UK review of information about higher education

Cognitively testing questions for the National Student Survey

Report to the UK higher education funding bodies by TNS BMRB

October 2015

Contents

Acknowledgements

1. Executive Summary

1.1 Introduction (Chapter 2)

This report details a package of cognitive testing work that explored questions asked as part of the National Student Survey (NSS). Three iterations of testing were conducted in 2014/15. The work was commissioned and supported by a consortium of funding bodies and overseen by the Higher Education Funding Council for England (HEFCE).

1.1.1 Aims of the NSS

The NSS has three main purposes: (1) to inform prospective student choice; (2) to enhance the student academic experience within Higher Education Institutions (HEIs) and; (3) to contribute to public accountability.

1.1.2 Review of the NSS

This cognitive testing work was commissioned following a detailed multiple stage review of the NSS, undertaken in 2014[1]. The review aimed to explore the purpose of the NSS both now and in the future, its effectiveness and how it might change to more effectively meet its purposes. The review made recommendations for: (1) new questions on engagement; (2) some changes to existing questions; and (3) some deletions. The review recommended these changes be subject to rigorous cognitive testing to further explore the kinds of problems students faced when answering the questions. In particular the review recommended the cognitive testing of new negatively worded statements.

1.1.3 Objectives of the study and research stages

This piece of work aims to effectively support the development of a future NSS. The work comprised the following stages:

- A desk based review of the current and proposed NSS statements using TNS BMRB's Questionnaire Appraisal Framework (QAF).

- Three iterative phases of cognitive testing (Part 1 – October 2014, Part 2 – November 2014 and Part 3 – May 2015). Summary tables of statement asked at each phase of testing, plus our recommendations for future wording are included in Appendix A.

1.2 Methodology (Chapter 3)

Three phases of cognitive testing were conducted with 105 students across 13 UK HEIs between October 2014 and May 2015. The funding bodies also commissioned a large scale pilot test, which was conducted in early 2015; two phases of cognitive testing were conducted prior to the pilot with one phase following the pilot.

Institutions and students were recruited by TNS's specialist in-house qualitative recruitment team to fit within an interlocking quota sample grid. We visited HEIs in all four countries of the UK (England, Wales, Scotland and Northern Ireland) and achieved a spread of type of HEI (Universities, specialist institutions, private providers and Further Education Colleges (FECs) offering undergraduate courses).

Students were recruited to quotas based on the following sample criteria:

- Study mode (full-time; part-time; studying via distance methods);
- Age (mature students; students aged under 24);
- Ethnicity and nationality;

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[1] http://www.hefce.ac.uk/pubs/rereports/Year/2014/nssreview/Title,92164,en.html

- Course subject (a spread across the wide range of courses offered); and
- Language (some students were interviewed in Welsh).

A range of cognitive interviewing techniques were used including observation, 'Think Aloud' and probing. Students were found to be adept at the 'Think Aloud' method and this technique was widely used in the interviews. All interviews were digitally recorded with data entered into a bespoke analytic framework which facilitated thematic analyses across and within cases. The testing took account of the different interviewing modes available to students filling in the survey (paper and pen (PAPI), online, using laptops and tablets (CAWI) and simulated telephone (CATI) interviews).

1.3 Students' answer strategies (Chapter 4)

Cognitive testing uncovered two main strategies employed by students when approaching the NSS questionnaire:

1. **An 'averaging' strategy**: following comprehension of the statement, students would recall the range of different relevant experiences they had had and use their judgement to sum them together in one response option.

2. **Focusing on one or two specific events of experiences ('cherry picking')**: grasping the statement and attaching meaning fairly quickly, then, rather than drawing together all relevant experiences, instead consider one or two poignant or particularly memorable experiences only.

The second strategy, termed 'cherry picking', while valid where the specific event is the student's only relevant experience or is typical of all relevant experiences, is less valid where a range of factors were relevant but only one or two were considered during the answering process. This approach requires a lesser degree of cognitive effort than the 'averaging' strategy, with students taking a shortcut to their answer; rather than thinking across all relevant experiences they took an easier route.

1.3.1 General problems experienced by students

Students experienced the following general problems when answering the NSS questions:

General problems
At some statements, the information required to answer was missing or misunderstood.
Understanding of the statement varied depending heavily on the course being studied.
Some statements were too long, contained jargon, multiple concepts or contained double meanings.
Students experienced difficulty when attempting to 'average' their experiences and, as mentioned, would 'cherry pick' unrepresentative events.
In some cases, students felt compelled to give an overall positive (or negative) answer or would avoid choosing certain answer categories (e.g. the middle category or the very first and last categories).
There was some uncertainty around how to code 'Don't know' responses; students would either select the middle category, the 'Not applicable' category or give their best guess.
Students found the inclusion of negatively phrased statements confusing and to require a greater degree of cognitive effort.

1.3.2 General considerations when developing the 2017 NSS

The table below summarises our general recommendations for consideration when developing the new NSS. More detail on each recommendation is included in Chapter 4.

Recommendations
Include a maximum of 3-4 statements within each section.
Keep statements short, simple and to the point and avoid using jargon, incorporating multiple concepts or double meaning.
Do not include negatively phrased statements due to potential confusion caused by these.
Consider changes to the scale, ranging from including a 'Don't know' category in the response scale - and consider ways of differentiating this and 'Not applicable' from the main scale - to a more radical re-design.
Remain aware that while it is possible to rectify some of the problems with fairly simple alterations to wording, other conceptual problems that cannot be alleviated through the re-wording of statements will remain.

1.4 Statement-by-statement findings (Chapter 5)

Chapter 5 contains a review of each statement and, after working through the versions of wording used at each stage of cognitive testing, makes recommendations for revisions to questions based on the testing. The chapter is intended as a reference guide for each statement or group of statements tested, with sub-sections included for each section of the questionnaire. Appendix A provides a summary of the statement journeys, our proposed wording and supporting rationale.

1.4.1 The teaching on my course (section 5.1)

The current NSS questionnaire includes four questions about teaching on my course. These four questions (including one that was re-phrased negatively 'Staff are poor at explaining things') were all tested during the three phases of cognitive testing, along with two newly designed questions.

While the statements were fairly well understood there was some overlap between statements within the section and those positioned in the new 'Critical thinking' section. We also found that students experienced problems relating to the negatively phrased statement, namely that these statements were more difficult to process.

The table below shows the current NSS wording and our recommended new wording for the NSS 2017. We recommend three statements are included in this section.

No.	Current/New wording	Recommended wording for NSS 2017
1	Staff are good at explaining things	Staff are good at explaining things
2	Staff have made the subject interesting	Staff have made the subject interesting
3	Staff are enthusiastic about what they are teaching	N/A
4	The course is intellectually stimulating	N/A
New	The course has challenged me to achieve my best work	The course has challenged me to achieve my best work
New	The teaching has encouraged me to think about the course content in depth	N/A

1.4.2 Critical thinking (section 5.2)

Three new questions about 'Critical thinking' were developed and tested prior to fieldwork. All three questions were tested at each of the three phases of testing; essentially the changes following each iteration aimed to shorten the statements and reduce the number of terms or concepts included within each to help students focus more clearly.

These questions covered new material recommended for inclusion by the review, attempting to measure the extent to which students have been able to critically analyse what they have learnt and apply it in a practical sense. This measurement objective proved fairly challenging, for the most part due to the wide range of courses studied across the HE sector. The statements were initially placed within the 'Teaching on my course' section but following Part 1 were relocated to a new section entitled 'Critical thinking'.

Students found these statements to be more cognitively difficult to process and answer compared with other parts of the questionnaire, partly due to the multiple concepts included within them. The course that was being studied greatly influenced students' answers.

The table below shows the current NSS wording and our proposed new wording for the NSS 2017. We recommend three statements are included, however due to the difficulties students faced in answering these statements we suggest further testing of alternative statement wording (see section 5.2.5 for further details).

No.	Current/New wording	Recommended wording for NSS 2017
New	My course has provided me with opportunities to explore ideas, concepts or experiences in depth	My course has provided me with opportunities to explore ideas or concepts in depth
New	My course has enabled me to bring information and ideas together from different topics to solve problems	My course has provided me with opportunities to bring information and ideas together from different topics
New	My course has encouraged me to apply what I have learnt to practical problems or new situations	My course has provided me with opportunities to apply what I have learnt

1.4.3 Assessment and feedback (section 5.3)

The current NSS questionnaire includes five questions about 'Assessment and feedback'. These were all tested during the three phases of cognitive testing.

On the whole the statements were fairly well understood but we found there to be overlap between the five statements and feel the number could be cut down. We also found evidence of 'cherry picking' strategies used at certain statements. Alternative terms were tested at two of the statements (e.g. 'timely' in place of 'prompt' and 'helpful' instead of 'detailed') which were felt to represent improvements.

The table below shows the current NSS wording and our proposed new wording for the NSS 2017. We recommend three statements are included in this section.

No.	Current/New wording	Recommended wording for NSS 2017
5	The criteria used in marking have been clear in advance	The criteria used in marking have been clear in advance
6	Assessment arrangements and marking have been fair	Marking and assessment has been fair
7	Feedback on my work has been prompt	Feedback on my work has been timely
8	I have received detailed comments on my work	I have received helpful comments on my work
9	Feedback on my work has helped me clarify things I did not understand	N/A

1.4.4 Academic support (section 5.4)

Three questions about 'Academic support' are asked in the current NSS; all were tested during the phases of cognitive testing included negatively phrased versions of two of the statements 'I have not been able to contact staff when I needed to' and 'I have received insufficient advice and support with my studies'.

Students found statements in this section fairly straightforward although as before we found overlap between the statements in the section. In particular, we found students to interpret 'I have been able to contact staff when I needed to' literally and consider purely whether they had been able to make contact with staff members rather than the effectiveness of this contact. We also found that students did not always restrict their thinking to teaching staff and additionally considered different types of support staff. The negatively phrased versions of statements caused some difficulties for students.

The table below shows the current NSS wording and our proposed new wording for the NSS 2017. We recommend two statements are included and have suggested fairly minor alterations to the wording to clarify meaning.

No.	Current/New wording	Recommended wording for NSS 2017
10	I have been able to contact staff when I needed to	Teaching staff have been responsive when I needed to contact them
11	I have received sufficient advice and support with my studies	I have received helpful advice from teaching staff in relation to my course
12	Good advice was available when I needed to make study choices	N/A

1.4.5 Organisation and management (section 5.5)

The current NSS questionnaire includes three questions about 'Organisation and management', all of which were tested during the three phases of cognitive testing. The third statement was negatively phrased at the first iteration of testing ('Any changes in the course or teaching were not communicated effectively'). The review of data had highlighted that the questions are highly correlated and it had been suggested that only one question remain ('The course is well organised and is running smoothly'). Concern was also raised that the statements are irrelevant for distance learners.

Cognitive interviewing showed that students employed very similar strategies when answering all three statements, supporting the concern that the statements were highly correlated and as such we

recommend only the first statement is retained. This statement was well understood and answered. We did not find evidence to support the concerns that the statements were not relevant to distance learners.

The table below shows the current NSS wording and our proposed new wording for the NSS 2017.

No.	Current/New wording	Recommended wording for NSS 2017
13	The course is well organised and is running smoothly	The course is well organised and running smoothly
14	The timetable works efficiently as far as my activities are concerned	N/A
15	Any changes in the course or teaching have been communicated effectively	N/A

1.4.6 Learning resources (section 5.6)

The current NSS questionnaire includes three questions about learning resources. Updated versions of all three statements were tested at each stage of cognitive interviewing.

Students were generally able to answer these questions, but in some cases there was confusion surrounding what to include in their answers. The statements attempt to capture information about distinct services/resources, whilst also including a clause referring to more general services (e.g. 'digital services' and 'the library'; and 'virtual learning facilities' and 'general IT resources'). This led students to either focus on the more specific element only ('digital services' or 'virtual learning facilities') at the exclusion of the more general element ('the library' or 'general IT resource') or answer only in relation to the more general element.

The table below shows the current NSS wording and our proposed new wording for the NSS 2017. We recommend three statements are included; however, we recommend a further consideration over whether the data yielded from these questions (and particularly for the third statement) meets the required objectives.

No.	Current/New wording	Recommended wording for NSS 2017
16	The library resources and services are good enough for my needs	The library resources (e.g. books, online services) have supported my learning well
17	I have been able to access specialised equipment, facilities or rooms when I needed to	I have been able to access subject specific resources (e.g. equipment, facilities, software) when I needed to
18	I have been able to access general IT resources when I needed to	The University's/College's IT resources and facilities have supported my learning well

1.4.7 Personal development (section 5.7)

Currently three statements about 'Personal development' are included in the NSS questionnaire; these and alternative versions were all tested during the three phases of cognitive interviewing. Students found the first two questions to be a little repetitive, employing similar thought processes for each.

The table below shows the current NSS wording and our proposed new wording for the NSS 2017. We recommend all three statements are taken out of the core survey. This is mainly due to the fact that students responded negatively to the statements for very different reasons thus bringing into question the validity of the data (e.g. taking 'The course has helped me to present myself with confidence', students would disagree where: 1. they felt other students, tutors or feedback had had a negative impact on their confidence; and 2. they felt they had already been confident before starting the course).

No.	Current/New wording	Recommended wording for NSS 2017
19	The course has helped me to present myself with confidence	We recommend this statement is relocated to an optional bank.
20	My communication skills have improved	We recommend this statement is relocated to an optional bank.
21	As a result of the course, I feel confident in tackling unfamiliar problems	We recommend this statement is relocated to an optional bank.

1.4.8 Learning community (section 5.8)

Three new questions about 'Critical thinking' were developed and tested; all three questions were tested at each of the three phases of testing. The NSS review proposed that additional questions on student engagement should be included in future surveys. This included proposed questions on the learning community and collaborative learning.

Students found the first two statements easier to answer than the third which contained concepts that were confusing and lacked clarity; accordingly we do not recommend this is included in the NSS 2017. Students had a fairly clear understanding of a 'community' of staff and students though some found it difficult to think about both within one statement.

The table below shows the current NSS wording and our proposed new wording for the NSS 2017. We recommend two statements are included, and make suggestions for fairly minor changes in wording. We also recommend the pilot data is reviewed to examine levels of agreement with the second statement. In some cases students answered this statement purely thinking about whether they'd *ever* had the opportunity to work as part of a group rather than whether this was the 'right' or 'appropriate' opportunity.

No.	Current/New wording	Recommended wording for NSS 2017
New	I feel part of a community of students and staff committed to learning	[On my course] I feel part of a community of staff and students
New	I have had opportunities to work jointly with other students on my course	I have had the right opportunities to work with other students as part of my course
New	I have been encouraged to talk about academic ideas with other students	N/A

1.4.9 Student voice (section 5.9)

The NSS review also proposed a new set of questions on 'Student voice' to increase coverage of issues relating to student engagement. The proposed student voice questions are intended to measure how empowered students feel to initiate change and shape their own learning experiences; whether they are able to engage at a variety of levels from sharing their views to being proactive in shaping and delivering change; and how much they feel they are listened to as valuable partners in improving their educational experiences. Four statements were included in this section and all were cognitively tested during the three iterations.

The order of questions in this section was revised following Part 1 testing to improve the flow, moving from opportunities for feedback, to the perceived value of feedback, to the impact of feedback. We found this to replicate the natural process of thinking for students who were generally able to answer the first three questions fairly well. However, in some cases we found that students thought purely about whether they'd had any opportunity to provide feedback rather than whether the opportunity had been adequate. The fourth statement was interpreted in a wide variety of ways and caused confusion. Students felt they did not have the information necessary to answer the statement and in some cases disagreed with the

premise behind the statement (saying that they did not think students *should be* involved in decisions about how the course is run).

The table below shows the current NSS wording and our proposed new wording for the NSS 2017. We recommend three statements are included, and also suggest the pilot data are reviewed to examine levels of agreement with the first statement and overall correlation between the second and third statements in this section.

No.	Current/New wording	Recommended wording for NSS 2017
New	I have had appropriate opportunities to provide feedback on this course	I have had the right opportunities to provide feedback on my course
New	Staff value the course feedback given by students	Staff value students' views and opinions about the course
New	It is clear how students' feedback on the course has been acted on	It is clear how students' feedback on the course has been acted on
New	Students are encouraged to be involved in decisions about how this course is run	N/A

1.4.10   Overall satisfaction (section 5.10   )
The NSS includes one question on overall satisfaction with the course which was cognitively tested.

Students, on the whole, found answering this question straightforward. A handful of students said it was hard to think about the course as a whole, bring together all the elements and answer but most were able to do this without problem.

The table below shows the current NSS wording and our proposed new wording for the NSS 2017. We recommend retaining the existing statement.

No.	Current/New wording	Recommended wording for NSS 2017
22	Overall, I am satisfied with the quality of the course	Overall, I am satisfied with the quality of the course

1.4.11   Students' Union (section 5.11   )
One question about the Students' Union (SU) is included in the existing NSS; this question focuses on overall satisfaction with the SU. Wording for two versions of a new question was proposed following the review which moves away from satisfaction and places more of a focus on the impact the SU has on students' academic experiences. Both versions of this adapted question were tested during the iterations of cognitive testing.

Students' answers overwhelmingly showed that the Students' Union at their institution was not associated with the 'academic experience' and this had a substantial impact on responses. Students either:

1. Said they didn't know what the SU was at all, didn't know what it did or were not interested;

2. Answered in relation to overall satisfaction with the SU;

3. Answered about the overall student experience; or

4. Understood the question correctly as referring to the SU's role in students' academic interests. Of these students some were able to give an answer and some said they did not know.

Students answer strategies are explored in much more detail in section 5.11.2   .

Depending on the results of the pilot test, and bearing in mind the conceptual problems students' experienced in answering the SU questions, we recommend two options:

1. Include two SU questions, the first asking generally about representation of the SU and the second focusing on academic representation (e.g. 'The Students' Union (Association or Guild) effectively represents students' interests and 'The Students' Union (Association or Guild) effectively represents students' academic interests'); or

2. Remove the reference to academic interests' altogether and ask one general question about representation of students' interests (e.g. 'The Students' Union (Association or Guild) effectively represents students' interests).

1.4.12 Overall teaching (section 5.12   )

Findings from Part 1 showed that the inclusion of negatively phrased statements dotted throughout the questionnaire resulted in some students misunderstanding statements. Subsequently, at Parts 2 and 3, the negative statements were removed with the exception of one at the end of the survey ('The teaching on my course has been poor' and 'Overall, I am dissatisfied with the teaching on my course'). This allowed an exploration of whether students answered this question consistently with their views provided throughout the rest of the survey, and whether the inclusion of a single negative statement at the end of the survey removed the issues found when such statements were included throughout.

The questionnaire flowed smoothly without the negative statements included throughout the survey. Students did however express surprise at the final statement; this wording made some students feel defensive of their course while others said they felt compelled to think of the negative aspects. While students were able to provide answers it was cognitively difficult to switch their thinking to a negatively phrased statement when all other statements had been positively phrased.

Based on the cognitive testing, we do not recommend the inclusion of negatively phrased statements due to potential confusion caused.

2. Introduction

2.1 The National Student Survey (NSS)

The National Student Survey (NSS) is a large scale study conducted annually since 2005. It is commissioned by the Higher Education Funding Council for England (HEFCE) on behalf the Higher Education Funding Council for Wales (HEFCW), the Department for Employment and Learning, Northern Ireland (DELNI), the Scottish Funding Council (SFC), Health Education England (HEE) among other funders.

2.1.1 Background and rationale

Eligible undergraduate students are encouraged to participate in the NSS during their final year of study. The landscape of Higher Education (HE) in the UK has developed organically over time and currently a very wide range of courses is offered across different types of institution. While traditionally offered by universities, HE courses are also provided at HE colleges and some FE colleges (FECs) that specifically offer degree provision. The NSS is conducted in all four countries of the UK (England, Wales, Northern Ireland and Scotland) and covers all publicly funded HEIs (Universities and Higher Education colleges (HECs)), a small number of private HE providers and all directly funded Further Education Colleges (FECs) in England and Wales.

The NSS was initiated in 2003 following the development of a framework for assuring quality and standards of Higher Education (HE). It was decided that regular and detailed information about teaching quality should be published for three main reasons: (1) to help inform the choices of prospective students about what and where to study; (2) to inform the judgements of other stakeholders; and (3) to more generally contribute to public accountability.

2.1.2 Method and design

There are two main segments to the survey. The first consists of the 'main survey', a list of 23 positive statements about the teaching and learning experience using a five point answer scale (ranging from 'Definitely agree' to 'Definitely disagree') with the inclusion of a middle category ('Neither agree nor disagree'). Additionally there are two open text boxes where particularly positive or negative aspects can be recorded. The second segment forms 12 sets of optional question banks, first introduced in 2007. There are additional questions for students who have received NHS funded provision. The NSS incorporates a mixed-mode design whereby participants can complete the questions on paper, online or by telephone.

2.1.3 Response

A report produced by Universities UK and the Higher Education Statistics Agency (HESA) in 2014[2] showed that 2.3 million students were registered to study at 162 Higher Education Institutions (HEIs) in the UK in 2012-13, with 1.5 million studying first degrees. This includes students studying either at their home institution or with a partner organisation, such as an FEC or other alternative provider. There were an additional 186,000 students registered directly as studying HE courses within FECs.

In 2014, 325 institutions took part in the NSS, including 156 universities, 166 colleges and 3 private institutions. More than 450,000 students were invited to complete the 2014 survey, with over 320,000 responding, giving a response rate of 71%. The 2014 survey saw a record number of participating institutions and the highest response rate since the survey began. Since the NSS started in 2005, nearly 2.4 million students have completed the survey.

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[2] http://www.universitiesuk.ac.uk/highereducation/Documents/2014/PatternsAndTrendsInUKHigherEducation2014.pdf

2.2 Background to the research study and objectives

The next section includes background to this piece of research along with its overall research objectives.

2.2.1 A comprehensive review of the NSS

Findings from a detailed review of the NSS were published in July 2014[3]. The UK funding bodies commissioned the review, under advice from the Higher Education Public Information Steering Group (HEPISG)[4], for two main reasons. First, while a previous review of the NSS (undertaken in 2010) did not recommended making any major alterations, it suggested a comprehensive review take place 10 years after the inception of the NSS (therefore no later than 2015). Second, it was felt that considerable shifts have taken place in recent years within the HE landscape. The review aimed to explore the purpose of the NSS (both now and in the future), its effectiveness and how it might change to more effectively meet its purposes. There were multiple stages to the review (which took place between July 2013 and February 2014), incorporating a literature review, consultation with stakeholders and students and expert panel workshops. A comprehensive statistical analysis of the NSS data was conducted alongside this review.

Two dominant purposes were identified: first to inform prospective student choice; and second to enhance the student academic experience within HE institutions. The importance of ensuring public accountability was also highlighted. Views on the effectiveness of the current NSS were varied; while it was felt the NSS remained a valued and valid tool, stakeholders and students felt the NSS had conceptual weaknesses surrounding what it measured and methodological weaknesses concerning its coverage. Therefore, while stakeholders and students did not wish to make radical changes to the NSS, and support was received for retaining most of the existing questions, it was felt that the survey would benefit from the addition of a small number of questions on student engagement. Data analysis uncovered greater levels of 'yea-saying' or acquiescence bias, than expected; that is, where the same answer category is selected for each question without proper thought being dedicated to answers. In light of this finding the review recommended the cognitive testing of negatively worded statements and potential alterations to the agree/disagree scale to test whether the responses are unconsidered.

The review put together a set of criteria for selecting new questions and assessing existing questions and used these as a steer during the consultation phase. It was recommended that all questions in the core NSS conform to these criteria. To recap, the review made recommendations for: (1) new questions on engagement; (2) some changes to existing questions; and (3) some deletions. Question wording was specified for suggested new questions and changes to existing questions.

In light of the issues flagged up by the review an iterative phase of cognitive testing was recommended to further explore how students approached the NSS statements and the types of problems they experienced. This report details findings from these phases of cognitive testing.

