=479) compared to men (66%, n=345).
- There are no differences by nationality of FE student.

£3000



Differences by respondent characteristics (2016/17)

- Again, women FE respondents are more likely than men to accept a salary sacrifice (64%, n=387) compared to 50% men (n=261).

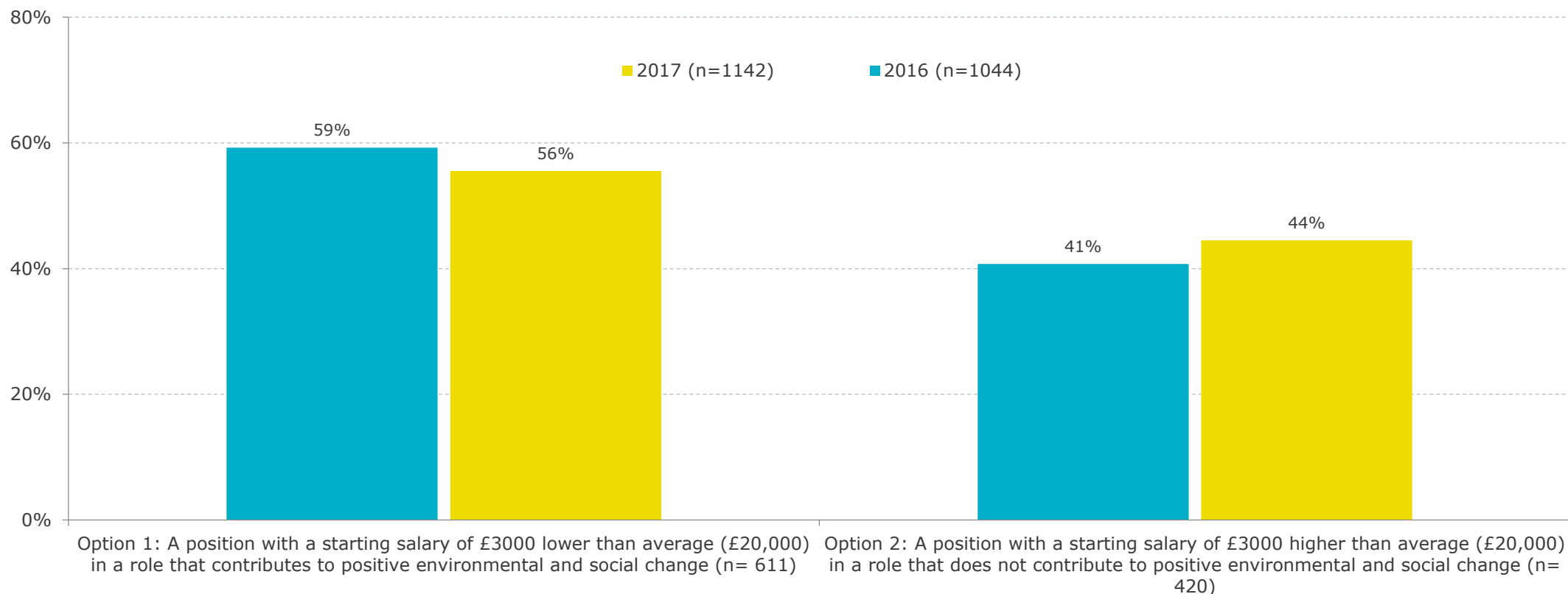
Q: Assuming all other factors are equal, please select which option you think that you would choose.

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?

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A slightly lower proportion of FE respondents in 2016/17 say they would be willing to sacrifice £3000 from a starting salary to work in a specific role that contributes to positive environmental and social change (56%, n=634) compared to 59% in 2015/2016 (n=616).



Differences by respondent characteristics (2016/17)

- Once again, women FE respondents are more likely than men to accept a salary sacrifice (63%, n=380) compared to 47% men (n=242).

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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