2.2.2 Objectives of the study

The objective of this package of testing work was to effectively support the development of a future NSS, to be launched in 2017. Working iteratively with an expert panel, the overarching aim was to improve question wording and help provide advice and assurance of the overall coherence of the main survey.

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[3] http://www.hefce.ac.uk/pubs/rereports/Year/2014/nssreview/Title,92164,en.html
[4] http://www.hefce.ac.uk/lt/review/Governance/

2.3   Research stages

The existing NSS questions were subjected to a desk based review using TNS BMRB's Questionnaire Appraisal Framework (QAF) and recommendations for amendments put forward.

Next, two phases of cognitive testing were conducted each side of a large scale pilot test commissioned by the funding bodies (Parts 1 and 2 which took place in October and November 2014). A smaller set of Part 3 interviews followed in May 2015. Conducting three phases of testing allowed the adoption of an iterative approach meaning improvements could be made between each phase and then re-tested. Summary tables of statements asked at each phase of testing, plus our recommendations for future wording, are included in Appendix A.

Following analysis, brief summary reports were provided following each of the three phases of testing in advance of this full combined report.

The funding bodies currently intend to commission further cognitive interviews and quantitative testing of the NSS statements and methodology; these testing phases are to be conducted between autumn 2015 and summer 2016.

2.4   Report structure

This report is structured as follows:

- Chapter 3 provides an summary of the methodology used throughout the package of work;

- Chapter 4 gives an general overview of the answer strategies used by students, covering thinking behaviour and subsequent issues that were systematic across the questionnaire;

- Chapter 5 provides a more detailed statement-by-statement analysis, covering in greater depth the issues relating more specifically to each section and question.

Appendix A contains a set of summary tables clearly depicting the journey each statement took through the iterations of our cognitive testing. Each table also clearly shows whether we recommend each statement is included in the NSS 2017, our proposed wording and the supporting rationale.

This report focuses on the core statements of the NSS. The UK funding bodies also separately commissioned TNS BMRB to conduct a smaller piece of work investigating the current NHS questions and questions contained within four potential future optional banks; 34 students were interviewed across five HEIs including some interviews in Welsh. The findings from this smaller study can be found at Appendix B.

3. Summary of methodology

As part of a review of the National Student Survey (NSS), three phases of cognitive testing were conducted with 105 students between October 2014 and May 2015. This chapter gives a summary of the sample of students interviewed and the supporting cognitive testing methodology.

3.1 Desk based QAF review

Prior to cognitive testing a thorough review of statements included in the NSS was carried out using TNS BMRB's QAF. This has been adapted from QAS-99[5] to focus more clearly on issues that impact on social research questionnaires and provides a systematic framework for evaluating questions, enabling the user to identify and correct potential problems with questions that may lead to difficulties in question administration, miscommunication or other failings. The user examines questions by considering specific criteria (such as clarity, assumptions, instructions, knowledge/recall, task difficulty, sensitivity and social desirability bias) and decides whether the question exhibits features that are likely to cause problems.

Findings from the review were provided to the UK funding bodies which comprised comments on each question along with recommendations for any changes to wording for the first phase of cognitive testing. The findings from this phase also fed into the development of cognitive probes, to ensure that key issues were tested in sufficient depth.

3.2 Sample

Institutions and students were recruited by TNS's specialist in-house qualitative recruitment team to fit within an interlocking quota sample grid. In total, 105 interviews were conducted across 13 UK institutions, including four students learning via distance methods and four students who were interviewed in Welsh. HEIs were visited in England, Wales, Scotland and Northern Ireland and the sample covered seven universities, three specialist institutions, one private provider and two FECs. Students learning via distance methods were also separately recruited and interviewed. Students were recruited to fit a quota based on the following characteristics: study mode (whether studying full-time, part-time or via distance learning methods); age (whether younger than 24 or 24 or older); ethnicity; nationality; and course subject. Students with a spread of these characteristics were interviewed at each of the three iterations. Speaking directly to such a wide range of students gave a rich insight into the views of these students, how they saw their learning and their views on the NSS, its role and how they answered the questions.

3.2.1 Cognitive testing iterations

Three phases of cognitive testing, referred to throughout this report as **Part 1, Part 2 and Part 3**, were conducted to allow the adoption of an iterative approach. Parts 1 and 2 formed the majority of fieldwork and took place in October and November 2014. Part 3 comprised a smaller set of interviews, which took place in May 2015.

Priorities at each iteration

At each testing phase the questionnaire was designed to replicate the flow of the current NSS while ensuring new sections and wording were fully tested. All current and newly developed versions of statements were cognitively tested at least once; some statements were included within all phases of testing. At Part 1, testing of amended and newly designed questions along with the negatively phrased statements was prioritised. Part 2 focused on the alterations made in light of our findings at Part 1 and tested carefully the areas where respondents were known to have particular difficulties. Part 3

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[5] http://appliedresearch.cancer.gov/areas/cognitive/qas99.pdf

concentrated on testing any current and pilot questions that had not yet been cognitively tested including questions that were only tested using negative phrasing (explained in more detail in section 3.4   ).

The tables below show the characteristics of the students interviewed, the range of courses they were studying and the number of students that used each interview mode:

3.2.2   Characteristics of students

Phase	Study mode			Age		Ethnicity		Nationality	
	Full-time	Part-time	Distance	Under 24	24+	White	Non-white	British	Intl
Part 1	34	4	4	26	16	30	12	29	13
Part 2	39	4	-	31	12	31	12	27	16
Part 3	19	1	-	13	7	19	1	12	8
Total	92	9	4	70	35	80	25	68	37

3.2.3   Subjects studied by students

Part 1	Part 2	Part 3
Business Enterprise	Animal Management/Animal Science	Accounting and Finance
Business and Management	Business Management/Agricultural Business Management/International Business/International Business and Finance	Applied Sports Science/Sports Science and Coaching/Sports Coaching
Bioscience	Computing/Computing and System Development	Art/Art and Design
Chemical Engineering	Conservation and Environment	Business Management/International Business Management
Chemistry/Medicinal Chemistry	Education Support	Childhood and Learning Support Studies
Computing	Engineering/Biomedical Engineering	Computing
Criminology	Equine Studies and Business Management	
Economics/Economics and Finance	Film Production	Criminology
English Literature	Floristry	Electronic Engineering
Environmental Biology	Graphic Communication	Events Management
Environmental Management and Ecology	Horticulture	Fashion Design
French and Politics	Illustration	Illustration
Geography and Planning	Journalism/Sports Journalism	Journalism/Media and Cultural Studies
Health Sciences	Languages/Languages and Communication	Public and Social Policy
History/History and Politics	Law/Law with Business	Technical Support (IT)
International Relations and Politics	Medicine	Welsh
Journalism Studies	Naval Architecture and Ocean Engineering	
Law/LLB/Law with German Law/European and	Photography	

Part 1	Part 2	Part 3
International Law		
Maths/Maths and Finance	Physics	
Mechanical Engineering	Physiotherapy	
Medicine	Psychology/Psychology Counselling	
Music	Science/Biomedical Science	
Politics with Spanish	Spanish and French	
Sociology and Social Policy		

3.2.4 Number of students using each interview mode

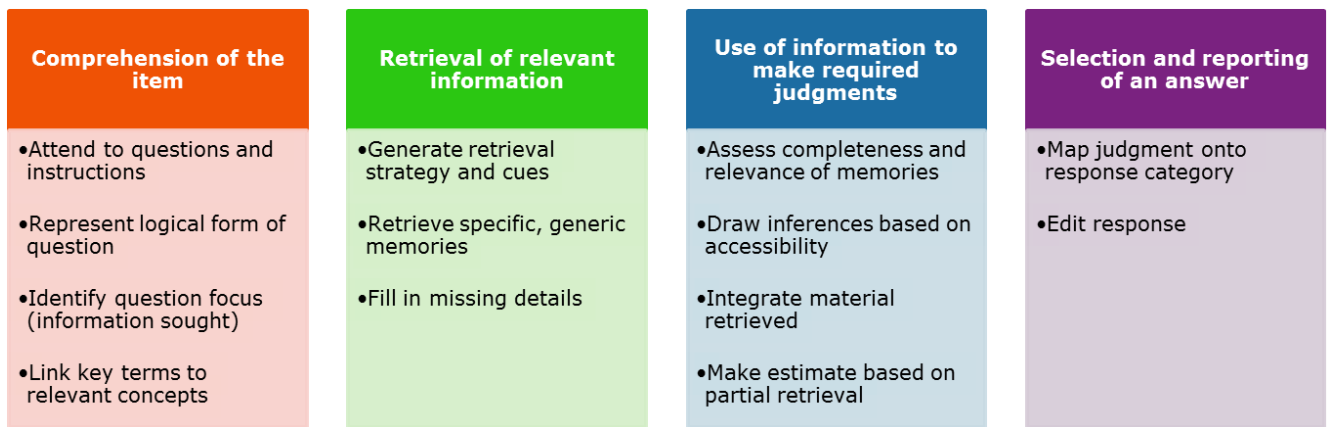| Mode	Number of students			% of students using this mode in the main NSS (supplied by Ipsos MORI)
	Part 1	Part 2	Part 3	
Paper and pencil	7	6	3	4%
Laptop	19	21	14	62% (laptop or PC)
Tablet	7	5	-	9% (hand held devices)
Interviewer administered	9	11[6]	3	25%
Total	**42**	**43**	**20**	**100%**

3.3 Cognitive interviewing and methods

Cognitive interviewing is a versatile technique that allows the critical evaluation of the transfer of information. It is commonly used in survey research to explore how participants understand, mentally process and respond to the presented material and aims to identify where problems are experienced within this process. Ultimately, the aim of the question designer is that material is interpreted universally in the manner that it was intended. Cognitive testing may uncover that an individual presented with the same question interpret it in an alternative way that retrospectively appears entirely reasonable. Detection of such problems allows modification of the survey instruments to enhance clarity, hopefully leading to a reduction in cognitive processing demands to allow thoughtful consideration of questions and ultimately more accurate answers.

Our approach to cognitive testing is underpinned by the theoretical principles put forward by Willis (2005)[7]. He states that the field of questionnaire design development, research and evaluation has come to be dominated by the 'CASM approach' (Cognitive Aspects of Survey Methodology), pioneered by Tourangeau and colleagues in the early 1980s. The principle behind CASM is that when answering survey questions respondents must employ a series of complex cognitive processes, or steps of processing information, as opposed to a more straightforward question-answer sequence. Tourangeau proposed the following four-stage cognitive model in 1984 to clearly depict this process:

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[6] This included four telephone interviews conducted with students at Further Education Colleges.
[7] Willis G. (2005), 'Cognitive Interviewing. A Tool for Improving Questionnaire Design' Sage.

Comprehension of the item	Retrieval of relevant information	Use of information to make required judgments	Selection and reporting of an answer
•Attend to questions and instructions •Represent logical form of question •Identify question focus (information sought) •Link key terms to relevant concepts	•Generate retrieval strategy and cues •Retrieve specific, generic memories •Fill in missing details	•Assess completeness and relevance of memories •Draw inferences based on accessibility •Integrate material retrieved •Make estimate based on partial retrieval	•Map judgment onto response category •Edit response

3.3.1 Our method

We conducted three phases of testing (Parts 1, 2 and 3) with final year students at their HEI, using cognitive interviewing methods to explore the techniques and strategies they employed when answering the newly adapted NSS questionnaire.

Cognitive interviewing techniques

The interviews were conducted by members of our quantitative and qualitative research teams. We used a mixture of observation, Think Aloud, probing techniques (both concurrent and retrospective) and paraphrasing, tailoring these to each respondent as appropriate. Keeping respondents thinking aloud is a skilled task and requires researchers to use both pre-prepared and spontaneous probes to explore respondents' thought processes. The key difference between Think Aloud and specific probing is that Think Alouds are 'respondent driven' whilst specific probes are 'interviewer driven'[8]. The Think Aloud technique was found to be very successful among this group and, perhaps as a result, interviewers favoured probing concurrently after each question. Interviewers demonstrated an example of the Think Aloud technique before asking the student to try the same as a practice. Following this, interviewers observed the student begin filling in the questionnaire, encouraged them to use the Think Aloud technique throughout and followed up with probes.

Years in education Think Aloud example

The example used focused on the number of years the student had been in education. Interviewers took the question 'How many years have you been in education?' and demonstrated, through describing out loud what they were thinking while working out their answer, how to go about using the Think Aloud technique.

Materials, data and analysis

Researchers used a question and probe sheet, agreed with HEFCE to help guide them through the interview. Interviews were digitally recorded to allow the interviewer the freedom to react to respondents' answers and non-verbal cues without trying to juggle this with lengthy note taking.

Data from the digital recordings were entered into a bespoke analytic framework. This framework was designed to outline the issues under consideration and the cognitive concerns (answer strategies, understanding of particular terms and concepts) and facilitated thematic analyses across and within individual cases. Following completion of each iteration of testing the research team met for an internal analysis session to review the findings and agree recommendations for the next iteration.

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[8] Collins D. (2003), 'Pretesting survey instruments: An overview of cognitive methods', Quality of Life Research, Vol. 12, pp. 229-238.

Mixed-mode testing

The three phases of cognitive testing took account of the different formats of response available to students filling in the survey (see table 3.2.4   for the number of students that used each mode). Interviews were conducted by paper and pen (PAPI), on-line, using laptops and tablets (CAWI) and simulated telephone (CATI) interviews to allow exploration of the differences between the modes and any mode-specific difficulties students may encounter.

3.4   Negatively phrased statements

The review of the NSS highlighted that there has been an increase in the proportion of students giving the same answer to all 23 questions (1.0% in 2005 compared with 5.4% in 2013), the majority answering 'Strongly agree' to all questions. While this problem, technically described as acquiescence bias or 'yea saying', is not uncommon in large online surveys, analysis of NSS data uncovered a larger extent than expected. To combat this problem the review team designed three new negatively worded statements and suggested these be cognitively tested. Existing literature has highlighted the cognitive difficulty commonly associated with measuring the negative ends of a continuum using an agree/disagree format. Fowler (1995) states that "disagreeing with a statement that says they are "not satisfied" is a complex way to say one is satisfied"[9]. This hesitance or scepticism meant that these would require particular focus within our phases of cognitive testing.

At Part 1, four statements were taken from the NSS survey, re-phrased negatively and dotted throughout the questionnaire. At Parts 2 and 3 one negative statement was retained at the very end of the survey to check how students approached one negatively phrased statement without it interfering with the flow of the remainder of the questionnaire.

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[9] Fowler F.J. (1995) 'Improving Survey Questions. Design and Evaluation (Applied Social Research Methods Series Vol 38)' Sage.

4. Students' answer strategies

This chapter gives an overview of the general answer strategies and thought processes students employed when approaching the questionnaire. Firstly, two main strategies commonly drawn on when providing answers across all types of statement are outlined. Secondly, the problems students encountered during this process are explored in detail, examining separately the issues surrounding comprehension, recall, judgement and response.

4.1 Two typical answer strategies

Taking all three phases of cognitive testing and looking at students' answering behaviour across the entire questionnaire, two main answering strategies were evident:

4.1.1 An 'averaging' strategy

We found systematic use of an 'averaging' strategy throughout all three phases of testing; that is following comprehension of the statement, the thinking over or recall of the different experiences students had had and using judgement to sum them together to select one response option. Where students used this strategy the middle category ('Neither agree nor disagree') was useful. While this 'averaging' judgement formed a valid answering strategy, students could feel dissatisfied with how they had coded their answer, feeling they had not done justice or adequately represented particularly positive or negative experiences by watering them down into one overall response. Notably, we uncovered students' reluctance to give an overall negative answer (i.e. 'Mostly' or 'Definitely' disagree) where their general experience had been negative but one very positive experience had taken place. In these instances students were drawn towards the 'Mostly agree' category, not wanting to give a perceived disservice to a particular member of staff (e.g. feedback on my work has not been especially prompt except for one or two tutors so I will choose mostly agree as picking disagree would be unfair on them).

4.1.2 Focusing on one or two specific events or experiences

The second strategy adopted by students was to grasp the statement and attach meaning fairly quickly during the comprehension stage, then, rather than thinking across a range of factors, consider one or two concepts only. In particular, students commonly drew on, or cherry picked, one or two particularly poignant or recent experiences – which may or may not have reflected their general experience – and answered based on these memories only. Examples of such instances are: focusing on one particular assignment that had not received as good a mark as expected ('Marking and assessment has been fair'), one member of staff who was especially unengaging or unhelpful ('Staff are enthusiastic about what they are teaching') and one instance where it was not possible to access a computer ('I have been able to access subject specific resources (e.g. equipment, facilities, software) when I needed to'). Additionally, where statements were long or contained multiple concepts students focused on, or cherry picked, wording that best applied or was most relevant to them (e.g. choosing whichever felt the most relevant to their course from 'ideas', 'concepts' and 'experiences' at 'My course has provided me with opportunities to analyse ideas, concepts or experiences in depth').

While this 'cherry picking' strategy may be valid where the specific event is the student's only relevant experience or is an example of all typical experiences, it is less valid where a whole range of factors were relevant but only one or two were considered during the answering process.

Other instances of this type of answering behaviour included: thinking about whether something had 'ever' happened, been true or the case (e.g. undertaken group work, received feedback, advice, support or guidance) rather than considering whether it was sufficient or appropriate; and considering whether something is available at all (e.g. access to subject specific resources, opportunity to provide feedback, ability to contact staff) rather than whether it was sufficient or appropriate or when it was needed.

4.2 Cognitive burden, shortcut heuristics and why they matter

The second strategy, described above as 'cherry-picking', required a lesser degree of cognitive effort than the 'averaging' strategy outlined first. The key point of note is that students took a shortcut to their answer; rather than thinking across the whole experience they thought about something that was easier to consider.

Literature has shown that people approach tasks in a variety of ways, one common way being that they immediately look for the quickest way to complete the task or a 'shortcut'. Krosnick has termed this behaviour 'satisficing' (Krosnick, 1991)[10]. Heuristics are mental shortcuts or 'rules of thumb' that allow people to make inferences or decisions quickly and with reduced effort (Kahneman and Tversky, 1973)[11]. While these heuristics have been used to explore and understand how people draw conclusions in social settings the same rules can be applied to a task such as answering a survey questionnaire. The inherent need to take a shortcut forms an important part of the cognitive process people undertake when making decisions about how to answer each question. Therefore different people employ different 'rules of thumb' when answering survey questionnaires (McGee and D'Ardenne, 2009)[12].

As survey researchers we are well aware that respondents take shortcuts when answering questions; however, due to pressures of questionnaire length and content it is easy to include more than is ideal and remain optimistic that respondents will understand what is required of them. Multiple concepts are wrapped within questions to reduce the overall number of items and response category lists become longer. At all three phases of cognitive testing students systematically used shortcut strategies when answering the NSS questionnaire. The following section gives an overview of the kinds of issues students experienced and where possible makes suggestions for how to deal with them.

4.3 An overview of the issues students experienced

As illustrated, cognitive testing can help identify where and why students take shortcuts, enabling well informed recommendations for changes to simplify the task so that students feel motivated to complete it as required rather than taking a shortcut. As outlined above, cognitive testing deconstructs the answering process and explores four key stages: comprehension; recall; judgement; and response. Next, we detail the main issues students experienced when completing the NSS questionnaire, breaking down these issues into these four key stages.

4.3.1 Issues around students' comprehension

Cognitive testing uncovered three main issues relating to students' comprehension of the NSS questionnaire.

Information is missing or misunderstood (e.g. role of the Students' Union)

Generally students were equipped to answer the questions included in the NSS; that is, they had the information required at each statement and broadly understood what they were being asked. However, there were a few exceptions to this rule.

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[10] Krosnick J.A. (1991) 'Response Strategies for Coping with the Cognitive Demands of Attitude Measures in Surveys'. Applied Cognitive Psychology, 5, 213-236.
[11] Kahneman D. and Tversky A., (1973) On the Psychology of Prediction, Psychological Review, 80 (4), American Psychological Association.
[12] McGee A. and D'Ardenne J. (2009) 'Netting a winner': tackling ways to question children online. A good practice guide to asking children and young people about sport and physical activity. Prepared for the Sports Council for Wales. http://sport.wales/media/351853/netting_a_winner_-_english.pdf

Most notably students did not always have the information necessary to answer the question about the Students' Union (wording shown below).

Part 1:   The Students' Union (Association or Guild) has improved students' academic experiences
Part 2:   The Students' Union (Association or Guild) effectively represents students' academic interests

Despite re-wording the statement between Parts 1 and 2 we found systematic evidence that students did not associate the Students' Union (Association or Guild) with the academic experience; if they were aware of the Union at their institution they associated it with social and extra-curricular activities. We were unable to alleviate the conceptual problems relating to the Students' Union question through changes to the wording and recommend two options for consideration:

1. Asking students first about general representation of students' interests, followed up with a more specific question on academic interests; or

2. Including only one general question about representation of students' interests (i.e. removing the reference to academic interests).

The Students' Union statements are discussed in more detail in section 5.11 .

There were other examples of students not having the information required to enable them to respond to statements. This included 'It is clear how students' feedback on the course has been acted on' (asked at all three phases of testing). While students were aware of feedback provided some were unclear about what the impact had been. Further detail about this statement can be found in section 5.9.4 .

Understanding of the statement varies widely depending on the course being studied
It became very clear during Part 1 of the cognitive testing that the most important factor that influenced students' understanding and answer strategies was the course they studied. Concepts were interpreted in a wide variety of ways and were more relevant or applicable to certain courses than others. Taking the statement 'My course has provided me with opportunities to apply what I have learnt in practice' as an example, students undertaking courses that included a practical element (e.g. Music, Sports Science) were more likely to restrict their thinking to this practical part of their course. Taking 'As a result of the course, I feel confident in tackling unfamiliar problems' as a second example, students on Mathematics or Accountancy based courses were likely to interpret 'problems' as a given mathematical problem or example case study that they needed to solve, exclusively thinking about course material.

Difficulties by course type/mode
The testing sought to examine whether students taking different types of courses or using different modes of learning may experience difficulty at particular statements, namely part-time students, distance learners and students taking joint honours courses (e.g. Geography and Politics). Due to these concerns we ensured our sample included students from all three groups. The expert panel was concerned that questions in the organisation and management bank would not hold relevance for **distance learners** and **part-time** students (see section 5.5), specifically that these groups would find thinking about their 'timetable' would be difficult. In fact, cognitive testing showed that students experienced a narrower range of problems than had been expected and we did not find systematic evidence to support the concerns raised by the expert panel; within our cognitive sample these two groups were able to give meaningful and thought out answers. Problems that were more noteworthy were that distance learners were not always sure how to answer the statement about library resources (see section 5.6.2) and part-time students could experience uncertainty when answering questions about the Students' Union (see section 5.11).

We found no major specific problems as a result of students taking **joint honours courses**; the range of issues experienced by these students were consistent with those studying single honours courses (e.g. taking the various relevant factors at any given statement, averaging across experiences and summing them together into one answer). Where anything arose in relation specifically to joint honours courses this is mentioned throughout the statement-by-statement findings in Chapter 5.

We found that, with each iteration of testing, we were able to make changes to the wording of the statements which constituted an improvement in students' overall understanding across every section but, due to the wide variety of courses being studied, some of these more conceptual problems remained. It is important that this is borne in mind during analysis; course subject was by far the most significant factor and had the greatest impact on students' answer strategies and thinking behaviour.

Statements are too long/too many, contain jargon, multiple concepts and have double meanings

The QAF review highlighted where statements contained:

1. Jargon or potentially unfamiliar terms (e.g. 'virtual learning facilities (e.g. VLE)');

2. Too many concepts (e.g. 'My course has enabled me to bring information and ideas together from different topics to solve problems'); or

3. Double meanings (e.g. 'The course has helped me to improve my self-confidence' where a disagree answer could be given for two different reasons: 1. Where there had been a negative impact on their confidence; and 2. where there had been no impact as they had already been confident before starting the course).

Findings from the three phases of cognitive testing generally supported our hypotheses. To give an example, at Part 2 the questions in the new 'Critical thinking' section were found to be complex and applied differently across subjects. For Part 3 we shortened and simplified the statements, removing concepts to focus each statement on one particular aspect and found them to be better received (e.g. 'My course has provided me with opportunities to apply what I have learnt in practice' (Part 2) was shortened to 'My course has provided me with opportunities to apply what I have learnt' (Part 3). More detail on the 'Critical thinking' statements can be found in section 5.2 .

Students also commented where they felt the section as a whole was too long, containing too many statements. At Part 1, students found the 'Teaching on my course' section to be too long and muddled; it contained six statements whereas most sections held three or four. The various concepts included were confusing and there was also overlap between the statements here and in the personal development section (in relation to 'problem solving skills'). Following Part 1 the statements were simplified and split into two sections; the new section entitled 'Critical thinking' was introduced. Despite the problems in the new 'Critical thinking' section described above, this change made the questionnaire clearer and the reduced 'Teaching on my course' section worked well.

4.3.2 Issues around students' recall

The two issues relating to students' recall related back to the two answer strategies detailed in section 4.1 .

Difficulty with averaging process

As outlined in section 4.1.1 , students could find it difficult to provide one overall 'average' answer where experiences had differed (e.g. at 'Staff value students' views and opinions': I don't feel staff have been interested in our opinions except one who always asks us for feedback so I don't want to pick 'Mostly disagree', I will choose 'Mostly agree' because of her).

Despite this problem we found, for the most part, students were able to give an overall answer taking account of all relevant experiences though it should be noted that this answer process is more cognitively challenging than 'cherry picking' (see below) and requires more effort.

'Cherry picking' of unrepresentative events

Where students do not consider the whole range of relevant factors and instead 'cherry pick' the most meaningful, memorable or recent ones this leads to a skewed and invalid answer (e.g. being unsure what to include as IT resources and facilities and only thinking of computers at 'IT resources and facilities have supported my learning well'). To encourage students to think over the whole range of factors we recommend making the statements as concise and to the point as possible. That said, this strategy is likely to remain due to an inherent, automatic and unconscious desire to take a shortcut where possible.

Generally students were able to remember the information necessary to answer the questions but the process of doing so could require a fair degree of cognitive effort. We experienced few cases where students said they could not remember; a more relevant scenario was that the information was not available at all (as outlined in section 4.3.1).

4.3.3 Issues around students' judgement

Cognitive testing detected two issues surrounding students' judgement, neither of which is felt to be overly significant.

Feel compelled to give an overall positive (or negative) response

Though not generally perceived to be a significant problem we should note that some students felt obliged, perhaps through loyalty to their staff and institution, to approach the questionnaire positively, were reluctant to give negative responses and were drawn towards the agree categories throughout and where there had not been a specific problem they would choose from these. It seems reasonable that students would like to feel the course has been worthwhile, this being a supportive basis for the positive mindset and overall approach to the questions.

Avoidance of selecting certain categories

Some students said they generally did not like to choose the first and last categories at either end of any questionnaire scale; some mentioned that there is always room for improvement and these are too definite or ultimate. This is not a problem where, during data analysis, the agree and disagree categories are combined but students' reluctance to choose the extreme categories is worth noting here.

We also found students who said they did not like to choose the middle category as it felt too 'on the fence' and they liked to give an opinion. There was a feeling that 'Neither agree nor disagree' answers would not count.

4.3.4 Issues around students' responses

Problems relating to students' responses concern how they fit their answer into one of the given answer categories. Cognitive testing detected two issues students faced in selecting a category from the scale.

Uncertainty around how to code a 'Don't know'

Cognitive testing showed that, for the most part, students had the knowledge to answer the questions contained within the NSS questionnaire; however there were some exceptions to this rule (most notably the Students' Union statement, whether staff value students' opinions and views about the course and some questions about 'Critical thinking' that contained multiple concepts). In cases where students were unsure of their answer, cognitive testing uncovered a lack of consistency in the decision making process of choosing an answer; students haphazardly selected the middle category ('Neither agree nor disagree'), the 'Not applicable' category or simply gave a best guess. Some students asked whether they should leave a question blank if they did not know the answer. The inconsistent use of the middle and 'Not applicable' categories led to the recommendation after Part 1 of including a 'Don't know' category at Part 2 but this was not taken forward due to a requirement to maintain the current answer scale. Subsequently this conceptual problem of students' inconsistent strategies when dealing with a 'Don't know' remained at both Part 2 and Part 3 and it is recommended the UK funding bodies consider the impact of this problem on achieved findings.

Additional answer categories

Currently a 'Not applicable' category sits alongside the five categories that make up the agree/disagree answer scale. As mentioned, students' use of the middle category and the 'Not applicable' category was haphazard. During the pilot test a further additional category 'I don't understand the question' was added to the response options. We recommend that decisions relating to the inclusion of additional answer categories should be based on the use of this code during the pilot, alongside 'Not applicable', the middle category and feedback from the cognitive interviews. Other measures might be to explore design options for making such additional categories stand apart from the scale (e.g. using a small space or different colour to highlight that they are not part of the scale).

Error/confusion when coding a negatively phrased statement

The current NSS contains 23 positively phrased statements. A statistical review of the data, undertaken by HEFCE, flagged concern regarding acquiescence bias; namely that a higher than expected proportion of students were ticking 'Definitely agree' throughout the questionnaire. The concern is that students are selecting the same category throughout the questionnaire to get through it as quickly as possible with the minimal cognitive effort required, the collection of non-meaningful answers having a negative impact on data validity. Negatively phrased statements were included at all three phases of testing, shown in the table below:

Negatively phrased statements

Part, Round	Current wording	Negative wording
Part 1	Staff are good at explaining things	Staff are **poor** at explaining things
Part 1	I have received sufficient advice and support with my studies	I have received **in**sufficient advice and support with my studies
Part 1	I have been able to contact staff when I needed to	I have **not** been able to contact staff when I needed to
Part 1	Any changes in the course or teaching were communicated effectively	Any changes in the course or teaching were **not** communicated effectively
Part 2	-	The teaching on my course has been **poor**

Part 3 -	Overall, I am **dis**satisfied with the teaching on my course

At Part 1, four statements were taken from the NSS survey, re-phrased negatively and dotted throughout the questionnaire. These four statements were chosen to allow the alteration of the phrasing in two different ways. The wording of the first two was simply reversed from positive to negative (good to bad, sufficient to insufficient). At the remaining two the word 'not' was inserted.

At Part 1, we found the inclusion of four randomly placed negative statements led to problems and error. While some students were able to process the statement and fit their answer correctly into one of the response options it led to confusion and misreporting for some students and was felt to be an unnecessary complication by others when probed. The statements place more cognitive burden on the student; for example where students report a positive experience the instinct is to reply in a positive light (e.g. "mostly yes"). They then have the additional task of fitting this positive answer to a negative category. Some students would fit their answer to 'Definitely agree' or 'Mostly agree' meaning an incorrect answer is recorded. This highlights the 'double negative' aspect of the tested wording and that it requires a greater level of cognitive effort which, if not made can result in an incorrect answer. Some students would realise their mistake and alter it and then watch out for the negatively phrased statements later on. We recommended that, for Part 2, the negative statements were removed; it was subsequently agreed with the UK funding bodies that one negative statement would be included at the very end of the survey to check how students approached one negatively phrased statement without it interfering with the flow of the remainder of the questionnaire.

At Part 2, the questionnaire flowed smoothly without the negative statements. We found that when students arrived at the final question 'The teaching on my course has been poor', they would express surprise at the change. Generally it was felt to be an unnecessary complication by some students. With one or two exceptions, students spotted and correctly interpreted the negative wording but many felt it to be rather a strange question in terms of wording and position. It made some students feel quite defensive of their course after a lengthy set of positively worded statements while other students said they felt compelled to think of the negative aspects. However, students found it far more easy to comprehend and respond to the negative wording than had been the case at Part 1, and responses were consistent with answers and views put forward earlier in the questionnaire. While evidence showed this did not work well in practice, we recommended including one negatively worded statement at the end of the pilot questionnaire and conducting analyses to further explore the concerns surrounding 'yea saying'.

At Part 3 we again included one negatively phrased question at the end of the questionnaire 'Overall, I am dissatisfied with the teaching on my course '. Findings were similar to those at Part 2; many students asked for clarification that they had selected the right category and some actively said they did not like the change and felt it was trying to catch them out or trick them.

4.4 General recommendations

This section has outlined the two main answer strategies employed by students when approaching the NSS questionnaire and highlighted specific problems that emerged during cognitive testing, these broken down into the four stages of processing: comprehension, recall, judgement and response.

Next we give our general recommendations for the NSS questionnaire and note where we found conceptual problems that cannot be resolved through the re-wording of statements and re-organisation of information.

4.4.1 Considerations when developing the 2017 NSS

Recommendations
Include a maximum of 3-4 statements within each section.
Keep statements short, simple and to the point; this should help students' comprehension across all interviewing modes. Avoid using jargon, incorporating multiple concepts or double meaning. As well as improving students' understanding of the statements it may help make the option of using a shortcut less attractive.
Do not include negatively phrased statements due to potential confusion caused by these. However, this should be reviewed alongside the pilot data, particularly looking at the proportion agreeing with the negative statement while responding positive elsewhere and how this correlates with other indicators (e.g. length of time taken to complete the questionnaire).
Consider changes to the scale, ranging from including a 'Don't know' category in the response scale and finding ways to differentiate both this category and 'Not applicable' from the main scale - to a more radical re-design.
While it is possible to rectify some of the problems with fairly simple alterations to wording, other conceptual problems that cannot be alleviated through the re-wording of statements will remain. These are: • *where information is generally missing or misunderstood (e.g. role of the Students' Union)* • *students' understanding of concepts across different courses – this will inevitably vary due to the exceptionally wide range of courses offered* • *where jargon, multiple concepts or double meaning remains* • *where students decide to 'cherry pick' rather than consider the full range of events/experiences* • *where students feel compelled to give an overall positive response* Where these conceptual problems were found through the cognitive testing they are detailed on a statement-by-statement basis in the following chapter (Chapter 5). For each relevant statement we recommend it be weighed up whether the issues highlighted reduce the worth of the results to too great a degree for the data to be useful or whether, on balance, the issues can be accepted due to the overall value of the data provided.

5. Statement-by-statement findings

This section details findings from our three phases of cognitive interviewing (Parts 1, 2 and 3) and is intended to be used as a reference guide for each statement or group of statements tested.

5.1 The teaching on my course

The current NSS questionnaire includes four questions about teaching on my course. Small changes were made to these statements following TNS BMRB's review of questions using their QAF, most notably that one was amended to be phrased negatively. The review proposed that this initial section would also contain five new questions (two are included in the summary table below and three in the following 'Critical thinking' section (5.2.1   ). At Part 1, one original (albeit negatively phrased) statement and all five new statements were tested. Students found the section too long overall and as four of the new questions were felt to have a different focus to the original statements in this section they were relocated for Parts 2 and 3 to a new section entitled 'Critical thinking'. The questions tested at each stage are shown in the table below.

5.1.1 Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
Staff are good at explaining things	Staff are **poor** at explaining things	Staff are good at explaining things	Staff are good at explaining things	N/A
Staff have made the subject interesting	N/A	Staff have made the subject interesting	Staff have made the subject interesting	N/A
Staff are enthusiastic about what they are teaching	N/A	Staff are enthusiastic about what they are teaching	Staff are enthusiastic about what they are teaching	N/A
The course is intellectually stimulating	N/A	The course is intellectually stimulating	The course is intellectually stimulating	N/A
N/A	My course has challenged me to achieve my best work	N/A	My course has challenged me to achieve my best work	My course has challenged me to achieve my best work
N/A	The teaching has encouraged me to think about the course content in depth[13]	N/A	N/A	N/A

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[13] Due to overlap this statement was incorporated into the 'Critical thinking' questions for Parts 2 and 3.

5.1.2 Staff are good at explaining things

Part 1:   Staff are poor at explaining things
Part 2:   Staff are good at explaining things
Part 3:   N/A

This statement is part of the existing questionnaire. Following TNS BMRB's review of questions using their QAF the wording was amended to be phrased negatively to allow exploration of how students approached negative statements. As students found this phrasing complicated the statement reverted to positive phrasing for Part 2 and was not included at Part 3.

Answer strategies
This came across as an effective opening question, being seen as both very relevant to all students and reasonably easy to answer. No changes were recommended for or after the pilot.

Some students found it difficult to generalise here due to some staff being better at explaining things compared with others. Despite this, they were usually able to answer through a process of 'averaging' – i.e. taking all staff into account and determining whether they were mostly good or mostly poor. In some cases a single or small number of negative cases affected the student's response. For example, a student had one lecturer with whom they felt there was language barrier but the rest were 'brilliant'. This led the student to opt for 'Mostly' rather than 'Definitely'.

A number of considerations were included when responding to this statement, including the clarity of lectures, how well staff respond to queries from students, how well they put across complicated ideas or principles, information being provided with relevant explanations and general communication skills (e.g. their 'manner' when talking to students).

Staff
The vast majority of students were only considering academic teaching staff here (i.e. lecturers and tutors). Some also included administrative, support and technical staff related to their course (e.g. lab technicians) and PhD students who led seminars.

Negative phrasing at Part 1
In Part 1, there were some issues with the negative wording. A small number of students initially didn't spot this and gave the wrong responses (thinking the statement was phrased positively) and a couple of others commented that the negative wording made this question more difficult to answer and required more effort on their part.

5.1.3 Staff have made the subject interesting

Part 1:   N/A
Part 2:   Staff have made the subject interesting
Part 3:   N/A

This question is part of the existing NSS questionnaire and was only tested once within our package of work, at Part 2. The review of questions using the QAF proposed retaining the original wording without changes.

Answer strategies
Overall students found this question easy to answer. Again there was some work required here in generalising – with comments that some staff are better at making the subject interesting than others. Again though, most students could provide an answer through an 'averaging' process. It was notable that

students often mentioned 'enthusiasm' (of teaching staff) when describing how their subject had been made interesting – pointing to a degree of overlap with the next statement.

Some students commented (with and without prompting) that their answer here was quite subjective or personal – i.e. it depended on their own level of interest. Students who were not very enthusiastic about what they were studying tended to answer based on how interesting staff had tried to make the subject for them, so in some cases still agreed with the statement. Students who were very interested in their subject tended to respond positively. In some cases they found it difficult to unpick their own pre-existing interest from the impact the teaching had on this – though they could usually cite examples of ways that staff had made the subject more interesting (and increased their own already high interest levels), and were factoring these considerations into their answer here.

Making the subject interesting
Students gave a wide range of examples of ways that staff had made their course interesting. This included: staff who were engaging, enthusiastic and able to impart their passion about the subject; giving students the freedom to explore areas of interest; staff imparting their knowledge to students; an interactive approach to teaching and learning (e.g. encouraging group discussions, bringing in guest lecturers); relating teaching and learning to 'real life' issues; and using a variety of teaching methods and technologies.

Those who responded less positively to this statement usually talked about lecturers just reading lecture notes and rigidly going through the 'standard' course content. Some commented that these lecturers tended to take a more 'traditional' approach.

5.1.4 Staff are enthusiastic about what they are teaching

Part 1:   N/A
Part 2:   Staff are enthusiastic about what they are teaching
Part 3:   N/A

This question is part of the existing NSS questionnaire and was only tested once within our package of work, at Part 2. The review of questions using the QAF proposed retaining the original wording without changes.

Answer strategies
A number of students commented (often without prompting) that interest and enthusiasm related closely to each other. As such, they cited similar examples in responding to this statement and the previous one. Staff who had been most successful in generating interest tended to be enthusiastic about what they were teaching.

One student initially skipped over this question because she automatically gave the same answer as to the previous one and said; "it kind of goes with it, if they're not interested then they wouldn't be enthusiastic" (Specialist College, Animal Management). If only one statement is included, we feel that examples given by students for the previous statement better related to the impact that teaching had on their own learning experience and this is perhaps a higher priority for the survey.

Showing enthusiasm
Students noted a number of different ways that staff showed enthusiasm. Some mentioned very obvious 'visible' signs such as seeming 'excited' (for example 'jumping up and down'), being creative in teaching methods and through their voice and body language (e.g. not being monotone, moving around the room during lectures).

Enthusiasm was also discussed more broadly and in perhaps less obvious ways in other cases. This included: staff being knowledgeable about their subject (and having intrinsic knowledge – i.e. beyond

lecture material); sensing they are fully invested in the subject and what students are doing; preparing well for lectures and being ready to impart knowledge; and being approachable and ready to answer questions.

Students who responded less positively to this statement mentioned staff being more interested in their own research pursuits than in teaching students, with one comment that it felt like they were "forced to be there" (University, Law). It was mentioned that staff can be very enthusiastic about their field of interest but not about teaching it to students. In these cases, students tended to focus their response specifically on enthusiasm in a teaching context.

5.1.5 The course is intellectually stimulating

Part 1:   N/A
Part 2:   The course is intellectually stimulating
Part 3:   N/A

This question is part of the existing NSS questionnaire and was only tested once within our package of work, at Part 2. The statement was tested using the existing wording following the QAF review.

Answer strategies
Some students interpreted the statement to be a measure of the extent to which the course had encouraged them to think further. These students talked about being inspired to develop their own interest, being thought provoking ('making you think'), encouraging self-learning and exploration around ideas or concepts and enabling students to understand rather than simply memorise things. They also mentioned being encouraged to develop ideas on their own and challenge their own thinking. For example, one student understood the term to refer to the course encouraging her to read more afterwards to study in more detail (University, Business Management). Under these definitions, there was a substantial degree of overlap between this statement and some of those in the 'Critical thinking' section.

Intellectually stimulating
There were no major issues cited with understanding 'intellectually stimulating'. However, students did interpret this term in a number of different – and not entirely consistent - ways. Some students took 'intellectually stimulating' as a proxy for how challenging their course was and the extent that it pushed or stretched them to do their best and/or things they had not been able to do before. They referred, for example, to how much they had to 'concentrate'. In some other cases students took this statement to be a measure of how interesting they found their course, for example referring to whether it makes your "mind race" (University, Medicine).

In a few cases students studying more practical courses (e.g. Graphic Design) appeared less likely to agree with this statement, as they considered 'intellectually stimulating' to be more related to theoretical work and/or disciplines rather than practical work. Others who responded less positively talked about the lack of relevance of their course (e.g. out of date), it being overly general and the content being fed to students without encouraging wider thinking.

5.1.6 My course has challenged me to achieve my best work

Part 1:   My course has challenged me to achieve my best work
Part 2:   N/A
Part 3:   My course has challenged me to achieve my best work

The review proposed adding this new question to the 'Teaching on my course' section. The review of questions conducted using TNS BMRB's QAF recommended referring to 'achieving my best **work**' rather than simply 'my best' in an attempt to add clarity.

Answer strategies

Overall, we found the current statement to be clear to most students and it was interpreted in a meaningful and sensible way. At Part 1, most students based their answer to this statement on whether the course pushes them to perform to their full potential and demands their full effort to succeed (e.g. get good/top marks).

The statement was interpreted in a range of different ways. Students considered aspects such as the overall structure of the teaching (e.g. how the course is organised with regard to amount of contact time versus individual learning) as well as the content of the course and mentioned: assignments; deadlines; exams; the support of the teaching staff; and the cost of attending university.

My course

Some students commented that referring to 'my course' was a bit unclear here, and they were unsure whether they should base their response on the course content/structure or teaching (or both). Some felt that it would be better to refer to 'the teaching on my course' but this may narrow the focus a little.

Challenged me to achieve my best work

Students interpreted 'challenged me to achieve my best work' in a variety of ways. In considering whether the course was 'challenging' students talked about how difficult it was (e.g. 'much harder than A-levels'), sometimes comparing it with other courses they were aware of through fellow students and whether they had learned something new. There was a little confusion at the term 'challenging' where students said they enjoyed their course; the course was not a 'challenge' because they had enjoyed it.

'Best work' was also defined in a number of ways, including getting top marks (or in some cases the best grades they could), delivering to their full potential and showing evidence of improvement over the course. For example one student said "Best work means doing things to the best of my ability" (University, Criminology) and another said; "It challenged me to make myself better because by the end of the year I was doubly better than I was in the beginning" (Private provider, LLB).

5.1.7 The teaching has encouraged me to think about the course content in depth

Part 1: The teaching has encouraged me to think about the course content in depth
Part 2: N/A
Part 3: N/A

This statement was suggested as a new addition by the review. Minor changes were suggested following the QAF review, namely removing the word 'greater' from 'in greater depth' to simply think about the course content 'in depth'. This change was made because 'greater depth' suggests a comparison should be made to something else (i.e. greater than what?) and may have caused confusion. This version of wording was tested once only, at Part 1. Testing showed significant overlap with statements within the 'Critical thinking' section and at later phases of testing it was incorporated there.

Answer strategies

This statement was a little more challenging than some of the previous ones and students generally took longer to respond. Several students selected 'Neither agree nor disagree' and in a few cases this was due to not really understanding the statement or being able to apply it to their circumstances. This was particularly the case for students on more practical courses, who, for example, separated the practical and theoretical aspects of their course.

In depth

Most students interpreted the statement (and particularly the inclusion of 'in depth') as being a measure of the extent to which they have been encouraged to explore the basic course material further – e.g. 'it encourages you to research it further', 'gives you more than is actually on paper', 'inspiring you to explore further'. For example one student understood it as; "In depth means...not just skimming over the

details" (University, Criminology). They also mentioned looking at things from other perspectives and opportunities for further reading and research.

Encouragement

Students mentioned a range of ways their course had either encouraged or not encouraged them to think about content in depth, such as inspiring teaching, setting work that makes you want to go beyond the reading list, providing interesting case studies and examples, and suggesting documentaries. Some students reported being motivated themselves to look further rather than by the teaching or staff.

5.1.8 Considerations when developing the 2017 NSS

Recommendations
We recommend a total of three statements are included in this section.
'Staff are enthusiastic about what they are teaching' is likely to overlap with 'Staff have made the subject interesting'; as we feel the latter is a stronger statement we recommend retaining this one only, taking into account analyses of the pilot data.
We recommend 'The course is intellectually stimulating' is not included due to issues surrounding students' understanding of 'intellectually stimulating' and potential overlap with statements in the 'Critical thinking' section.
The final statement 'The teaching has encouraged me to think about the course content in depth' was found to overlap with questions in the new 'Critical thinking' section and thus we recommend it is not included here.
Recommended statements: *Staff are good at explaining things*   *Staff have made the subject interesting*   *My course has challenged me to achieve my best work*

5.2 Critical thinking

Three new questions about 'Critical thinking' were developed and tested. These questions covered new material recommended for inclusion by the review, essentially attempting to measure the extent to which students have been able to critically analyse what they have learnt and apply it in a practical sense. This measurement objective proved fairly challenging, for the most part due to the wide range of courses studied across the HE sector. The statements were initially placed within the 'Teaching on my course' section but following Part 1 were relocated to a new section entitled 'Critical thinking'. Students found these statements to be more cognitively difficult to process and answer compared with other parts of the questionnaire.

The review proposed three statements for inclusion in cognitive testing. Small changes were made to these statements following TNS BMRB's review of questions using their QAF. All three questions were tested at each of the three phases of testing, the changes in wording shown in the table below. Essentially the changes following each iteration of testing aimed to shorten the statements and reduce the number of terms or concepts included within each statement to help students focus more clearly.

5.2.1 Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
N/A	My course has provided me with opportunities to explore ideas, concepts or experiences in depth	My course has provided me with opportunities to analyse ideas or concepts in depth	My course has provided me with opportunities to explore ideas or concepts in depth	My course has provided me with opportunities to explore ideas or concepts in depth
N/A	My course has enabled me to bring information and ideas together from different topics to solve problems	My course has provided me with opportunities to bring information and ideas together from different topics to **explore** problems	My course has provided me with opportunities to bring information and ideas together from different topics	My course has provided me with opportunities to bring information and ideas together from different topics
N/A	My course has encouraged me to apply what I have learnt to practical problems or new situations	My course has provided me with opportunities to apply what I have learnt **in practice**	My course has provided me with opportunities to apply what I have learnt	My course has provided me with opportunities to apply what I have learnt

5.2.2 Exploring ideas, concepts or experiences in depth

Part 1:   My course has provided me with opportunities to analyse ideas, concepts or experiences in depth
Part 2:   My course has provided me with opportunities to explore ideas or concepts in depth
Part 3:   My course has provided me with opportunities to explore ideas or concepts in depth

This was a new question, suggested for inclusion by the review. No changes were made to this statement following the QAF review. However it was noted that there is quite a lot for students to take on board here. Extensive probing was carried out around the various terms (opportunities, analyse, ideas,

concepts, experiences). Following Part 1 the statement was shortened, 'experiences' dropped from the wording and students asked only about ideas and concepts. 'Analyse' was changed to 'explore' which was felt to apply more generally across different courses.

Answer strategies
Due in part to the number of terms and concepts included at this statement students found it, and the other statements in this section, more cognitively challenging than other parts of the questionnaire. On the whole the question was understood in the intended way with students considering the course material and then what they needed to do, or had been asked to do, over and above it.

Students answered the statement by picking up on whichever of 'ideas, concepts or experiences' related most to them and their course, this based on the part(s) they saw as being most relevant. At Part 1, students found 'ideas and concepts' to be meaningful; most students said they did not analyse 'experiences', though there were some exceptions. This in itself did not create any major issues as most students just focused on the aspects that applied to them and answered on this basis.

Where students did not understand what they were being asked some requested to re-read the statement. Another strategy was to take a shortcut and select the middle category rather than try to understand what was being asked.

Importance of the course
As noted, responses were very subject specific. Students studying Maths or Science based courses could more easily relate to 'analysis' at Part 1 (one student commenting "that's the whole basis of Maths" (University, Maths)). It was harder for those studying some other subjects to relate to the terms in this statement.

In depth
Examples of 'in depth' included: going that bit further; extra reading; asking for clarification; expanding; applying what was learnt (particularly where the course contained a practical element); discussions outside the course; and thinking about the future.

Ideas, concepts or experiences
Ideas and concepts were interpreted differently by some. 'Ideas' was felt to be more personal, and consisted of the ideas and opinions of the student and those theories, arguments and perspectives that came up in the course material. 'Concepts' was more difficult to define; they were seen as being more 'established', something that had been proven and more generally recognised. As noted above, students found it more difficult to apply 'ideas and concepts' to subjects that were Mathematics or Science based as these were seen as having fixed answers rather than ideas of concepts that could be explored.

Overlap at Parts 1 and 2
At Part 1, students commented that this statement was similar to 'The teaching has encouraged me to think about the course content in depth' ('Teaching on my course' section). While the differences in wording were recognised during probing students employed similar thought processes in answering the two questions, essentially giving a measure of the extent to which the course encourages them to 'go further', over and above the core content. This was compounded by the inclusion of 'in depth' at both questions and it was generally felt that there was no need to include this here.

At Part 2, some commented that this question overlapped with 'The course is intellectually stimulating' ('Teaching on my course' section), and was asking for the same information again.

5.2.3   Bringing information together from different topics

Part 1:   My course has enabled me to bring information and ideas together from different topics to solve problems
Part 2:   My course has provided me with opportunities to bring information and ideas together from different topics to explore problems
Part 3:   My course has provided me with opportunities to bring information and ideas together from different topics

Again, this was a new statement suggested by the review. No changes were suggested for this statement following the QAF review. Extensive probing was carried out to explore how students understand 'solve problems' and other terms in the statement. The statement was altered following Part 1 to ask about 'opportunities', bringing it in line with other statements in this section. The wording was also amended to 'explore' rather than 'solve' problems as we expected 'solve' problems to have a greater potential for subject specific bias (e.g. Maths based courses where 'solving' problems is a key part of learning). At Part 3, due to overlap with other statements, the reference to problems was dropped altogether and the focus placed on simply the bringing together of information. It was felt that this would still provide a measure of the transferability of different course elements but focus less specifically on problem solving.

Answer strategies
Students interpreted this statement as asking for a measure of how well their course worked together or the extent to which it was 'joined-up' i.e. provided scope for cross-referencing material from different disciplines (if a joint honours course), modules or bringing in arguments/examples from outside the specific module they were studying. 'Different topics' was often substituted for 'different modules'. One or two students said that the process of bringing together information and ideas did take place but that they were unsure whether they could attribute the opportunity explicitly to the course.

At Parts 1 and 2 students felt this question to be quite long and to contain a number of different concepts. Due to its length students tended to focus on one aspect (e.g. 'information and ideas' or 'explore problems') rather than necessarily considering the question as a whole. This was particularly problematic during interviewer administered interviews where earlier parts of the statement were missed by the student during the read out or students said they had lost track or were confused.

Where students did not understand what was being asked or chose not to engage with the question as it was felt to be too long, they chose the middle category as a way to skip past to the next question. When asked some said they would have chosen 'Don't know' if it had been an option.

The wording at Part 3 showed an improvement where students correctly interpreted the statement as asking whether they had brought together or linked the content learned in different modules. Some thought of the information they'd learnt in different modules or in different years, others thought of information within a particular module. This depended largely on how relevant it was depending on the course. Some students commented that the statement did not apply to their course as it wasn't appropriate for information across topics to be brought together; they were intended to be taught discretely and so were not related.

Information, ideas and topics
The reference to 'information and ideas' seemed clear to most students, with most referring to the course specific information, the course content that is taught, and the theory and philosophy underpinning what is being learnt. There were one or two queries over this from Music students, who said their course did not really deal with 'information or ideas'. As noted, students interpreted this very differently depending on what they were studying. 'Topics' was understood to mean: modules; units; disciplines; or academic areas.

Problems

The word 'problems' raised issues where students were unsure what they were meant to consider; this word was felt to be vague and subjective. Where students engaged with the question they tended to try to apply it to their course. For some this felt easy as problems were part and parcel of their learning (e.g. Maths and Computing where they are set 'problems' to solve as part of their learning). This way of thinking was uncovered throughout the questionnaire wherever there was a reference to 'problems'. Other students interpreted it as meaning: assignments; exams; set questions; practical exercises; or ways to improve on prior work.

Overlap at Part 1 and Part 3

Students at Part 1 commented that this question was very similar to 'My course has encouraged me to apply what I have learnt to practical problems or new situations' and had used similar answering strategies for each, considering both course-related problem solving and overcoming broader issues in everyday life and future work environments. During probing, this seemed to be mainly caused by the inclusion of 'solve problems' here.

At Part 3, some students saw this statement as similar to 'My course has provided me with opportunities to explore ideas or concepts in depth', possibly due to the word 'opportunities' being repeated throughout this section.

5.2.4   Applying what I have learnt

Part 1:   My course has encouraged me to apply what I have learnt to practical problems or new situations
Part 2:   My course has provided me with opportunities to apply what I have learnt in practice
Part 3:   My course has provided me with opportunities to apply what I have learnt

This was the final newly recommended statement focusing on 'Critical thinking'. Following the QAF review this statement changed to refer to 'My course' rather than 'The course' for consistency. Extensive probing was conducted around what students understand by 'practical problems or new situations' and whether there is consistency in how these terms are interpreted. Following Part 1 the statement was brought in line with others in this section to ask about being 'provided with opportunities' rather than using the word 'encouraged' which was found to be confusing for some. Over the separate testing phases the statement was shortened to focus on the application of what has been learnt rather than including a reference to 'practical problems or new situations' (at Part 1) or 'in practice' (at Part 2).

Answer strategies

At Part 1, students considered this statement in two main ways. Some thought specifically about problems and situations on their course. This was particularly the case for courses involving a lot of problem solving (e.g. Maths, Business Management) and those with practical elements (for example, singing/playing music for Music students). Students studying courses that did not have a 'practical' element were often more likely to disagree with this statement if they interpreted it in this way. Other students took the question more broadly and answered about the extent to which the course has given them knowledge and skills that can be used in everyday life or future work environments (some specifically referred to 'transferable skills'). Some students thought about both problem solving on their course and everyday life when answering here.

With the changed wording at Part 2, students tended to focus on the practical element of their course. For some, this was easy as the course contained a large amount of practical work (e.g. where studying Medicine or Animal Science) or where they had been on a placement, year abroad or conducted parts of

their work outside of the institution (e.g. visited a criminal court or taken photographs in a particular setting). Due to these findings we suspect that students studying more 'practical' subjects are more likely to respond positively to this statement. At Part 2, some students used the question as an opportunity to say whether they were satisfied with the practical element of their course (e.g. that two sessions a week was not enough).

After removing the reference to 'in practice', students at Part 3 focused here on applying what they had learnt on their course (skills, knowledge) in a practical way. As before, this was easier for students who had a clear practical element to their course (e.g. sports studies). Commonly students mentioned applying what they had learnt to a real life or everyday situation. Students also raised the importance of learning transferable skills to prepare them for the work place and their future careers (e.g. time management).

More generally we found students were often unclear what they were meant to think about whilst answering this question (e.g. whether they should restrict thinking to the course or consider more broadly than this) and regularly asked for clarification about what they should include.

Practical problems or new situations
Students interpreted these terms in a variety of ways. 'Practical problems' was considered by some to include course material only and others related problems to everyday life (e.g. using what had been learnt on a law course to take someone to court). Some restricted their thinking to the practical element of their course. 'New situations' was similarly interpreted in a range of different ways, some thinking about applying what they had learnt to real life and others thinking about new situations as part of their course (e.g. working with a new group of students on a joint project).

In practice
'In practice' was largely interpreted as being able to have practical, hands on experience, to put the theory of what they had learnt into practice. Some extended this to think about how they would use what they had learnt practically in their future careers.

Extra-curricular opportunities
The word 'opportunities' was included within the stem of all three statements at Part 3. We found that this led some students to think about specific extra-curricular opportunities they had been given and this applied throughout this section. One student commented that the section should be titled 'Opportunities' rather than 'Critical thinking' (University, Sports Coaching).

The 'problem' of overlap
As mentioned throughout this chapter, we found there to be overlap wherever the word 'problem' was used within different sections of the questionnaire. Notably, at Part 1 students commented that this statement overlapped with 'My course has enabled me to bring information and ideas together from different topics to solve problems' and 'The course has helped me to improve my problem solving skills' ('Personal Development' section).

5.2.5 Considerations when developing the 2017 NSS

Recommendations
We recommend this section includes three statements.
The title 'Critical thinking' was meaningful to students and should remain.
Consider testing an alternative version of 'My course has provided me with opportunities to bring information and ideas together from different topics'. This is a statement used in the UK Engagement Survey 2014 that referred to 'combining ideas from different modules when completing assignments' (though 'completing assignments' would need to be tested to ensure it was relevant for all students).
Consider testing an alternative version of 'My course has provided me with opportunities to apply what I have learnt': 'My course has given me skills and knowledge that I can use outside of my studies'. This may differ from the information objective for this statement and as such may not fit the data requirement. However, if the aim is to gain a measure of transferable skills this alternative statement might be successful in providing that.
On the whole we feel in light of the changes made throughout the three phases of testing these are good additions but it should be noted that comprehension does differ across students and some terms are interpreted in a variety of ways. Of particular note at the third statement students are often not thinking about the synthesizing of information; rather they focus on the practical element, or lack of, on their course. We recommend the funding bodies and expert panel review the data requirements for this section alongside the feedback provided and pilot data and consider whether the statements are delivering their objectives.
Recommended statements: *My course has provided me with opportunities to explore ideas or concepts in depth*   *My course has provided me with opportunities to bring information and ideas together from different topics*   *My course has provided me with opportunities to apply what I have learnt*   We also recommend testing the alternative versions of the second and third statements detailed above.

5.3 Assessment and feedback

The current NSS questionnaire includes five questions about assessment and feedback. At Part 1, two of the statements were tested with alternative wording, mainly because the QAF review suggested potentially improved terminology ('timely' and 'helpful'). These statements were subsequently retested at Part 3 with the original wording in order to provide comparative findings. The three remaining statements were tested at Part 2, one of which was then adapted and retested at Part 3 ('Marking and assessment has been fair').

5.3.1 Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
The criteria used in marking have been clear in advance	N/A	The criteria used in marking have been clear in advance	The criteria used in marking have been clear in advance	N/A
Assessment arrangements and marking have been fair	N/A	Assessment arrangements and marking have been fair	Marking and assessment has been fair	Marking and assessment has been fair
Feedback on my work has been prompt	Feedback on my work has been **timely**	N/A	Feedback on my work has been **timely**	Feedback on my work has been **prompt**
I have received detailed comments on my work	I have received **helpful** comments on my work	N/A	I have received **helpful** comments on my work	I have received **detailed** comments on my work
Feedback on my work has helped me clarify things I did not understand	N/A	Feedback on my work has helped me clarify things I did not understand	N/A	N/A

5.3.2 Marking criteria

Part 1:   N/A
Part 2:   The criteria used in marking have been clear in advance
Part 3:   N/A

This is an existing statement currently asked as part of the NSS. The QAF review proposed testing the statement as currently worded. The statement was tested only once as part of this package of work, at Part 2.

Answer strategies
This statement was generally well understood by students. There was evidence that students were looking back over the full duration of their course rather than focussing only on their final year. Some students talked about how the clarity of the marking criteria had changed over time, and considered this when answering. With regards to timing, students generally referred to criteria being provided at the beginning of the course, module or assignment.

Some students reported a varied experience depending on the type of work they were thinking about. For example, criteria might be clear for coursework, but not for exams. These students usually selected 'Neither agree nor disagree' on the grounds that they wanted to select a balanced answer, reflecting their differing experience.

Criteria and marking
Students generally understood 'criteria' to mean a list of requirements for attaining a particular mark or grade. When considering 'marking' most students thought about coursework when answering – written or practical assignments.

Clear
For the most part, students were able to pick up on the 'clarity' aspect of the statement. Some said that while they did receive an explanation of the marking criteria, it was not easy to understand, which contributed to their answer (for example, leading them to choose 'Mostly agree' as opposed to 'Definitely agree').

5.3.3   Whether assessment has been fair

Part 1:   N/A
Part 2:   Assessment arrangements and marking have been fair
Part 3:   Marking and assessment has been fair

This is an existing statement currently asked as part of the NSS. The QAF review proposed testing the statement as currently worded but highlighted that the statement included two separate factors (assessment arrangements and marking) and emphasised that this would need to be probed about during testing to establish whether students saw marking and assessment (arrangements) as two separate factors and would answer differently for each. The statement was tested at Part 2 and a shorter version at Part 3, using simplified wording.

Answer strategies
Most students observed that there are two elements to this statement; on the one hand, being happy/ satisfied with their marks and, on the other, believing the marks to be fair. Evidence from the cognitive interviews suggests that students *are* able to differentiate and think only about whether the marking is fair. For example, some students who said that they weren't always happy with the marks they received still agreed with the statement.

The majority of students agreed with the statement. Those who disagreed did so because they felt the marking to be inconsistent between tutors or because the methods used to assess students were too limited (i.e. solely exam based).

Assessment/Assessment arrangements
At Part 2, there was some confusion around the term 'assessment arrangements'. A number of students commented that they were unsure what this meant. Some felt that this referred to arrangements for sitting exams (e.g. timing of the exam, the venue). Others talked about deadlines for submitting coursework and the process for handing work in. In cases where students were unsure of the meaning here, they tended to focus only on the 'marking' element of the statement. For other students, the distinction between assessment arrangements and marking caused problems when selecting an answer. The fact that these were regarded as being distinct from one another meant that their answers would be different if answering about them individually.

In an attempt to remedy some of these issues, the statement was tested again at Part 3, with 'assessment arrangements' changed to simply 'assessment'. There was still some variation in whether or not students distinguished between 'marking' and 'assessment'. Some thought that about these individually. However, in contrast to Part 2, students could more easily give an answer that reflected both

the way in which they are assessed and the marks they have received. On this basis, it seems that the term 'assessment' is less confusing than 'assessment arrangements'.

Fair

Students identified a number of conditions for marking being 'fair'. The requirements should be clarified in advance of the work being delivered. Marking should be clearly explained and justified, so that the recipient can understand why a particular mark has been given. It should be consistent, so that the same criteria are used for all students and marks are not influenced by personal feelings.

Some students commented on the subjective nature of the question. They remarked that this can be difficult to judge, because everyone will have a different concept of what is 'fair'. However, these students were able to answer the question, thinking about their own experience and impression of how their work had been marked.

5.3.4   Whether feedback has been prompt

Part 1:   Feedback on my work has been timely
Part 2:   N/A
Part 3:   Feedback on my work has been prompt

This is an existing statement currently asked as part of the NSS. The QAF review proposed substituting the word 'timely' for 'promptly' to explore whether this would be clearer to students. Thus, this new wording 'Feedback on my work has been timely' was tested at Part 1 and the existing wording 'Feedback on my work has been prompt' tested at Part 3.

Answer strategies

At both stages of testing students talked about the guidelines put in place by their institution, e.g. 'feedback is supposed to be sent within 2 weeks'. This informed their answers, insofar as their interpretation of 'timely/ prompt' was in relation to the definition set forward by the institution. One student specifically said that he didn't think his institution's timeframe was prompt enough, but because they had met their own deadline he agreed with the statement (University, Electronic Engineering).

Students were generally able to generalise and select an answer that reflected their experience overall. Some students mentioned that there had been occasions when feedback was received later than they expected, but still agreed with the statement because such occasions were rare.

Feedback

'Feedback' was generally understood to take two main forms – marks/ grades on essays or exams, and more detailed comments on pieces of work. The latter can be a supplement to their formal marks or given in a more informal setting (e.g. verbal feedback in a tutorial or seminar, response via email).

Timely/Prompt

The term 'timely' was used during Part 1 testing. Most students defined 'timely' as being within the expected timescale. There is a clear distinction here between 'timely' and 'quick'. Students were comfortable declaring feedback to be timely provided it has been received before the feedback deadline. Some mentioned that it needed to be received in sufficient time for them to use the feedback to inform their next piece of work, but that in general the deadlines are set with this in mind.

When the statement was tested at Part 3, the term 'timely' was changed to 'prompt', in order to investigate whether this would change the interpretation of the statement. The definitions given were very similar to those provided for 'timely' at Part 1. While almost all students interviewed understood the term 'prompt', this is more problematic among students for whom English is a second language. Two such students weren't familiar with the term and asked for it to be explained.

In light of these issues, the term 'timely' worked better here, retaining the objectivity of 'promptness' and ensuring that students do not answer purely in terms of speed.

5.3.5 Comments on work

Part 1:   I have received helpful comments on my work
Part 2:   N/A
Part 3:   I have received detailed comments on my work

Again, this is an existing statement currently asked as part of the NSS. The QAF review proposed substituting the word 'helpful' for 'detailed' to explore whether: a) students would find this easier to answer; and b) whether it would yield more meaningful results. While comments could be detailed this did not necessarily mean they were beneficial to students. The QAF review also highlighted that there was no direction as to who might be providing these comments; conceivably this could have included tutors, other students as well as friends and family and proposed adding 'from teaching staff' to the end of the statement. This recommendation was not tested but extensive probing was conducted around who students had thought of as providing comments on their work. The wording 'I have received helpful comments on my work' was tested at Part 1 and the existing wording 'I have received detailed comments on my work' was tested at Part 3.

Answer strategies
For this statement, students' answers were likely to be driven by particular occasions rather than reflecting their general experience, this being an example of the 'cherry picking' strategy outlined in section 4.1.2 . Several who agreed with the statement said that, while they had received helpful/ detailed comments from some tutors, others gave little or no feedback. In this respect, they were interpreting the statement as asking 'Have you <u>ever</u> received helpful/ detailed comments?'. Conversely, there were some instances were a single particularly negative experience prompted the student to disagree with the statement.

Comments
Most students thought about comments provided by tutors or teaching staff. While some also considered comments provided by other students on their course (e.g. during seminar discussions), highlighted as a concern during the QAF review, evidence did not show this to be a significant problem. Students tended to think about written comments provided by tutors or teaching staff on submitted work.

There was some overlap in students' interpretation of 'comments' here and 'feedback' from the preceding statement. Since the statements are asking about different aspects of comments/ feedback, and are therefore distinct, this should not be considered a problem.

Helpful/Detailed
At Part 1, a number of factors were included in students' definitions of 'helpful' comments. Some referred to clarity (comments must be legible and comprehensible), others talked about the need for comments to be constructive (i.e. enabling them to understand mistakes and improve in the future). Another element mentioned was the need for comments to be balanced, and show clear rationale, rather than being subjective comments of 'good' or 'bad'.

Given the variation across modules and across tutors, some students found it somewhat difficult to generalise when answering. This was perhaps due to the subjective nature of the statement and the more complex cognitive task involved in answering (determining whether individual comments are helpful and then whether all comments have been, on balance, helpful or unhelpful).

At Part 3, the current wording which asks about 'detailed' rather than 'helpful' comments was tested. In general, understanding of the statement was similar to that shown during Part 1 testing. A slight difference was evident in that some students thought more about written comments provided by tutors or teaching staff on submitted work, and whether they received such comments or just their mark/

grade. Probing on this point revealed some limitations on the usefulness of the revised statement. Students, many of whom agreed with the statement, commonly said that comments could be detailed but unhelpful. On this basis, there was some ambiguity around how 'agreement' should be interpreted. Asking about 'helpful' comments will probably yield more meaningful answers.

5.3.6   Whether feedback has helped clarify things I did not understand

Part 1:   N/A
Part 2:   Feedback on my work has helped me clarify things I did not understand
Part 3:   N/A

This is an existing statement currently asked as part of the NSS. The QAF review proposed testing the statement as currently worded although highlighted that this statement does not fit well with an agree/disagree scale as it is not clear how an answer of 'Disagree' should be interpreted. The statement was tested only once as part of this package of work, at Part 2.

Answer strategies
Answer strategies were similar across the majority of students. Most could distinguish between feedback that had helped them to understand and feedback that had not. Students generally answered in relation to whether or not they had received feedback that had been helpful or constructive. While students reported, when probed, that the statement was clear, the second half of the statement around 'clarifying things I did not understand' did not always register. Very few mentioned occasions when they had not understood something, instead referring to feedback that they felt had helped them to improve. As a result, students seem to understand and answer this statement in much the same way as the statement 'I have received helpful comments on my work'.

Feedback
'Feedback' encompassed written comments appended to written work and verbal comments received from tutors in a more informal context.

Clarify
In general students described helpful comments as those that explain where there they have gone wrong and provide information they can use in future, rather than simply pointing out where they have made mistakes.

5.3.7   Considerations when developing the 2017 NSS

Recommendations
It is recommended that no more than four statements are included in this section.
We recommend using 'timely' rather than 'prompt' and 'helpful' rather than 'detailed'.
We recommend the final statement 'Feedback on my work has helped me clarify things I did not understand' is not included. The statement was interpreted in a similar way to 'I have received helpful comments on my work' and a common answering strategy was to consider purely whether feedback had been received at all, the second part of the statement being missed.
Recommended statements: • *The criteria used in marking have been clear in advance* • *Marking and assessment has been fair* • *Feedback on my work has been timely* • *I have received helpful comments on my work*

5.4 Academic support

The current NSS questionnaire includes three questions about academic support. At Part 1 the first two questions were re-phrased negatively and the third statement was not tested. At Part 2 we re-tested the original positively phrased wording of the second statement and the original wording of the third statement. At Part 3 the wording of the first statement was tested, this time phrased positively and the newly worded second statement was tested again. The QAF review predicted students may have difficulty interpreting 'study choices'.

The order of questions in this section was revised following Parts 1 and 2. The table below is based on the order statements were presented at Part 3 where 'I have been able to contact staff when I needed to' and 'I have received sufficient advice and guidance in relation to my course' were switched round. This ordering improved the flow of statements in this section, moving from contacting staff to receiving advice and guidance from them.

5.4.1 Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
I have been able to contact staff when I needed to	I have **not** been able to contact staff when I needed to	N/A	I have been able to contact staff when I needed to	I have been able to contact staff when I needed to
I have received sufficient advice and support with my studies	I have received **in**sufficient advice and support with my studies	I have received sufficient advice and **guidance** with my studies	I have received sufficient advice and guidance **in relation to my course**	I have received sufficient advice and guidance **in relation to my course**
Good advice was available when I needed to make study choices	N/A	Good advice was available when I needed to make study choices	Good advice was available when I needed to make study choices	N/A

5.4.2 Contacting staff

Part 1:   I have **not** been able to contact staff when I needed to
Part 2:   N/A
Part 3:   I have been able to contact staff when I needed to

This statement, phrased positively ('I have been able to contact staff when I needed to') is currently asked as part of the NSS questionnaire. Following the QAF review this statement was selected as one that would be amended to be negatively phrased for Part 1. The review also recommended referring explicitly to 'teaching staff' to better emphasis the focus on the course but it was clarified that where students broadened their thinking to other members of staff this was not considered to be a problem.

Answer strategies
As before, students either considered one particular instance of contacting staff (these were especially meaningful where they had recently occurred) or thought more generally about their experience of contacting staff and adopted an 'averaging strategy' (e.g. experience of contacting my personal tutor has been excellent but I can't always get hold of the secretary so I will choose 'Mostly disagree'). At Part 1 some students felt this statement overlapped with 'I have received insufficient advice and support with my studies') and subsequently this statement was moved to be asked first in this section for the pilot to better reflect the contact process.

Staff

Students varied in who they included as 'staff'. The most common strategy was to restrict thinking to their tutors and teaching staff. Others included 'everyone', that is, teaching staff plus administrative, IT and support staff members that provide more general help (pastoral care, assistance with financial matters).

Methods of contact

Students considered email first and foremost. Other methods considered included: going to the staff member's office; telephoning them; or texting them. Importantly, students focused on whether they were able to contact staff rather than whether the contact was effective and they received the response they needed. Accordingly, the statement is likely to achieve high levels of agreement. It may be better to ask more specifically about whether an adequate response was received.

When I needed to

Students gave a range of examples of occasions where they 'needed to' contact staff. These ranged from fairly casual emails to organising a meeting to a more urgent need for help with an imminent deadline. Students' opinions varied in terms of whether they felt their emails had been replied to in a timely way.

Negative phrasing at Part 1

As previously mentioned, the negatively phrased wording was understood correctly by some students who were able to fit their answer correctly to a category. Others gave incorrect answers or commented that they found the wording awkward and that it required them to make more effort when fitting their answer to the response categories.

5.4.3 Advice, support and guidance

Part 1:   I have received **in**sufficient advice and support with my studies
Part 2:   I have received sufficient advice and guidance with my studies
Part 3:   I have received sufficient advice and guidance **in relation to my course**

This statement, phrased positively ('I have received sufficient advice and support with my studies') is currently asked as part of the NSS questionnaire. Following the QAF review this statement was selected as one that would be amended to be negatively phrased for Part 1.

Answer strategies

Students employed a range of answering strategies here. Some based their answer only on a particular person or positive or negative instance of receiving or not receiving the advice or support they needed, referred to earlier in this report as 'cherry-picking' (see section 4.1.2   ). Others used an 'averaging' strategy of thinking over the different experiences they had had and summing them together in one answer (for more detail see section 4.1.1   ). Where students used this strategy the middle category ('Neither agree nor disagree') was useful.

To give some examples of shortcuts students took when interpreting the statement, at Part 1, students interpreted the statement as asking whether they had 'ever' received insufficient advice or support and so, even where the overall experience had been positive, they answered 'Definitely agree' or 'Mostly agree'. Others considered whether help was available, regardless of whether the student had actually received it. Here there was an emphasis on being proactive in seeking out help.

Some students were keen to give a positive answer, even where they did not have the information and gave a 'best guess' based on their expected level of support. In these instances students talked about how approachable the staff are, that they are friendly and would always provide help where needed.

Middle and Not Applicable categories

We found evidence of students using the middle and 'Not Applicable' categories in a variety of ways. The category was used where students had never asked for help and in instances where they were unsure of their answer (enabling them to skip to the next question). Students also chose the middle category where they hadn't needed advice or support (but knew it was available) and where using an 'averaging strategy'.

Advice, support and guidance

The question tested at Part 1 referred to 'advice and support'; at Parts 2 and 3 students were asked about 'advice and guidance'. We found evidence of overlap between all three terms whereas some students saw them as being distinct from each other. Problems arose where students would have given different answers if they had been asked about each separately. The main problem was that students were unsure whether they should restrict thinking to their course or consider 'advice, support and guidance' outside the course. Some asked specifically whether they should restrict their thinking to the course or bring in other factors.

'Advice' was generally seen as informal or casual information linked to the course; academic advice with learning and the course materials. 'Support' was interpreted more widely including pastoral care, general and personal support with their welfare and university life, financial help and support from other students or their parents. There was evidence of students including admin staff and other support staff here. 'Guidance' was seen as more formal than advice and students' interpretations varied widely, to include guidance on issues such as career options, student finances and IT and learning support. Guidance also included pastoral care and general welfare support and counselling services.

Whether advice, support or guidance was sufficient

Students interpreted 'sufficient' as: the minimum; meeting basic needs; giving just enough; being happy with the advice/guidance; and the staff having time for you.

My studies/In relation to my course

Students interpreted 'my studies' in a variety of ways: some felt this to be restricted solely to the course content, others included their whole university experience including the more social aspects. 'My studies' was queried in some instances where students said they were unsure how far reaching this was and what they should include. The wording was amended following Parts 1 and 2 to link the statement more explicitly to the course. However, we found students at Part 3 also struggled with what to include here despite the revised wording and commonly queried whether they should include pastoral or welfare support as well as support from teaching staff. One of the institutions we visited had an internal department called 'Advice and Guidance' and therefore it was natural that students considered this department in their answers. Similarly, another institution included 'unit guides' (summary documents of what would be covered within a particular unit or module) within their course materials and the word 'guidance' drew thinking to these.

Negative phrasing at Part 1

For the most part, students coped well with the negative phrasing of the statement although some commented that it was harder work to answer, confusing, unnecessarily complicated or, having made a mistake previously, were more careful here. The phrasing could make students defensive of their course and feel they needed to stress how the statement was incorrect.

5.4.4 Advice for study choices

Part 1:   N/A
Part 2:   Good advice was available when I needed to make study choices
Part 3:   N/A

This statement is currently included in the existing NSS questionnaire. The QAF review recommended testing this statement using its existing wording but highlighted that 'study choices' may be considered very differently by students and could require clarification.

Answer strategies
Students used two main strategies to answer this statement; some thought about their general level of satisfaction with the amount of choice they had received rather than about the advice that had been available. Others considered the advice they perceived to be available rather than thinking about their own personal experiences. As we found at earlier questions, there was an emphasis on seeking out advice rather than it being offered. Students felt there to be overlap between this question and the previous one that asked about 'advice and guidance' and commonly thought about the same issues when answering.

Study choices
Students expressed some confusion over the term 'study choices'. For some this was clear, these students tending to have module options they could pick at the start of each term or year. For others the choices are fixed and there are no further decisions to make. Notably, in these cases students did not always select the 'Not applicable' option but gave a variety of answers across the scale. Interpretations of 'study choices' were: module options; project/dissertation ideas; how to study (e.g. how much time to spend on a task); choosing to take the course as a whole (i.e. before they started at their institution); and future choices relating to their career. Some students suggested including examples to help focus on what should be included.

5.4.5 Considerations when developing the 2017 NSS

Recommendations
We recommend that two statements are included in this section.
Consider re-focusing the first statement ('I have been able to contact staff when I needed to') on whether students received an adequate response from staff (see newly proposed wording below).
Consider re-focusing the second statement ('I have received sufficient advice and guidance in relation to my course') on 'teaching staff' and removing 'guidance'. Also consider changing 'sufficient' to 'good' or 'helpful' to better differentiate cases (see newly proposed wording below).
We do not recommend including the final statement 'Good advice was available when I needed to make study choices'. This is not particularly well understood by students and is seen as similar to 'I have received sufficient advice and guidance with my studies'.
Explore whether 'advice and guidance' is commonly used name for support/welfare departments within institutions.
Recommended statements: • *Teaching staff have been responsive when I needed to contact them* • *I have received helpful advice from teaching staff in relation to my course*

5.5   Organisation and management

The current NSS questionnaire includes three questions about organisation and management: first students are asked about the timetable; secondly about changes to the course and teaching; and thirdly whether the course is well organised and running smoothly.

Following the QAF review, the order of statements was reorganised to that shown in the table below. At Part 1 we tested the latter two questions, amending the third so that it was negatively phrased. At Part 2 we re-tested a revised version of the second statement and the first statement for the first time. No questions in this section were tested at Part 3. The review of data had highlighted that the questions are highly correlated and it had been suggested that only one question remain ('The course is well organised and is running smoothly'). Concern was also raised that the statements are irrelevant for distance learners.

5.5.1   Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
The course is well organised and is running smoothly	N/A	The course is well organised and is running smoothly	The course is well organised and is running smoothly	N/A
The timetable works efficiently as far as my activities are concerned	The timetable works efficiently as far as my activities are concerned	The timetable works efficiently **for me**	The timetable works efficiently **for me**	N/A
Any changes in the course or teaching have been communicated effectively	Any changes in the course or teaching **were not** communicated effectively	N/A	N/A	N/A

5.5.2   Well organised and running smoothly

Part 1:   N/A
Part 2:   The course is well organised and is running smoothly
Part 3:   N/A

This statement is currently asked as part of the NSS questionnaire. The QAF review did not recommend any alterations, bar a change in the order of statements meaning this one moved to first place, and the existing wording was tested at Part 2.

Answer strategies

This question generally worked well; it was meaningful to students and they were able to answer it fairly easily. As before, students tended to either focus on one particular poignant aspect that stood out to them, referred to in this report as 'cherry-picking' or employed an 'averaging' strategy, drawing a range of experiences together in one answer. Use of an averaging strategy was especially relevant to those on joint honours degrees; the only instances of difficulty came about where experiences on the two sides of the degree course had been quite different. Some students thought about their own experience and others drew on the general experience of others too, commenting where they had been told by other students about particularly negative experiences.

Well organised and running smoothly

Students had different opinions on whether 'well organised' and 'running smoothly' were the same or different things. For example one said "if it's well organised it's going to run smoothly" (Specialist College, Animal Science). Others felt the course could be well organised but wouldn't necessarily run smoothly as it needs to be coordinated. Interpretations included: good communication between staff and students; everything 'works' and is consistent and prepared; there are no changes/clashes to the timetable; exam and assignment deadlines are clear well in advance; lecturers turn up on time; the administrative/logistical side works well (e.g. easy to book rooms, equipment works); and problems are quickly resolved. Some students mentioned their institution's virtual learning facilities (e.g. BlackBoard, WebLearn) and that this helped the course to run smoothly.

5.5.3 Timetable works efficiently

Part 1:   The timetable works efficiently as far as my activities are concerned
Part 2:   The timetable works efficiently for me
Part 3:   N/A

This statement is currently asked as part of the NSS questionnaire. The QAF review did not recommend any alterations, bar a change in the order of statements, but flagged that 'as far as my activities are concerned' is fairly vague and students' understanding would need exploring during testing. The existing wording was tested at Part 2.

Answer strategies
Students employed two main strategies when selecting their answer, these being very similar across Parts 1 and 2.

1. The first strategy involved considering the balance between lectures/tutorials and time off. Time off included both personal activities (e.g. looking after children, part-time work) and other institution based activities (e.g. independent study, playing sport for the university). The focus here was juggling responsibilities and time management. Students falling into this category also considered their perceptions of whether it was the 'right' amount of free time or contact time and one thought about value for money. This raises the question of the usefulness of the data; students may disagree because they don't like early starts or agree because they like only being at the university one day a week so have lots of free time.

2. A second strategy, used by students on full-time courses, was to consider only the structure of the timetable itself, how practical it was in terms of clashes and gaps and ease of getting from one venue to another. Students here also thought about changes in their timetables as some courses (e.g. medical courses) issue new timetables every few weeks. Here students might average out any experiences where there had been clashes or timetables were issued too late or think about a particular instance where they had had a problem.

Some students immediately questioned what they should be including and thinking of as 'activities', mainly whether to include extra-curricular activities or not. In these instances students either chose the middle category ('Neither agree nor disagree') or gave their best guess.

As far as my activities are concerned
At Part 1, interpretation of 'activities' varied; some students included activities outside the course and some only considered institution based activities.

Timetable
At Parts 1 and 2, 'timetable' was understood as the structure or schedule of planned lectures and tutorials and usually those conducted at the institution. Some students considered materials also provided online which can be organised depending on their lectures and contact time. Course timetables

were also available online for some students. Students tended to think about their current year when answering.

Works efficiently
Some students were confused by the term 'efficiently' and were unsure how to interpret it. Some expressly said they didn't know what it meant. Interpretations included: being convenient; balanced; well organised (i.e. no long gaps); effective; suitable to the students' own needs; lectures being well spaced with no clashes; things running smoothly; there being no changes mistakes (e.g. double booked rooms); and getting the most out of each day. Value for money was mentioned by some students.

Relevance of statement to all groups
Prior to testing, the expert panel raised concerns that this question did not hold relevance for **distance learners**. During testing we found that while distance learners felt they set their own 'timetable', some felt this to relate to the modules or topics they studied week by week and was therefore meaningful. Others felt it related to being physically present at the university for lectures and tutorials. Conversely some full-time students saw the timetable as including online materials such as lectures and seminars on the online portal. These findings show that the differences in interpretation of 'timetable' are not clear cut between students learning at the university and those learning via distance methods.

Concerns were also raised regarding how meaningful this question is for **part-time students**. We found little differences in students' interpretations of 'timetable'; the term 'activities' was more widely interpreted at this question both for full-time and part-time students who considered 'activities' outside of university work.

5.5.4   Changes in the course or teaching

Part 1:   Any changes in the course or teaching were not communicated effectively
Part 2:   N/A
Part 3:   N/A

This statement, phrased positively ('Any changes in the course or teaching were not communicated effectively') is currently asked as part of the NSS questionnaire. Following the QAF review this statement was selected as one that would be amended to be negatively phrased for Part 1.

Answer strategies
Students adopted similar answer strategies to those used at previous questions. They either: focused on the only instance or most poignant instance a change had been made and answered solely about that; or used an 'averaging' strategy to give an overall idea of how all the changes had been communicated. Some students gave comparisons against the situation on other courses. In one case the student said there was an expectation among the students on her course that they would be told of any change right at the last minute (Specialist College, Music).

Where there had been no changes at all students handled this in three different ways: select 'Not applicable'; select the middle category; or select 'Definitely disagree'. This highlights that the statement does not lend itself well to an agree/disagree scale.

Methods of communication
Students thought almost exclusively of communication via email.

Course or teaching
Including both 'course' and 'teaching' did cause difficulties as students reported that these were very different things and that their answer would differ for each one; in practice students tended to consider one or the other. For the most part, alterations to the teaching on their course were considered: change

of lecturer; room; cancelled lectures; and different teaching materials. Changes to the course were considered in far fewer cases, possibly because these changes are much less common.

Whether effective

The wording 'effectively' seemed inconsistent as it followed a question using the word 'efficiently' and students could get muddled between the two, particularly where we were replicating a telephone interview and the wording was not laid out in front of students. Whether 'effectively' was related to timeliness or mode of communication was unclear; both concepts were drawn into students' answers.

Negative wording

In terms of the inclusion of negative phrasing students experienced the same problems as previously reported.

Relevance of statement to all groups

We did not find systematic evidence to support the concerns raised by the expert panel, namely that this question was not relevant or meaningful for distance learners and part-time students. Within our cognitive sample these two groups were able to give meaningful and thought out answers.

5.5.5 Considerations when developing the 2017 NSS

Recommendations

We recommend only one statement is included in this section 'The course is well organised and running smoothly'. The review of data showed the three statements in this section to be highly correlated.

Recommended statement:
- *The course is well organised and is running smoothly*

5.6 Learning resources

The current NSS questionnaire includes three questions about learning resources. Updated versions of all three statements were tested at each stage of cognitive interviewing. Some general issues pertain to this section which informed the testing and revision of statements throughout.

Students were generally able to answer these questions, but in some cases there was confusion around what to include in their answers. The statements attempt to capture information about distinct services/resources, whilst also including a clause referring to more general services - in the case of the first statement, 'digital services' and 'the library'; in the case of the third statement 'virtual learning facilities' and 'general IT resources'. This leads students to adopt one of three answer strategies:

1. Students who are familiar with everything being asked about tend to focus on the more specific element ('digital services' or 'virtual learning facilities') at the exclusion of the more general element ('the library' or 'general IT resource');

2. Students who are not familiar with the more specific element either:

   a. Answer only in relation to the more general element;

   b. Feel that the question does not apply to them and answer 'Not applicable' or the middle category ('Neither agree nor disagree');

Given the range of interpretations here, the aim in developing this section (particularly after Part 1) has been to devise statements that will yield more meaningful, less ambiguous answers.

5.6.1 Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
The library resources and services are good enough for my needs	The library, **including its digital services, is** good enough for my needs	The library resources **(e.g. books, online services) have supported my learning well**	The library resources (e.g. books, online services) have supported my learning well	The library resources (e.g. books, online services) have supported my learning well
I have been able to access specialised equipment, facilities or rooms when I needed to	I have been able to access specialised equipment **(including computer software/ programmes)** when I needed to	I have been able to access **subject specific resources** (e.g. equipment, facilities, software) when I needed to	I have been able to access subject specific resources (e.g. equipment, facilities, software, **collections**) when I needed to	I have been able to access subject specific resources (e.g. equipment, facilities, software, collections) when I needed to
I have been able to access general IT resources when I needed to	I have been able to access general IT resources**, including virtual learning facilities (VLE)** when I needed to	IT resources **and facilities have supported my learning well**	The **University's/College's** IT resources and facilities have supported my learning well	The University's/College's IT resources and facilities have supported my learning well

5.6.2 Library resources

Part 1:   The library, including its digital services, is good enough for my needs
Part 2:   The library resources (e.g. books, online services) have supported my learning well
Part 3:   The library resources (e.g. books, online services) have supported my learning well

The NSS questionnaire currently includes the statement 'The library resources and services are good enough for my needs'. The review recommended this statement be updated to reflect the advancements in technology over the last decade. The wording put forward for the first phase of cognitive testing was 'The library, including its digital services, are good enough for my needs'. The QAF review suggested only the minor amendment to 'is' good enough for my needs. Following Part 1, the wording was amended to 'The library resources (e.g. books, online services) have supported my learning well'; this version was tested at Parts 2 and 3.

Answer strategies
A variety of answer strategies were demonstrated in relation to this statement.

Across all stages, students who had access to more than one library tended to think just about the library that they use most often. Some students at a particular institution said that one of the main libraries was generally too busy for them to use, so excluded this from their thinking and still agreed with the statement.

This statement proved to be somewhat problematic for distance learners. Some said immediately that they didn't use the library, while others said that they were answering in relation to a different library (e.g. an Open University student who uses the Manchester University library).

At Part 1, many students were drawn towards the term 'digital services' when presented with this statement. The inference in many cases was that this was the main focus of the question, leading the student to think *only* about digital services and exclude other services provided by the library. In an effort to clarify the focus of the statement, the wording at Part 2 was changed to refer to 'library resources' and include books and online services as examples. This proved to be a significant improvement, and helped students to focus on all services provided by the library. Where students used books *and* online services, they included both in their answer, while those who only used one or the other were still able to select an answer.

Digital services/Online services
The term 'digital services', used at Part 1, proved confusing for some students. A few spontaneously remarked that they didn't know what this meant, which made the question difficult to answer. Even those who were comfortable thinking just about the library (e.g. the building, checking out books) found the reference to 'digital services' distracting, leading them to doubt their understanding of what was being asked. Students interviewed at Part 1 were probed for their definition 'digital services'. Where interpretations were offered, they were not consistent. Some said this comprised online material (e.g. web portal, online catalogues, e-journals) while others thought it included more general IT equipment, such as computers, printers, and scanners held in the library.

On the strength of Part 1 testing, it was clear that the term 'digital services' was not fit for purpose. As a result, subsequent stages referred instead to 'online services'. In general, this was more easily understood by students. Definitions encompassed a much narrower range of facilities, focussing mainly on electronic journals or online portals.

Supported my learning well
The term used at Part 1 was 'good enough for my needs', which was generally taken to mean having access to materials needed for the course (e.g. having enough copies of a particular book to cater for everyone on the course) and being able to find them easily. This phrasing tended to invite more objective responses about whether resources were available and precluded any insight into how library services had impacted on students' experiences.

As such, the wording used at Parts 1 and 3 was 'supported my learning well'. This was well understood by students. It was defined in a number of different (but essentially related) ways: sufficient for learning needs; providing the information needed to succeed; enhancing learning; providing information to fall back on; and making learning easier.

5.6.3 Subject specific resources

Part 1:   I have been able to access specialised equipment (including computer software/programmes) when I needed to
Part 2:   I have been able to access subject specific resources (e.g. equipment, facilities, software) when I needed to
Part 3:   I have been able to access subject specific resources (e.g. equipment, facilities, software, collections) when I needed to

This statement was again updated to reflect how technology has advanced since the NSS began in 2005. The current wording of this statement is 'I have been able to access specialised equipment, facilities or rooms when I needed to'. The review recommended the testing of 'I have been able to access specialised equipment (including computer software/programmes) when I needed to'. The QAF review did not recommend any alterations but emphasised the need to explore this area to understand the kind of

language used by students in describing these types of specialised equipment. The Part 1 wording was amended following testing to 'I have been able to access subject specific resources (e.g. equipment, facilities, software, collections) when I needed to', this wording tested at Parts 2 and 3.

Answer strategies
There were clear differences in answer strategies depending on the subject of study. Students studying more vocational or technical courses found this statement easier to answer compared with other students, as it was obvious to these students what kinds of 'specialised equipment/ subject specific resources' might be included. For example, medical students thought about medical equipment such as scalpels and ultrasound machines, while journalism students thought about video editing software. Students who did not use specialised equipment (e.g. humanities students) struggled more with this statement, tending to think about more general IT equipment.

As above, the example cited in the statement at Part 1 ('computer software/ programmes') proved to be distracting for some students. These students tended to think *only* about computer software at the exclusion of other types of specialised equipment. This led to the use of a more general range of examples ('equipment, facilities, software') at Part 2.

Specialised equipment/Subject specific resources
The term 'specialised equipment' used during Part 1 caused confusion with some students, who thought the question was asking about equipment used by students with disabilities (e.g. brail materials for blind or partially sighted students). These students selected 'Not applicable'. To address this issue, the wording for Parts 2 and 3 was changed to 'subject specific resources'. This effectively resolved the problem, as the same confusion did not arise.

Examples of subject specific resources included: cameras; microphones; computer software (e.g. SPSS, Composer); course handouts; PowerPoint slides; recordings of lectures; and research greenhouses.

Collections
For Part 3 testing, the term 'collections' was added to the list of examples cited in the statement. No-one in our sample of students mentioned anything relevant under 'collections' and when probed were unable to give examples of what this might cover.

5.6.4 General IT resources

Part 1:   I have been able to access general IT resources, including virtual learning facilities (VLE) when I needed to
Part 2:   IT resources and facilities have supported my learning well
Part 3:   The University's/College's IT resources have supported my learning well

The third statement in this section was also updated to reflect recent advancements in ways of learning, most notably, the introduction of Virtual Learning Facilities/Environments (VLF/VLE). This statement is currently worded 'I have been able to access general IT resources when I needed to' and the review proposed amending this to 'I have been able to access general IT resources, including virtual learning facilities (VLE) when I needed to' prior to Part 1. The QAF review recommended testing this newly revised wording and emphasised the importance of exploring how students described the virtual learning environment at their institution, ensuring that specific probes asking about the set up were included. The statement was amended following Part 1 to 'IT resources and facilities have supported my learning well', this version tested at Part 2. The wording was further refined for Part 3 where 'The University's/College's IT resources have supported my learning well' was tested.

Answer strategies

There were some inconsistencies in the way that students interpreted 'general IT resources'. Some thought that this would include hardware such as computers and printers, while others seemed to be thinking only about online material and accessing their university's web portal.

While the statement used at Part 2 was found to work more effectively, there was evidence that 'IT resources and facilities' was being interpreted too narrowly. Most students thought only about the 'physical' IT infrastructure at their institution, mainly PCs, printers and scanners. When probed, these students said that the term' facilities' led them to think this way. Others thought the statement was asking about individuals working in the IT department (i.e. IT Support). The wording was adapted at Part 3 to refer to 'The University's/College's IT resources'. Students interviewed at this stage tended to think about access to computers, printers and scanners, as well as using the intranet and computer software. Some mentioned access to support staff members, people who would help you if you needed it. Some also thought about their online portal here, mainly where it was used as a central part of their learning.

Virtual learning facilities (VLE)

Students who used VLE were able to easily understand what is being referred to here, but often knew it by a different name (e.g. Muse, Moodle). The statement was more confusing for those who don't use any services of this kind. These students struggled to answer the question, giving a range of answers. Some answered 'Not applicable' because they weren't sure whether this applied to them, some answered 'Neither agree nor disagree' for the same reason, while others thought just about general IT services (i.e. computers, printers).

Some students who could give a valid opinion on general IT resources were discouraged from answering because they either hadn't used, or didn't understand the term 'virtual learning facilities'. Asking about both things in the same statement proved to be problematic. This led to the decision to drop the reference to VLE from the statement for subsequent stages of testing. Findings from Parts 2 and 3 indicated that students who use VLE still include this element in their thinking and could give clear examples, while those who do not find the statement easier to answer.

5.6.5 Considerations when developing the 2017 NSS

Recommendations
Clarify what should be included under 'collections' and consider removing this from the statement.

Recommended statement:
- *The library resources (e.g. books, online services) have supported my learning well*
- *I have been able to access subject specific resources (e.g. equipment, facilities, software) when I have needed to*
- *The University's/College's IT resources and facilities have supported my learning well*

5.7 Personal development

Currently three statements about 'Personal development' are included in the NSS questionnaire. The QAF review recommended re-wording these three questions, giving them the same stem ('The course has helped me to') to improve consistency between the three and anchor them more clearly to the course. At Part 1 we tested the revised versions and the original current wording was tested at Part 3. At both phases, students found the first two questions to be a little repetitive, employing similar thought processes for each.

5.7.1 Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
The course has helped me to present myself with confidence	The course has helped me to **improve my self-confidence**	N/A	N/A	The course has helped me to present myself with confidence
My communication skills have improved	**The course has helped me to improve my communication skills**	N/A	N/A	My communication skills have improved
As a result of the course, I feel confident in tackling unfamiliar problems	**The course has helped me to improve my problem solving skills**	N/A	N/A	As a result of the course, I feel confident in tackling unfamiliar problems

5.7.2 Confidence

Part 1:   The course has helped me to improve my self-confidence
Part 2:   N/A
Part 3:   The course has helped me to present myself with confidence

As stated, the QAF review recommended slightly re-wording the original question to improve consistency. The new version was tested at Part 1 and the current version at Part 3.

Answer strategies
Students, on the whole, found this an easy question to answer. Strategies were similar across both phases of testing.

Students who agreed talked about the positive elements of the course, what they had learnt and the ways their confidence had improved. Other students who agreed did not restrict their thinking to their course and drew in how university life and these experiences had helped them improve their confidence in general.

Another strategy was to consider whether they had already been confident before starting the course and answer accordingly. This raised the issue of usefulness or accuracy of data collected, due to difficulty with quantifying answers, namely because students gave a disagree answer for very different reasons: 1. Where they felt other students, tutors or feedback had had a negative impact on their confidence; and 2. where they felt they had already been confident before starting the course.

As before, students thought of specific instances which had impacted on their confidence or 'averaged' across their different experiences and chose a category (e.g. the feedback on the academic side of my course has been very good and helped my confidence but some of the unhelpful comments I've received on my playing have impacted negatively on my confidence so I will chose the middle category).

Improve my self confidence/presenting myself with confidence

At both phases of testing students focused on their verbal skills when giving examples: presentations; people skills; and performances. Speaking in front of other people was a theme that came up time and time again.

At Part 1, students spoke of the challenges of doing a difficult course and how achieving better grades helped boost their self-confidence.

At Part 3, students were not sure whether they should consider their confidence level when presenting themselves generally (self-esteem) or confidence when presenting themselves in relation to their course (academically). Some queried this and said they would give different answers to each. It was very common for students to think exclusively about their presentation skills and speaking in front of others, the statement wording leading them to think along these lines. Confidence was defined as: presentations; speaking skills; feeling comfortable when talking to strangers; and talking about university related things to anyone.

Overlap

Students found there to be overlap between this question and the following one on communication skills, possibly because there was such emphasis on verbal skills here.

5.7.3   Communication skills

Part 1:   The course has helped me to improve my communication skills
Part 2:   N/A
Part 3:   My communication skills have improved

As stated, the QAF review recommended slightly re-wording the original question to improve consistency across the section. The new version was tested at Part 1 and the current version at Part 3.

Answer strategies

At Part 1, students found this question straightforward to answer. Only one or two students said they were confused about what to include as communication skills and would have liked this to be more specific.

Employing similar strategies to earlier statements, students referred to specific instances where they had received training specifically in communication skills (e.g. workshop on communication) or thought more generally across what they had learnt on the course and opportunities they had had to communicate (seminars, projects, presentations).

At Part 3, students experienced problems due to the statement not being clearly linked to the course as it is not obvious whether they should anchor their thinking to the course or comment on their communication skills in general. Subsequently an 'Agree' response may not be an indicator that the course has had a positive impact.

As with the previous question, it was difficult to tease out whether communication skills had improved as a result of the course or could be attributed to other aspects of university life or growing up in general. Therefore this creates the problem that if students consider they already had good communication skills or that there was no problem with these skills, they may choose 'Definitely disagree' giving a false impression that there were problems with this aspect of their course. Other instances in which students would select one of the disagree categories were: where the question was interpreted as relating solely to group work which they hadn't had opportunity to do; and where their communication skills were considered to be poor in general, this being unrelated to their course.

Communication skills

Some students considered only verbal communication skills: presentations; speaking in front of, or to, new/different people; improvements in foreign languages; talking to clients; debates; and group work. Other students included written communication: emails; letter writing; and essay writing. One student mentioned that her listening skills had improved (FEC, Sports Science and Coaching). Medical students also included body language when communicating with patients and skills in delivering good/bad news. Music students included communication to the audience through music and performance. The non-native English speakers in our sample thought exclusively about communication in terms of speaking English as a foreign language.

Overlap

As stated, students found there to be overlap between this question and the previous one on confidence, with students commonly thinking about giving presentations at both questions.

5.7.4 Problem solving

Part 1:   The course has helped me to improve my problem solving skills
Part 2:   N/A
Part 3:   As a result of the course, I feel confident in tackling unfamiliar problems

Compared with the other two statements in this section, the QAF review recommended more significant change to the original wording. Rather than asking about 'tackling unfamiliar problems' the QAF recommended referring to an improvement in 'problem solving skills'. As with the other statements in this section the new version was tested at Part 1 and the current version at Part 3.

Answer strategies

At both phases of testing, students found this question more problematic that the other two in this section. It was also felt to overlap with questions in earlier sections which included references to 'problems' or 'applying what has been learnt' (Part 1: 'My course has encouraged me to apply what I have learnt to practical problems or new situations'; 'My course has enabled me to bring information and ideas together from different topics to solve problems' and Part 3: 'My course has provided me with opportunities to apply what I have learnt').

A common initial response was for students to say they didn't understand what the question was asking them. Some asked specifically whether it related to 'everyday life' or only to problems within their course. It was felt to be too broad and they weren't sure what to include. Some chose 'Not applicable' or the middle category in order to skip past it.

Problems within or outside the course

At both phases of testing, students differed in terms of whether they included 'problem solving' or 'unfamiliar problems' within or outside their courses. Some thought only about problems that came up as part of their course material and others considered whether they had applied what they had learnt to everyday life or real world problems (or both). In some cases students raised problems they had already faced and problems they may face in the future.

The importance of the course

Interpretation and responses to this statement differed greatly based on which subjects students were studying (as highlighted in section 4.3.1   ). Some courses lend themselves to tackling or solving 'problems' (e.g. Maths, Economics, Engineering, Business, Law and Medicine among other applied courses) and in these cases students would restrict their thinking to problems within their course. Here, the question was easier than those studying other subjects as there is a problem solving element to the course (e.g. Maths problem, or a patient whose symptoms need to be diagnosed). However, a knock-on

effect was that these students sometimes (but not always) restricted their thinking to problems within the course. For students taking courses that did not address specific 'problems' this was harder to pin down. Some examples of problems were: problems within groups when undertaking a group project; personal problems; and anything never faced before.

Tackling/solving
International students struggled to define 'tackling' and felt 'solving' to be better known and understood.

5.7.5 Considerations when developing the 2017 NSS

Recommendations
We recommend inclusion of the alternative versions tested at Part 1 which anchor each statement more clearly to the course.
We recommend these statements are taken out of the core survey and repositioned in an optional bank.
Consider dropping the third statement 'As a result of the course, I feel confident in tackling unfamiliar problems' due to the range of ways this is interpreted, the strong link to the subject being studied and the overlap with statements in the 'Critical thinking' section.
Recommended statement: • *The course has helped me to improve my self-confidence* • *The course has helped me to improve my communication skills*

5.8 Learning community

The NSS review proposed that additional questions on student engagement should be included in future surveys. This included proposed questions on the learning community and collaborative learning. Following a review of the proposed questions and discussion with stakeholders, three questions in this area were developed for testing (as shown in the table below).

5.8.1 Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
N/A	I feel part of a community of students and staff committed to learning	I feel part of a community of staff and students	I feel part of a community of staff and students	I feel part of a community of staff and students
N/A	I have had opportunities to work jointly with other students on my course	I have had **appropriate** opportunities to work with other students on my course	I have had appropriate opportunities to work with other students **as part of** my course	I have had appropriate opportunities to work with other students **as part of** my course
N/A	I have been encouraged to talk about academic ideas with other students	N/A	N/A	I have been able to **explore** academic interests with other students

5.8.2 Community of staff and students

Part 1: I feel part of a community of students and staff committed to learning
Part 2: I feel part of a community of staff and students
Part 3: I feel part of a community of staff and students

The objective of this question is to measure the extent to which students feel part of and engaged in an active learning community. The last part of the statement – 'committed to learning' – was removed following Part 1 testing. The reasons for this revision are explained below, alongside other feedback.

Answer strategies
At Part 1 most students perceived this question to be a measure of the extent to which students on their course or at their institution were committed to learning. Following revision of the statement for later rounds of testing, students were prompted to think more about the extent to which they felt part of an engaged and active community on their course or at their institution, and could more easily group students and staff together.

Committed to learning
Students generally felt comfortable with the term 'committed to learning'. Most cited high attendance at lectures or seminars as evidence of this. In some cases students agreed with the statement on the basis that 'students wouldn't be here if they weren't committed'. Responses tended to be based on a general perception of how committed other students appeared, with students often lacking a clear impression of levels of commitment. As such, there was a degree of uncertainty in responses to the version of the question tested at Part 1.

Community of students and staff
Most students understood 'community' to mean feeling part of an active and engaged group of students, feeling supported by staff and other students and feeling a sense of belonging to their course and/or institution. This was more clearly defined in the testing at Parts 2 and 3; for the statement tested at Part 1 students tended to focus on whether students were committed to learning rather than the 'community' component. There were some queries from students over the stages of testing as to what constitutes a community – for example, whether this can be just their own friendship group, or the people they sit with at lectures or if it should be something more established than this. Others commented that it is up to students whether they form a 'community' and not the fault of the institution if they choose not to.

While some students were able to think of staff and students as a single group, others regarded them as distinct and could find it difficult to generalise. A common response was to the effect that 'I feel part of a group of students but not staff'. Some also differentiated that staff are paid to be there, whereas students are not. When probed, some students said they would give different responses for staff and students, and sometimes struggled to consider them both in a single statement. This issue was generally less pronounced at Parts 2 and 3, where the removal of 'committed to learning' made it easier to think about staff and students collectively.

As at other statements, students sometimes employed an 'averaging' strategy when answering here. This was typically because they felt closer to students than staff (or vice-versa) or that they felt closer to some students/staff compared with others.

Some students were unsure whether this question related to the university as a whole or just staff and students on their course, and were unclear which they should be thinking about when answering. In some cases they thought only about their course; in others they thought about both and used an 'averaging' strategy. Typically, students studying at smaller institutions were more likely to consider the whole institution when considering this statement. Those studying courses where there were clear links

with other subjects (e.g. joint projects) were also more likely to think beyond their course community. It may the case that these differing definitions are acceptable (and that students can consider whichever community they feel best applies to them); however, if there is a requirement for all students to only think about their course, this should be made clear in the statement (e.g. 'On my course I feel part of a community of staff and students').

5.8.3 Working with other students

Part 1:   I have had opportunities to work jointly with other students on my course
Part 2:   I have had appropriate opportunities to work with other students on my course
Part 3:   I have had appropriate opportunities to work with other students as part of my course

This question sought to measure the extent to which students had opportunities to work with other students on their course. 'Appropriate' was added following Part 1, to encourage students to focus on opportunities that were suitable or helpful in the context of their studies. A change was also made following Part 2: 'on my course' was changed to 'as part of my course' to focus students on organised group work and away from instances where they may have arranged informally to work with other students on their course.

Answer strategies
This statement was well understood by students. Most students took all versions of the question to be a measure of the extent to which they were given opportunities to work in groups as part of their course, for example as part of projects, seminars or presentations. Levels of agreement with this statement were high; in some cases students selected 'Definitely agree' simply because they had been given some group work, without any real consideration of the quantity or quality of these opportunities. As a result, the statement may not differentiate sufficiently well between different levels of group working, and possibly limit the value of responses provided.

Appropriate opportunities
In a number of cases students did not notice the inclusion of 'appropriate' in the statement at Parts 2 and 3, with their response based simply on whether or not they had been offered *any* opportunities. When probed around 'appropriate' students referred to group work that had a clear and specific benefit (rather than just 'for the sake of it'). In a few cases students said they were unsure what 'appropriate' meant in this context, and that 'sufficient' or 'the right' may be better words to include.

Work with other students as part of my course
Most students focused their responses on formal group work (i.e. organised through the course), though some included informal discussions with other students outside the immediate structure of the course. There was overlap here with the next statement, which asks about exploring academic ideas or interests with other students.

As noted above, the reference to working with other students 'on my course' prompted some students to think about informal working rather than organised group work as part of their course. This was changed to 'as part of my course', which generally worked better, though some students were unsure whether to include projects where they had worked jointly with students on other courses.

5.8.4 Academic interests

Part 1: I have been encouraged to talk about academic ideas with other students
Part 2: N/A
Part 3: I have been able to explore academic interests with other students

This question sought to measure the extent to which students engaged academically with other students outside of organised group work on their course. It was asked before the statement discussed above during Part 1 testing but subsequently moved to be asked following it. This aimed to prompt students to think first about organised group work and to then consider other work or discussions that sit outside of this.

The statement was updated for Part 3 in response to findings from Part 1, as we discuss below.

Answer strategies
Students struggled with this question to a greater extent compared with the other two statements in this section. There were particular issues with the reference to 'encouraged' and how students should respond if they had discussed ideas but not been encouraged to do so.

Many students questioned what this statement was asking and specifically whether it meant material studied and discussed within lectures and seminars or whether it applied to discussions beyond these settings. Those who did think beyond lectures and seminars tended to focus on informal discussions with friends or fellow students.

Encourage to talk about/been able to explore
Some students commented that they do discuss academic ideas (for example, in seminars) but that this was a requirement of the course, so were unsure whether it constituted 'encouragement'. Similarly, students who felt that they had been encouraged to discuss ideas but not actually done this were unsure how to answer. The statement (as tested at Part 1) prompted students to think both about whether they had been encouraged to discuss ideas and whether they had actually done this, and they were unclear how to answer if the responses to each part did not align.

Those students who said they had discussed academic ideas or interests outside of lectures and seminars sometimes commented that this was out of choice, rather than because they were encouraged to do so. Students found it a little easier to respond to the statement tested at Part 3 – with the change in wording to focus on being 'able to explore' – but other difficulties relating to interpreting this statement remained.

Academic ideas/interests
Students who said they had discussed academic ideas or interests mentioned talking about topics covered as part of their course with friends or fellow students, discussing journal articles and talking about future career options or intentions.

Some students were unsure what was meant by the terms 'academic ideas' or 'academic interests', with one commenting that it would be better to refer to 'ideas from your course'. Students studying more practical or vocational courses tended to feel that academic ideas/interests were less relevant to them and commented that this would apply more to students on more theory-based courses (e.g. when discussing 'large ideas about how the world works'). There were no clear differences in understanding of or response to this statement based on whether it referred to academic 'ideas' or 'interests'.

Other students

It was sometimes unclear who should be included under 'other students'. In some cases students included discussions with students on other courses while some restricted their thinking to those on their own course.

5.8.5 Considerations when developing the 2017 NSS

Recommendations
Consider whether there is a need to encourage a consistent definition of 'community' (e.g. course based rather than across the whole institution). If so, consider updating the first statement to: 'On my course I feel part of a community of staff and students'.
Consider changing 'appropriate opportunities' to 'the right opportunities' at the second statement. Also review pilot data to examine levels of agreement with this statement and whether this sufficiently differentiates students.
Consider dropping the third statement as students interpreted it in a wide variety of ways and queried what they should be thinking about.
Recommended statements: • *[On my course] I feel part of a community of staff and students* • *I have had the right opportunities to work with other students as part of my course*

5.9 Student voice

In addition to the questions on 'Critical thinking' and the 'Learning community', the NSS review also proposed a new set of questions on 'Student voice' to increase coverage of issues relating to student engagement. The proposed student voice questions are intended to: measure how empowered students feel to initiate change and shape their own learning experiences; whether they are able to engage at a variety of levels from sharing their views to being proactive in shaping and delivering change; and how much they feel they are listened to as valuable partners in improving their educational experiences.

The review proposed four statements for inclusion in cognitive testing. Small changes were made to these statements following TNS BMRB's review of questions using their QAF. The questions tested at each stage are shown in the table below.

The order of questions in this section was revised following Part 1 testing. The table below is based on the order statements were presented at Parts 2 and 3. This ordering improved the flow of statements in this section, moving from opportunities for feedback, to the perceived value of feedback, to the impact of feedback.

5.9.1 Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
N/A	I have had appropriate opportunities to provide feedback on this course	I have had appropriate opportunities to provide feedback on **my** course	I have had **the right** opportunities to provide feedback on my course	I have had **the right** opportunities to provide feedback on my course
N/A	Staff value the course feedback given by students	Staff value **students' views and opinions about the course**	Staff value students' views and opinions about the course	Staff value students' views and opinions about the course
N/A	It is clear how students' feedback on the course has been acted on	It is clear how students' feedback on the course has been acted on	It is clear how students' feedback on the course has been acted on	It is clear how students' feedback on the course has been acted on
N/A	Students are encouraged to be involved in decisions about how this course is run	N/A	N/A	N/A

5.9.2 Providing feedback

Part 1: I have had appropriate opportunities to provide feedback on this course
Part 2: I have had appropriate opportunities provide feedback on my course
Part 3: I have had the right opportunities to provide feedback on my course

This statement sought to measure the extent and quality of opportunities for feedback offered. Following a review of the originally proposed statement ('I have had enough opportunities to provide feedback on this course') it was decided to refer to 'appropriate opportunities' and, later, 'the right opportunities', to encourage students to think about the quality and suitability of feedback opportunities, and not just the number of times they have been asked for feedback.

Answer strategies
This statement was generally well understood. Students were familiar with the term 'feedback' and could readily cite examples of times they had been asked to provide feedback. Almost all students had been given opportunities to provide feedback and, as a result, agreement levels with this statement were high.

Feedback
A wide range of feedback mechanisms were mentioned. Students tended to focus on 'formal' types of feedback – most commonly, course feedback forms or surveys completed at the end of modules. Other students mentioned informal feedback, for example verbal comments or emails to tutors.

Students also mentioned providing feedback via course reps and, in a few cases, staff and student liaison meetings. Students who had been course reps appeared more likely to respond positively to this statement, stating that they were more involved in the feedback process compared with other students, and that they may have responded differently had they not held their course rep role.

A small number of students also mentioned completing the NSS (including the cognitive interview) as an example of being asked to provide feedback on their course.

A possible issue here is that students tend to agree with the statement due to being given *any* opportunities to provide feedback, regardless of the quantity or quality of opportunities. As a result, the statement may not differentiate sufficiently well between students based on feedback opportunities, and possibly limit the value of responses provided.

Appropriate/the right opportunities

As noted above, the inclusion of 'appropriate' or 'the right' opportunities was intended to encourage students to think about the quality of feedback opportunities, and not just whether or not they has been asked for any feedback. There were mixed views on the worth of including these terms within the statement. Some students understood these terms to relate to being asked for the right amount of feedback ('not too little, not too much') and at the right time (e.g. midway through modules rather than once they had finished). Others questioned what 'appropriate' or 'the right' meant in the context of this statement and simply answered based on whether there were any opportunities for feedback.

There were specific issues with the inclusion of 'appropriate' identified during Part 1 and 2 testing. It led some students to think more about 'formal' or 'official' feedback processes (e.g. forms and surveys) and less about informal feedback (e.g. discussion with tutors). As a result the statement was revised prior to Part 3 to refer to 'the right opportunities'. This change appeared to result in improved levels of understanding and encouraged students to consider a broader range of feedback. However, other students did not notice the inclusion of 'the right opportunities' and again answered simply based on whether they had been given any opportunities to provide feedback.

5.9.3   Whether staff value students' feedback

Part 1:   Staff value the course feedback given by other students
Part 2:   Staff value students' views and opinions about the course
Part 3:   Staff value students' views and opinions about the course

This statement sought to build on whether opportunities for feedback had been offered, asking students to consider the extent to which staff valued feedback that was provided. Some students struggled to provide a response to the statement included at Part 1, citing that they would not be able to judge the value of feedback provided. As a result, the statement was changed to refer to 'students' views and opinions' for Parts 2 and 3 of testing.

Answer strategies

There was a fairly high level of uncertainty in relation to this statement, particularly for the version tested at Part 1. Students often felt they could not judge the value of feedback, sometimes commenting that staff 'seemed to' value it but they could not judge whether it really was valued. In these cases students answered based on their own impression of whether feedback was valued, or said that they could not really judge this and selected the 'Neither agree nor disagree' code.

Value of feedback/views and opinions

In judging whether views and opinions (or feedback) were valued, some students said it depended on whether they had been 'acted on', taken on board, or whether any changes had been made as a result. In this respect there was overlap between this statement and the next one ('It is clear how students' feedback on the course has been acted on'). Some students did however differentiate between the two statements and here talked about whether or not staff 'seemed to' appreciate feedback, whether they encouraged feedback, whether they asked for feedback on specific issues, and whether they appeared to listen to students' views and opinions. In some cases students cited evidence of feedback being valued, for example debrief sessions on feedback held by staff.

At this statement, perhaps more than at most others, responses were often based around specific (and sometimes one-off) instances, rather than students' overall course experience. In some cases students recalled being asked for their views on a particular issue, and seeing what impact this had, and answered solely based on this experience. Other students said that feedback was more highly valued by some tutors (or for parts of their course) compared with others. Here they typically used an 'averaging' strategy to provide an overall view based on their experiences.

On the whole, students felt more able to respond to this statement once it was revised to refer to 'students' views and opinions' (rather than 'feedback'). At Part 1, students were prompted to consider 'formal' feedback processes, and often struggled to assess how highly staff valued this feedback. The switch to 'views and opinions' encouraged them to think too about less formal processes – for example whether opinions cited in discussions with tutors were taken seriously – and meant that they could more easily provide a response here.

5.9.4 How students' feedback has been acted on

Part 1:   It is clear how students' feedback on the course has been acted on
Part 2:   It is clear how students' feedback on the course has been acted on
Part 3:   It is clear how students' feedback on the course has been acted on

This statement aimed to build on the previous two included in this section by assessing whether feedback provided had been acted on. The same version of the statement was included at all three testing phases.

Answer strategies
At all stages of testing some students commented on similarities between this statement and the previous one in this section ('Staff value students' views and opinions about the course'). Students often cited the same examples for whether feedback (or views and opinions) had been valued and acted on, and answered the two questions in the same way. However, other students commented that while the two statements are related (both relating to the feedback process), they are asking about different things, and that this statement naturally follows on from the previous one.

Acted on
Most students defined 'acted on' as being where a change was made as a result of feedback. Other students also included cases where feedback had been looked at and considered, even if it did not necessarily result in changes being made. Those who agreed with the statement cited examples of communication about changes being made as a result of feedback (or reasons for not making changes). Students who disagreed with the statement often cited examples of feedback being passed on to tutors but nothing happening following this.

A number of students said that they did not know how to respond to this statement. They were aware of feedback provided but were unclear on what impact this had. In some cases this was because feedback was collected at the end of a course or year, and so the impact would only be felt by future students. Those who were unaware whether feedback had been acted on responded in two different ways. Some selected 'Neither agree nor disagree' as they felt they did not have sufficient knowledge to agree or disagree with the statement. However, others disagreed with the statement *because* it was not clear what impact feedback had. Students in the latter group commented that if it was clear how feedback had been acted on they would have heard about this. The contrast in response strategies here among those unaware of whether feedback had been acted on may present an analysis issue. However, if the bulk of analysis will focus on those who agree versus everyone else, this would be less of a concern.

As at other statements in this section, students who had worked as course reps were better able to respond to this statement, sometimes commenting that they only knew about whether feedback had been acted on as a result of taking on this role.

5.9.5 Whether encouraged to be involved in course decisions

Part 1:   Students are encouraged to be involved in decisions about how this course is run
Part 2:   N/A
Part 3:   N/A

This statement aimed to provide further evidence on the extent to which students felt empowered to shape their learning experience. However, a number of issues were identified with the statement during Part 1 testing and as a result it was not included in subsequent stages.

Answer strategies

The statement was interpreted in a number of different ways. Some students took it to be a general measure of opportunities for providing feedback and considered it in a similar way to other statements in this section. Others saw this as taking feedback a step further and considered whether students could have any real impact or bring about change in the running of their course.

There were differences in interpretation of 'how the course is run', with some feeling this referred to course timetables or structures, and others mentioning impacting on course content or teaching methods.

Many students selected 'Neither agree nor disagree' or 'Not applicable' here. In some cases this was because they had no real idea whether students had been encouraged to be involved, often commenting that only those acting as students reps or on the student council would be able to answer this. However, in other cases students selected these responses because they did not feel that students should be involved in decisions about how the course is run. Other students holding this view disagreed with the statement – not because students were discouraged from being involved but because they did not feel they should be involved. A number of students said that this was the responsibility of teaching staff, as they had far more experience and expertise to draw upon.

5.9.6 Considerations when developing the 2017 NSS

Recommendations
Consider whether the first statement adequately addresses the measurement objective as students commonly thought only about whether they'd been asked to give feedback at all (rather than whether the feedback process was effective). The level of agreement with this statement in the 2014 pilot should be reviewed. For future piloting, it may also be worthwhile to consider a split-sample experiment, where half of students are asked if they have had 'the right opportunities' and the other half are simply asked if they have had 'opportunities'. This would provide a test of the extent to which students are being prompted to answer based on the type and quality of feedback, rather than simply whether any there have been any opportunities for feedback.
Consider whether a potentially high proportion of 'Neither agree nor disagree' responses to the second and third statements will reduce their value. The level of 'Neither agree nor disagree' responses should be reviewed in the pilot data.
Review the level of correlation between responses to the second and third statements in the pilot data. If the level is high, the inclusion of both of these statements may not be necessary.
Do not include the fourth statement ('Students are encouraged to be involved in decisions about how this course is run').
Recommended statements: • *I have had the right opportunities to provide feedback on my course* • *Staff value students' views and opinions about the course* • *It is clear how students' feedback on the course has been acted on*

5.10 Overall satisfaction

The NSS includes one question on overall satisfaction with the course.

5.10.1 Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
Overall, I am satisfied with the quality of the course	Overall, I am satisfied with the quality of the course	N/A	Overall, I am satisfied with the quality of the course	N/A

5.10.2 Whether satisfied with the course quality

Part 1:   Overall, I am satisfied with the quality of the course
Part 2:   N/A
Part 3:   N/A

The QAF review recommended the question be cognitively tested as currently worded but flagged the mismatch of asking a satisfaction question against an agree/disagree answer scale and the level of cognitive burden this places on students. This question was tested at Part 1 only.

Answer strategies
Students, on the whole, found answering this question straightforward. A handful of students said it was hard to think about the course as a whole, bring together all the elements and answer but most were able to do this without problem.

Additional cognitive burden
The use of a satisfaction question within an agree/disagree scale questionnaire will undoubtedly raise issues where students think about their level of satisfaction (e.g. yes I'm fairly satisfied) and are then required to fit this into an agree/disagree answer scale. While this issue presented itself, it was not felt to be a major problem.

Satisfaction/quality
There was a feeling that students were thinking mainly about their satisfaction with the course/institution rather than considering the word 'quality'. It is not clear how useful the inclusion of 'quality' is. We suspect the results would be fairly similar if the question were worded 'Overall, I am satisfied with the course'.

Students thought about a very wide range of factors when answering this question. These included: content; teaching/tutorials; other students; online facilities; cost/value for money; whether the course had met/exceeded their expectation; how happy they are on the course; how much they are enjoying it; and the progress they have made.

5.10.3 Considerations when developing the 2017 NSS

Recommendations
Despite the use of a satisfaction scale against an agree/disagree scale, students were generally able to understand and answer this statement.
Recommended statement: • *Overall, I am satisfied with the quality of the course*

5.11 Students' Union

The NSS currently includes one question about students' satisfaction with the Students' Union. Consultation work undertaken by the National Union of Students (NUS) has shown that the current question is too broad to be valuable for enhancement purposes and, as it stands, does not meet the suggested criterion for inclusion in the survey that it is focused on the academic experience.

Following the QAF review two new questions were tested at Parts 1 and 2 of our cognitive testing and students were probed extensively on their understanding of these new questions and the terms used within them.

5.11.1 Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
Thinking of all the services, including support, activities and academic representation provided by the Students' Union (Association or Guild) at your institution, to what extent do you agree with the following statement: I am satisfied with the Students' Union (Association or Guild) at my institution	N/A	N/A	Thinking of all the services, including support, activities and academic representation provided by the Students' Union (Association or Guild) at your institution, to what extent do you agree with the following statement: I am satisfied with the Students' Union (Association or Guild) at my institution	N/A
N/A	Thinking of all the services, including support, activities and academic representation provided by the Students' Union (Association or Guild) at your institution, to what extent do you agree with the following statement: The Students' Union (Association or Guild) **has improved students' academic experiences**	The Students' Union (Association or Guild) **effectively represents** students' academic interests	The Students' Union (Association or Guild) effectively represents students' academic interests	N/A

5.11.2 Students' Union's role in the academic experience

Part 1:   Thinking of all the services, including support, activities and academic representation provided by the Students' Union (Association or Guild) at your institution, to what extent do you agree with the following statement: The Students' Union (Association or Guild) has improved students' academic experiences

Part 2:   The Students' Union (Association or Guild) effectively represents students' academic interests

Part 3:   N/A

One question about the Students' Union is included in the existing NSS; this question focuses on overall satisfaction with the Union. Wording for two versions of a new question was proposed following the review which moves away from satisfaction and places more of a focus on the impact the Union has on students' academic experiences. The QAF review recommended including one of the suggested versions at each round of testing and extensively probing around the alternative question wording.

Answer strategies

Students' answers overwhelmingly showed that the Students' Union at their institution was not associated with the 'academic experience'. Students adopted various strategies when answering both versions of the question:

1. **No knowledge of the SU**: Those students in this first category immediately said they didn't know what the SU was at all, didn't know what it did or were not interested. These students either chose 'Not applicable', the middle category or 'Definitely disagree'. Part-time students were more likely to fall into this category. Students at the FEC in our sample were least likely to be aware of the SU, its set up at their institution and the role it plays.

2. **Answered in relation to overall satisfaction with the SU**: The next group interpreted the question as asking about their general satisfaction with the SU (possibly as the previous question asks about satisfaction) or whether they are interested in being involved.

3. **Answered about the overall student experience**: Students in this group missed the word academic and answered thinking about the student experience in general. During probing, students said the social role the SU holds is so strong it feels natural to first and foremost consider this. Students also said during probing that the two aspects are inter-related (e.g. one can't have a good academic experience if they're not enjoying themselves at university).

4. **Understood the question referred to the SU's role in students' academic interests**: The final group understood the question and fell into two categories with regard to providing an answer (see 4a and 4b below). The vast majority of students in this category said they knew what the SU was but only associated it with social events (and activities/societies/sports), and student life (e.g. 'parties' was mentioned throughout) rather than the academic side of student life.

   a. **Could give an answer:** where these students understood the question (i.e. as relating to the 'academic experience') and could give an answer only a handful of students chose 'Mostly agree' or 'Definitely agree'. These students gave examples of putting together an exam timetable and course societies. The remaining students disagreed; they saw the SU as having a purely social role.

b. **Could not give an answer**: where students understood the question but didn't know the answer they either chose 'Not applicable' or the middle category. In other cases where students did not know the answer they gave a 'best guess'. Some felt the support would be there if you proactively went and looked for it, others felt they were happy with their SU in general and so assumed it would support students academically if they needed help. Despite understanding the question some students struggled to give an answer where they felt there had been no academic impact because they liked their Union and wanted to respond positively.

Improvements at Part 2

The conceptual issues surrounding students' interpretation of the Students' Union (SU) remained at Part 2 (where a revised statement was included: 'The Students' Union (Association or Guild) effectively represents students' academic interests'); these issues were not something that could be completely solved by re-wording the statement. Some students were able to process and answer the question correctly which showed an improvement in the Part 2 wording but overall students' answers fell into the same four categories outlined above. Despite changes to the question wording following the Part 1 testing, students continued to predominantly focus on the social role held by the SU and answer about the student experience in general (see category 3 above).

The role of the Students' Union

Students felt the SU played an important role in supporting students and helping them with any issues but not in an academic sense; they are more associated with the extra-curricular side. There were one or two exceptions that saw the SU as a body to help resolve any issues between students/tutors but these were few and far between. Supporting this further, some felt the question did not make sense and said explicitly that getting involved in students' academic interests is not part of the SU's role, as that is for course leaders and tutors to do at a department level.

Introductory wording at Part 1

For the most part, students missed the introductory wording unless it was read out to them in the interviewer administered interviews. Those filling in the paper version were more likely to read it with one or two reading it voluntarily from the laptop or tablet. Therefore, students are likely to miss this wording and go straight to the statement. This is understandable because none of the other statements begin with an introductory sentence.

The fact that students had missed the introductory wording had a knock on effect to the retrospective probing the interviewer was required to carry out at this statement. The probe guide included follow up probes about the terms used within the introductory sentence (support, activities and academic representation). As most students had missed the wording, these terms had not been taken into account during the initial answering process and so any discussion of their understanding of the terms took place from a retrospective point of view.

Academic experiences/interests

At Part 1, 'academic experiences' caused few problems, with only one or two students saying they didn't understand what it referred to. It was understood as anything to do with their course or teaching (e.g. modules, processors, lectures, essays). One student suggested 'your course experience' might be better understood (Specialist College, Music). At Part 2, 'academic interests' was similarly understood with students again describing it as anything to do with the course, its organisation and quality, complaints about staff or assignments, ensuring good grades and a good reputation.

(Association or Guild)

Students were occasionally confused by the inclusion of '(Association or Guild)' as these terms didn't apply to their institution. This bracketed wording does make the statement longer and more 'wordy' but as these apply to some institutions there is no option but to retain them. At Part 1, one student didn't

pick up on the bracketed wording (Association or Guild) and subsequently missed Association which is what it was called at her institution (Specialist, Music). This student had no knowledge of the role of the Student Association at her institution.

Alternative Students' Union statements included in retrospective probing
We were provided with two versions of wording for the Students' Union statement for both Parts 1 and 2. One version was included in the questionnaire and the second incorporated into the retrospective probes where we asked students if they would have preferred the alternative wording.

Part	Questionnaire wording	Alternative wording incorporated into probes
Part 1	Thinking of all the services, including support, activities and academic representation provided by the Students' Union (Association or Guild) at your institution, to what extent do you agree with the following statement: The Students' Union (Association or Guild) has improved students' academic experiences	Effective representation through the Students' Union (Association or Guild) had improved students' academic experiences
Part 2	The Students' Union (Association or Guild) effectively represents students' academic interests	Effective representation through the Students' Union (Association or Guild) has improved students' academic experiences

At Part 1, in practice it was difficult to follow up about 'effective representation' because so few students had understood the question correctly (those falling into categories 4a and 4b above). Where the student had not understood the question, this was not followed up during probing. Where this was followed up students had mixed feelings regarding the alternative 'effective representation' wording. Some found it unnecessarily wordy and confusing; others commented that they liked the word 'effective'. Interpretations included: having students' best interests at heart: and representation of the students. Some students commented that it made them think about student elections. One student suggested 'the SU has effectively supported students' learning' as an alternative (University, Chemistry).

At Part 2, again, students who correctly understood the question were asked during probing about the alternative question wording. Feedback was fairly mixed; some students preferred the alternative wording, saying it more clearly showed the process of contacting the SU and views being represented. Others stated a preference for one or the other but were unable to explain exactly why. A further group said they did not like the alternative wording, that it is too long, does not flow and is more difficult to understand. As it included the word 'experiences' it was felt that this related more the overall university experience (including social and pastoral aspects) whereas 'interests' was more linked to the course and academic side.

5.11.3 Considerations when developing the 2017 NSS

Recommendations
Depending on the results of the pilot test, and bearing in mind the conceptual problems students experienced in answering the SU questions, we recommend two options:
1. Include two SU questions, the first asking generally about representation of the SU and the second focusing on academic representation (e.g. 'The Students' Union (Association or Guild) effectively represents students' interests and 'The Students' Union (Association or Guild) effectively represents students' academic interests'). This will allow students to provide general feedback on the SU and then focus specifically on the academic context.
2. Remove the reference to academic interests' altogether and ask one general question about representation of students' interests (e.g. 'The Students' Union (Association or Guild) effectively

represents students' interests'). While the aim is to collect information on academic interests, if students are unable to conceptualise this and draw in other non-academic experiences the data yielded are inaccurate.

5.12   Overall teaching

Findings from Part 1 showed that the inclusion of negatively phrased statements dotted throughout the questionnaire was not overly well received. Subsequently at Parts 2 and 3 the negative statements were removed with the exception of one at the end of the survey. This allowed the exploration of how students responded to this statement without it interfering with the remainder of the questionnaire.

5.12.1   Range of questions

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording
N/A	N/A	The teaching on my course has been poor	Overall, I am dissatisfied with the teaching on my course	Overall, I am dissatisfied with the teaching on my course

5.12.2   Whether teaching has been poor

Part 1:   N/A
Part 2:   The teaching on my course has been poor
Part 3:   Overall, I am dissatisfied with the teaching on my course

Answer strategies

The questionnaire flowed smoothly without the negative statements. Students expressed surprise at the final statement; this wording made some students feel defensive of their course while others said they felt compelled to think of the negative aspects. However, students found it far easier to comprehend and respond to the negative wording than had been the case at Part 1, and responses were consistent with answers put forward earlier in the questionnaire.

As with the question on overall satisfaction with the course quality, students were able to think generally about the teaching across their whole course and provide an answer based on this. However, students found it cognitively difficult to switch their thinking to a negatively phrased statement when all other statements had been positively phrased. Fitting their answer into the correct category was not intuitive and many students asked for clarification that they had selected the right category to reflect their answer. Some students actively said they did not like the change and felt it was trying to catch them out or trick them.

5.12.3   Considerations when developing the 2017 NSS

Recommendations

Do not include negatively phrased statements due to potential confusion caused by these. However, this should be reviewed alongside the pilot data, particularly looking at the proportion agreeing with the negative statement while responding positively elsewhere and how this correlates with other indicators (e.g. length of time taken to complete the questionnaire).

Appendix A: Summary of 'statement journeys' and recommendations for consideration

This Appendix includes summary tables for each section of statements displaying the 'journey' undertaken by each statement. The final three columns include our recommendation for whether each statement should be included in the NSS 2017, the recommended wording and our supporting rationale.

Teaching on my course

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
Staff are good at explaining things	Staff are **poor** at explaining things	Staff are good at explaining things	Staff are good at explaining things	N/A	Yes	Staff are good at explaining things	Students can give an answer fairly easily; a good opening statement.
Staff have made the subject interesting	N/A	Staff have made the subject interesting	Staff have made the subject interesting	N/A	Yes	Staff have made the subject interesting	Most students could provide an 'averaging' answer; we also found overlap with the next statement.
Staff are enthusiastic about what they are teaching	N/A	Staff are enthusiastic about what they are teaching	Staff are enthusiastic about what they are teaching	N/A	No	N/A	Likely overlap with the previous statement (which we feel is a stronger statement); we recommend this is assessed alongside the pilot data.
The course is intellectually stimulating	N/A	The course is intellectually stimulating	The course is intellectually stimulating	N/A	No	N/A	There were issues with understanding of 'intellectually stimulating'; we also found overlap with the 'Critical thinking' section.

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
N/A	My course has challenged me to achieve my best work	N/A	My course has challenged me to achieve my best work	My course has challenged me to achieve my best work	Yes	My course has challenged me to achieve my best work	Statement was clear and interpreted in meaningful and sensible ways.
N/A	The teaching has encouraged me to think about the course content in depth[14]	N/A	N/A	N/A	No	N/A	Overlap with 'Critical thinking' section.

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[14] Due to overlap this statement was incorporated into the 'Critical thinking' questions for Parts 2 and 3.

Critical thinking

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
N/A	My course has provided me with opportunities to explore ideas, concepts or experiences in depth	My course has provided me with opportunities to analyse ideas or concepts in depth	My course has provided me with opportunities to explore ideas or concepts in depth	My course has provided me with opportunities to explore ideas or concepts in depth	Yes	My course has provided me with opportunities to explore ideas or concepts in depth	In light of changes made throughout the testing phases these are good additions but comprehension differs across students and some terms are interpreted in a variety of ways. We recommend the data requirements for this section are reviewed alongside both cognitive findings and pilot data to find whether the statements are delivering their objectives.
N/A	My course has enabled me to bring information and ideas together from different topics to solve problems	My course has provided me with opportunities to bring information and ideas together from different topics to **explore** problems	My course has provided me with opportunities to bring information and ideas together from different topics	My course has provided me with opportunities to bring information and ideas together from different topics	Yes	My course has provided me with opportunities to bring information and ideas together from different topics	Consider introducing/testing a statement used in UKES 2014 that referred to 'combining ideas from different modules when completing assignments' ('completing assignments' would need to be tested to ensure it was relevant for all students).
N/A	My course has encouraged me to apply what I have learnt to practical problems or new situations	My course has provided me with opportunities to apply what I have learnt **in practice**	My course has provided me with opportunities to apply what I have learnt	My course has provided me with opportunities to apply what I have learnt	Yes	My course has provided me with opportunities to apply what I have learnt	Students often do not think about the synthesizing of information; rather they focus on the practical element, or lack of, on their course. We recommend testing the alternative wording 'My course has given me skills and knowledge that I can use outside of my studies' if this

Assessment and feedback

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
The criteria used in marking have been clear in advance	N/A	The criteria used in marking have been clear in advance	The criteria used in marking have been clear in advance	N/A	Yes	The criteria used in marking have been clear in advance	This statement was generally well understood although there was some evidence of students looking back over the whole course rather than the final year.
Assessment arrangements and marking have been fair	N/A	Assessment arrangements and marking have been fair	Marking and assessment has been fair	Marking and assessment has been fair	Yes	Marking and assessment has been fair	This was fairly well understood and answers were well thought out.
Feedback on my work has been prompt	Feedback on my work has been **timely**	N/A	Feedback on my work has been **timely**	Feedback on my work has been **prompt**	Yes	Feedback on my work has been timely	Students were able to give an overall answer.
I have received detailed comments on my work	I have received **helpful** comments on my work	N/A	I have received **helpful** comments on my work	I have received **detailed** comments on my work	Yes	I have received helpful comments on my work	Students were able to answer although they were more likely to use a 'cherry-picking' strategy than at some other questions.
Feedback on my work has helped me clarify things I did not understand	N/A	Feedback on my work has helped me clarify things I did not understand	N/A	N/A	No	N/A	Overlap was detected with 'I have received helpful comments on my work'; a common answering strategy was to consider purely whether feedback had been received at all.

Academic support

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
I have been able to contact staff when I needed to	I have **not** been able to contact staff when I needed to	N/A	I have been able to contact staff when I needed to	I have been able to contact staff when I needed to	Yes	Teaching staff have been responsive when I needed to contact them	We recommend consideration of amending the statement as proposed to better understand how responsive teaching staff are - and not just how easy it is to contact them. Pilot data should be assessed here regarding whether there is a high level of agreement with the current statement.
I have received sufficient advice and support with my studies	I have received **in**sufficient advice and support with my studies	I have received sufficient advice and **guidance** with my studies	I have received sufficient advice and guidance **in relation to my course**	I have received sufficient advice and guidance **in relation to my course**	Yes	I have received helpful advice from teaching staff in relation to my course	We suggest removing 'guidance' to place the focus more clearly on the course. We also recommend altering 'sufficient' to 'good' or 'helpful'.
Good advice was available when I needed to make study choices	N/A	Good advice was available when I needed to make study choices	Good advice was available when I needed to make study choices	N/A	No	N/A	There is overlap with 'I have received sufficient advice and guidance with my studies' and the statement was not particularly well understood/interpreted.

Organisation and management

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
The course is well organised and is running smoothly	N/A	The course is well organised and is running smoothly	The course is well organised and is running smoothly	N/A	Yes	The course is well organised and running smoothly	The statement was well understood by students.
The timetable works efficiently as far as my activities are concerned	The timetable works efficiently as far as my activities are concerned	The timetable works efficiently **for me**	The timetable works efficiently **for me**	N/A	No	N/A	We recommend this statement is removed due to overlap/correlation with the first statement in this section.
Any changes in the course or teaching have been communicated effectively	Any changes in the course or teaching **were not** communicated effectively	N/A	N/A	N/A	No	N/A	We recommend this statement is removed due to overlap/correlation with the first statement in this section.

Learning resources

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
The library resources and services are good enough for my needs	The library, **including its digital services, is** good enough for my needs	The library resources **(e.g. books, online services) have supported my learning well**	The library resources (e.g. books, online services) have supported my learning well	The library resources (e.g. books, online services) have supported my learning well	Yes	The library resources (e.g. books, online services) have supported my learning well	Students are able to answer the statement but do not always consider the full range of relevant elements.
I have been able to access specialised equipment, facilities or rooms when I needed to	I have been able to access specialised equipment **(including computer software/ programmes)** when I needed to	I have been able to access **subject specific resources** (e.g. equipment, facilities, software) when I needed to	I have been able to access subject specific resources (e.g. equipment, facilities, software, **collections**) when I needed to	I have been able to access subject specific resources (e.g. equipment, facilities, software, collections) when I needed to	Yes	I have been able to access subject specific resources (e.g. equipment, facilities, software) when I needed to	Clarification on what should be included under 'collections' is needed; we recommend considering removing this from the statement.
I have been able to access general IT resources when I needed to	I have been able to access general IT resources**, including virtual learning facilities (VLE)** when I needed to	IT resources **and facilities have supported my learning well**	The **University's/ College's** IT resources and facilities have supported my learning well	The University's/ College's IT resources and facilities have supported my learning well	Yes	The University's/College's IT resources and facilities have supported my learning well	The statement worked fairly well but students rarely think about breadth of resources and facilities previously indicated as being relevant here. We recommend the funding bodies consider whether the data yielded meets the requirements/

	objectives.						

Personal development

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
The course has helped me to present myself with confidence	The course has helped me to **improve my self-confidence**	N/A	N/A	The course has helped me to present myself with confidence	No	N/A	We recommend this statement is relocated to an optional bank.
My communication skills have improved	**The course has helped me to improve my communication skills**	N/A	N/A	My communication skills have improved	No	N/A	We recommend this statement is relocated to an optional bank.
As a result of the course, I feel confident in tackling unfamiliar problems	**The course has helped me to improve my problem solving skills**	N/A	N/A	As a result of the course, I feel confident in tackling unfamiliar problems	No	N/A	We recommend either relocating this statement to an optional bank or consider dropping it due to the subject specific impact on response, lack of clarity over 'unfamiliar problems' and overlap with other statements that refer to 'problems'.

Learning community

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
N/A	I feel part of a community of students and staff committed to learning	I feel part of a community of staff and students	I feel part of a community of staff and students	I feel part of a community of staff and students	Yes	[On my course] I feel part of a community of staff and students	It is recommended the funding bodies consider whether there is a need to encourage a consistent definition of 'community' (e.g. course based rather than across the whole institution). If so, we recommend altering the statement to include 'On my course…'.
N/A	I have had opportunities to work jointly with other students on my course	I have had **appropriate** opportunities to work with other students on my course	I have had appropriate opportunities to work with other students **as part of** my course	I have had appropriate opportunities to work with other students **as part of** my course	Yes	I have had the right opportunities to work with other students as part of my course	Consider changing 'appropriate opportunities' to 'the right opportunities'. Also we recommend the review of the pilot data to examine levels of agreement with this statement and whether this sufficiently differentiates students.
N/A	I have been encouraged to talk about academic ideas with other students	N/A	N/A	I have been able to **explore** academic interests with other students	No	N/A	We do not recommend the inclusion of this statement given the lack of clarity and general confusion about what to consider.

Student voice

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
N/A	I have had appropriate opportunities to provide feedback on this course	I have had appropriate opportunities to provide feedback on **my** course	I have had **the right** opportunities to provide feedback on my course	I have had **the right** opportunities to provide feedback on my course	Yes	I have had the right opportunities to provide feedback on my course	We recommend the funding bodies consider whether this statement adequately addresses the measurement objective as students commonly thought only about whether they'd been asked to give feedback at all (rather than whether the feedback process was effective). The pilot data should be reviewed to uncover the level of agreement with this statement. We also recommend the consideration of conducting a split-sample experiment in the future.
N/A	Staff value the course feedback given by students	Staff value **students' views and opinions about the course**	Staff value students' views and opinions about the course	Staff value students' views and opinions about the course	Yes	Staff value students' views and opinions about the course	We recommend the funding bodies consider whether a potentially high proportion of 'Neither agree nor disagree' responses will reduce the value of the data yielded. This should be reviewed in the pilot data.
N/A	It is clear how students' feedback on the course has been acted on	It is clear how students' feedback on the course has been acted on	It is clear how students' feedback on the course has been acted on	It is clear how students' feedback on the course has been acted on	Yes	It is clear how students' feedback on the course has been acted on	Again, we recommend the funding bodies consider whether a potentially high proportion of 'Neither agree nor disagree' responses will reduce the value of the data yielded; this should be reviewed in the pilot data. We also recommend a review of the level of correlation between responses to the second and third statements in the pilot data. If the level is high, the inclusion of both statements

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
N/A	Students are encouraged to be involved in decisions about how this course is run	N/A	N/A	N/A	No	N/A	This statement was open to wide interpretation and caused confusion.

Overall satisfaction

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
Overall, I am satisfied with the quality of the course	Overall, I am satisfied with the quality of the course	N/A	Overall, I am satisfied with the quality of the course	N/A	Yes	Overall, I am satisfied with the quality of the course	Students are able to answer the statement fairly easily.

may not be necessary.

Students' Union

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
Thinking of all the services, including support, activities and academic representation provided by the Students' Union (Association or Guild) at your institution, to what extent do you agree with the following statement: I am satisfied with the Students' Union (Association or Guild) at my institution	N/A	N/A	Thinking of all the services, including support, activities and academic representation provided by the Students' Union (Association or Guild) at your institution, to what extent do you agree with the following statement: I am satisfied with the Students' Union (Association or Guild) at my institution	N/A	Yes	The Students' Union (Association or Guild) effectively represents students' interests	Depending on the results of the pilot test, we recommend two options: 1. Include two SU questions, the first asking generally about representation of the SU and the second focusing on academic representation (e.g. 'The Students' Union (Association or Guild) effectively represents students' interests' and 'The Students' Union (Association or Guild) effectively represents students' academic interests'). This will allow students to provide general feedback on the SU and then focus specifically on the academic context;

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
N/A	Thinking of all the services, including support, activities and academic representation provided by the Students' Union (Association or Guild) at your institution, to what extent do you agree with the following statement: The Students' Union (Association or Guild) **has improved students' academic experiences**	The Students' Union (Association or Guild) **effectively represents** students' academic interests	The Students' Union (Association or Guild) effectively represents students' academic interests	N/A	Yes	The Students' Union (Association or Guild) effectively represents students' academic interests	2. Remove the reference to 'academic interests' altogether and ask one general question about representation of students' interests (e.g. 'The Students' Union (Association or Guild) effectively represents students' interests'). While the aim is to collect information on academic interests, if students are unable to conceptualise this and draw in other non-academic experiences the data yielded are inaccurate.

Overall teaching

Current wording	Part 1 wording	Part 2 wording	Pilot wording	Part 3 wording	NSS 2017	Recommended wording	Rationale
N/A	N/A	The teaching on my course has been poor	Overall, I am dissatisfied with the teaching on my course	Overall, I am dissatisfied with the teaching on my course	No	N/A	We do not recommend the inclusion of negatively phrased statements due to potential confusion caused by these. However, this should be reviewed alongside the pilot data, particularly looking at the proportion agreeing with the negative statement while responding positively elsewhere and how this correlates with other indicators (e.g. length of time taken to complete the questionnaire).

Appendix B: Summary of Optional Question banks testing work

Introduction

As an additional part of the review of questions asked on the National Student Survey (NSS) TNS BMRB conducted a phase of cognitive testing focusing on four short batteries of questions asked within extra separate 'optional banks'. The fourth bank consisted of 6 statements asked only of healthcare students who had undertaken at least one NHS practice placement as part of their course. A total of 34 students were interviewed during May 2015, including three interviews conducted in Welsh. Of these 34 students, seven answered the practice placement questions; this included all three Welsh speaking students. This document gives a brief summary of our approach to the testing, the sample of students interviewed and initial findings and recommendations.

Method

Cognitive interviews were carried out at students' HEIs. Students were assured of confidentiality, anonymity and were asked for permission for their interview to be audio-recorded. This allowed the interviewer to listen without taking notes. Following the interviews notes were typed up into an analysis framework.

The cognitive interviewers used a variety of techniques including Think Aloud, concurrent and retrospective probing and paraphrasing. The Think Aloud technique was found to be very successful among this group and, perhaps as a result, interviewers favoured probing concurrently after each question.

Interviewers demonstrated an example of the Think Aloud technique (number of years in education) before asking the student to try the same as a practice. Following this, interviewers observed the student begin filling in the questionnaire, encouraged them to use the Think Aloud technique throughout and followed up with probes.

The NSS is a mixed-mode survey and a range of completion modes were incorporated into the cognitive interviews. Interviews were conducted by paper and pen (PAPI), on-line (CAWI) and through simulated telephone (CATI) to explore any differences between the modes and any mode-specific difficulties students may encounter.

Sample

The sample was recruited by TNS's specialist in-house qualitative recruitment team. A total of 34 interviews were conducted across 5 HEIs; 3 of these interviews were in Welsh. We visited one university, one FEC, one private institution and two specialist institutions. Two of the interviews conducted in Welsh took place over the telephone.

Recruitment of part-time students proved particularly challenging as some institutions did not offer part-time courses at all and where they were offered it was difficult to arrange convenient times to meet with these students due to their limited availability. The tables below show the characteristics of the 34 students, the range of courses the students were currently studying and the number of students that used each interview mode:

Characteristics of students

Study mode		Age		Ethnicity		Nationality	
Full-time	Part-time	Under 24	24+	White	Non-White	British	Non-British
33	1	24	10	23	11	27	7

Subjects studied by students interviewed
Accountancy/Financial Accountancy
Art and Design
Archaeology
Business Computing Solutions with Internet Applications
Business Studies/Business Management/Business Management with Finance
Dentistry
Education Studies/Education and Music
Fine Art
Genetic Counselling
Journalism
Law/Bar Professional Training course
Medicine
Music
Nursing/Adult Nursing
Optometry
Printing and Print Making
Product Design
Psychology
Religion and Theology
Sociology

Number using each interview mode

Mode	Number of students	% of students using this mode in the main NSS (supplied by Ipsos MORI)
Paper and pen	6	4%
Laptop	21	62% (laptop or PC)
Tablet	-	9% (hand held devices)
Interviewer administered	7	25%
Total	34	100%

General findings

Earlier testing phases uncovered a range of conceptual problems faced by students when answering statements included as part of the NSS. Some of these conceptual problems were also found within students' answers and thought processes at these additional optional banks questions. These were:

1. **Students' understanding and answer strategies differed depending on their course subject**

Students' answers were closely related to the subject they were studying. Concepts were interpreted in a wide variety of ways and were more relevant or applicable to certain courses than others. For example students taking courses that contained a practical element tended to focus on this when answering questions about 'presenting myself with confidence'. Similarly students who had learned about sustaining the environment as part of their course (e.g. studied Corporate Social Responsibility) were able to consider these formal policies when thinking about good environmental practices, while others who were unfamiliar with the concept thought only about whether they had used recycling bins. Further examples of these differences are included in the question specific findings that follow.

2. **There is a lack of consistency in how students use the 'Neither agree nor disagree' and 'N/A' categories and how they deal with a 'Don't know'.**

Students' use of these two categories was haphazard and answer strategies were interchangeable. The middle category ('Neither agree nor disagree') was sometimes used as an 'averaging tool' where students had had both positive and negative experiences. It was also used where they had no opinion or didn't know their answer. The Not Applicable ('N/A') category was also used in these instances with no clear pattern between the two.

3. **Students experienced difficulty at particular statements which did not lend themselves well to the agree/disagree answer scale.**

As detailed later on, some statements were not well suited to the NSS's agree/disagree answer scale. For example a statement such as 'The Students' Union (Association or Guild) has had a positive impact on my personal development and growth' was difficult to answer as a 'Disagree' response could mean two quite different things (1. there has been no impact at all; and 2. there had been a negative impact). In this case it may be better to ask about the extent of impact (e.g. How would you describe the impact of the Students' Union (Association or Guild) on your personal development and growth? [Very positive impact/Fairly positive impact/No impact/Fairly negative impact/Very negative impact]). This mismatch or double meaning meant answering some statements placed a greater degree of cognitive burden on students who felt unable to choose a category and some pointed out the problem. Subsequently answer strategies differed between students who gave the same answers for different reasons.

Statement-by-statement findings

The next section includes a summary of our main findings when testing the additional optional banks and NHS questions and our recommendations for further consideration.

Personal development

These three statements were also tested as part of the Part 3 core NSS testing. Findings were very similar within the sample of students here.

1. The course has helped me to present myself with confidence

Findings
Students were not sure what to include here; some focused on their self-esteem, considering their confidence level or presenting themselves generally. Others placed the emphasis on their confidence in an academic setting, or presenting themselves in relation to their course. This distinction was queried and some students said they would give different answers to each. Students, on the whole, found this a fairly straightforward question to answer.
It was common for students to think exclusively about their presentation skills and speaking in front of others, the statement wording leading them to think along these lines. 'Present myself with confidence' could be confusing; students were unsure whether to include informal meetings with people or restrict thinking to more formal situations.
Students also thought about interaction with other students during seminars and group discussions. Where there was a practical element to the course, students' answers tended to focus on this (e.g. music students thought about practical performance to others; healthcare students thought about confidence while being on practice placement and dealing with colleagues and patients).
Students considered whether they had already been confident before starting the course and some were accordingly unsure about how to answer with this in mind. For these students the same answer could be given for very different reasons, leading to concern about the accuracy of data collected.
Confidence was defined as: presentations; being professional; confidence to perform in a job interview to potential employers; making eye contact; not letting nerves overwhelm you; representing yourself as a confident person; how others perceive you; being able to deal with criticism; and feeling comfortable when talking to new people.
The non-native English speakers in the sample thought about improving their grasp of the English language and gaining confidence therein.
As before, students thought of specific instances which had impacted on their confidence or 'averaged' across their different experiences and chose a category.
There was overlap between this question and the following one on communication skills, possibly because there was emphasis on verbal skills here. This question was seen to ask about general skills whereas the second focuses on confidence when communicating.
Students were probed about their opinions on the alternative wording 'The course has helped me to improve my self-confidence'; some said they would have preferred to be asked about their 'self-confidence' as this was more personal and made them focus on their own level of confidence rather than what the course had provided, others said they would have considered the same things.
The funding bodies pointed out that the information being sought at this question can be hard to quantify and accordingly it has been suggested that the whole section is re-located to an optional bank. The question isn't particularly difficult to answer but it should be borne in mind that different strategies are used depending on the level of self-confidence the student had before beginning their course. This can then lead to negative answers there having been a negative experience, this bringing into question the

usefulness of the data.

2. My communication skills have improved

Findings
This statement overlapped with the previous one (Q1) and students commonly thought again about giving presentations and communicating with staff and students. Some students commented that the questions were similar and that if a person's confidence was good then communication would follow suit ("if my confidence has improved then I feel more able to communicate" (University, Adult Nursing)).
As at Q1 students considered how good their communication skills had been prior to starting the course and, where these had been good, this led to a negative answer.
As earlier flagged, the statement is not clearly linked to the course and it is not obvious whether students should anchor their thinking to the course itself or comment on their communication skills in general. Therefore an 'Agree' response may not be an indicator that the course has had a positive impact. As before, it was difficult to tease out whether communication skills had improved as a result of the course or could be attributed to other aspects of university life or growing up in general. Some students mentioned this explicitly when asked whether they preferred the alternative wording; they would have liked a definite link to the course if that was the intention. Others said they would have given the same answer.
The non-native English speakers in the sample thought exclusively about communication in terms of speaking English as a foreign language.
Some students considered only verbal communication skills: presentations; speaking with staff and students and in front of, or to, new people; being interviewed; improvements in foreign languages; and group work. Other students included non-verbal communication: emails; body language; and mannerisms. One student mentioned the academic language they used and how this had changed over time. Students on arts courses spoke of how it is possible to communicate through their work (e.g. through art or music) and restricted their thinking to this. Healthcare students thought about talking to patients, hard-to-reach groups in particular (e.g. disinterested young people or people with mental health problems). One student mentioned that communication skills includes being polite and compassionate.

3. As a result of the course, I feel confident tackling unfamiliar problems

Findings
As before, students found this question more problematic than the other two in this section and some commented that it covered the same issues. In earlier stages of testing this statement was also felt to overlap with questions within the earlier 'Critical thinking' section of the main survey.
Some students' first reaction was to say they didn't understand what the question was asking them. Some asked whether it related to general life or only to problems within their course. It was felt to be too broad and they weren't sure what to include. Some chose the middle category in order to get past it.
Students differed in terms of whether they included 'unfamiliar problems' within or outside their courses. Some thought only about problems that came up as part of their course material (see following point), others thought about the level of support they had received from teaching staff and others considered whether they had applied what they had learnt to everyday life or real world problems.
The course that was being studied was key to answering this statement (as with others throughout the questionnaire). Some courses lend themselves to using language relating to 'problems' (e.g. accountancy, engineering, mathematics and other applied courses) and in these cases students would restrict their thinking to problems within their course (e.g. working out a tax calculation). For students taking courses with no obvious 'problem' component this was harder to pin down. One student said she studies art and so does not come across unfamiliar problems. Some examples of unfamiliar problems were: problems within group work; problems you might face in your future career and being prepared for your future work; personal problems; and anything unexpected or that you had never come across before.
While some students correctly interpreted 'tackling' as using your initiative to figure things out or 'thinking outside the box', others (particularly international students), struggled to define 'tackling' and felt 'solving' to be better known and understood.
Some students were asked if they would prefer the alternative wording 'The course has helped me to improve my problem solving skills'; this was felt to be slightly more formal, clearer and more linked to the course but the word 'problem' was still felt to be confusing for the reasons given above. One student found this just as confusing as 'problem solving' was seen as only relevant to subjects like maths.

Considerations when developing the 2017 NSS

Recommendations
Consider using the alternative versions used at Part 1 which anchors each statement more clearly to the course.
Consider placing in an optional bank.
Consider amending 'tackling' to 'solving', 'addressing' or 'facing'.
Consider re-wording 'problem solving skills' as this was interpreted in a variety of ways (see below).
Recommended statements: • *The course has helped me to improve my self-confidence*   • *The course has helped me to improve my communication skills*   • *The course has helped me find ways to solve unfamiliar problems*

Environmental sustainability

Cognitive testing uncovered a range of problems with this section. It did not flow well in general and could feel very repetitive. The concept of 'Environmental sustainability' was unfamiliar to some students and was not widely understood which meant the whole section was problematic. Students employed a wide variety of answer strategies, this having important implications for data quality; students' thinking ranged from considering use of recycling bins to overall institution policy. Additionally, the statements do not naturally fit with the agree/disagree answer scale, the third and fourth statements in particular.

4. My institution encourages good environmental practice

Findings
Students fell into two main categories when answering this statement: those who understood what they were being asked; and those who did not. Of those who understood, some thought no further than whether the institution provided recycling bins and others considered that this meant on a large scale (e.g. Corporate Social Responsibility (CSR) and green policies at an institutional level), some deciding that they would not know if there was good environmental practice. Considering those who did not understand the statement, those who were aware they had not understood inconsistently used the N/A or middle category or gave their best guess. Lastly there were those who were unaware that they had not understood; this group interpreted the statement in a variety of ways and gave answers accordingly (e.g. whether the SU provided a good environment for students).
Students falling into this last group interpreted 'environmental practice' in a variety of ways. In some cases it was interpreted as the general environment for students in the institution or on the course, this meaning students did not tie it to 'being green' or environmental issues at all rendering their answers meaningless (e.g. "does it mean where I am in my studio space" (FEC, Fine Art)).
Where 'environmental practice' was correctly understood, a wide range of factors was considered: recycling; being green and healthy; the carbon footprint; awareness of climate change; being paperless or using less paper; energy saving; automatic lights; helping the environment; being sustainable; and counteracting anything that has a negative impact on the environment.
As before, students were able to provide answers and tended to either think about one or two specific, meaningful issues or provide an average (e.g. even though we have recycling bins on campus (institution focus) we are not encouraged to use them and we are given too many paper hand outs and things to print (course focus)).
It should also be noted that the answer scale does not fit particularly well with the topic. A disagree answer meant a <u>lack</u> of encouragement rather than negative encouragement; one student pointed out that no institution would encourage bad environmental practice. Questions asking about the <u>extent</u> to which the institution encourages good environmental practice would provide a better fit.
Additionally students varied in whether they considered their own department, the institution as a whole (e.g. "is it purely the staff, governing body and the course or does it include the students association?" (Specialist institution, Print and print making)) and even whether to include the NHS placements they had attended. This depended on their knowledge of each and the factors that were meaningful to them. The following statement asks about 'my subject'. Notably, 'institution' at this statement is inconsistent with the remainder of the questionnaire which asks about 'University/College' in places or just 'my course'. A consistent reference point would help students think more clearly and be surer of what to consider.

5. My studies have encouraged me to think about environmental sustainability in the context of my subject

Findings
The latter part of the wording 'in the context of my subject' was often missed so in effect the question was a repeat of the previous one. Students commented that this felt repetitive and thought about the same issues.
Importantly, some students did not understand the very essence of the statement and asked what 'environmental sustainability' meant (e.g. "would that be how the accounting field or business environment is doing outside of uni?" (Specialist institution, Accounting)). For these students the whole section was problematic and difficult to answer and they ended up guessing throughout.
Other students grasped the concept and what the statement was asking and were able to provide well thought out answers. This was particularly the case where they had learned specifically about environmental issues as part of their course (e.g. international business, corporate social responsibility, journalistic reporting on science and the environment and environmental accounting modules). Where the course did not include any material on environmental issues this was more difficult. For example students studying art and medicine chose N/A and the middle category respectively stating that it did not apply to them. These two categories were used inconsistently where students felt the statement did not apply to them. However, arguably environmental sustainability could be relevant to both subjects (through the use of art resources and medical equipment) so it was very clear that some students thought purely about the course material.
When probed some students had a fairly good understanding of 'environmental sustainability' and were able to describe it in a variety of ways: the ability to carry on forever without doing damage to the environment; enhancing/preserving/maintaining things for the **long term**; keeping things at the same level; and compensating for any damage or carbon footprint. These students tended to have studied environmental sustainability as part of their course. Students without such a good understanding tended to think more about ways of helping the environment rather than 'environmental sustainability' per se, reinforcing the overlap between this statement and the previous one. Definitions included: recycling; power saving; 'being green'; not wasting paper; and considering global warming.

6. I took part in environmental sustainability activities

Findings
This statement was easier for students to answer and they raised fewer problems but it was interpreted in a wide variety of ways.
Students who answered 'No' either: a) had done no institution based activities whatsoever (whether environmental or not); b) said they didn't know if any 'environmental sustainability activities' were available; or c) said they had chosen not to take part even though activities were available. These students were reluctant to give a 'Disagree' answer as it was not the 'fault' of the institution, it was their own choice. Next were students who were unsure whether they had taken part or not as they were unsure what to include (e.g. one student initially said he did not take part, then changed his answer to 'Mostly agree' because he always used the correct recycling bin). These students either chose the N/A or middle categories or gave their best guess. Students who answered 'Yes': either a) included any institution based activity they had taken part in (whether environmental or not); or b) counted an activity as being environmental. Activities that students counted here ranged enormously from using recycling bins, the water fountain or taking part in this questionnaire (!) to visiting another country with ENACTUS to help local residents set up their own sustainable businesses.
Other ideas students gave as examples of 'environmental activities' were: a walking/cycling initiative;

recycling week; local volunteering with the community; a reward system for being energy efficient; gardening and growing your own plants; and an SU group promoting the environment.

The wording here is inconsistent to the other statements, 'I have taken part…' may be a better fit. Additionally, as before, the wording does not lend itself to an agreement scale. A simple 'Yes/No' question or asking about the extent might be easier to answer.

7. I intend to use what I have learned to support environmental sustainability

To emphasise the point, some students reached this question still unsure about what 'environmental sustainability' meant.

Students queried whether they were supposed to restrict their thinking to information learnt on the course or consider information more widely. Some students had difficulty discerning what they had learnt from what they already knew. Students also queried the point behind the question; the whole idea is to apply what you have learned. The question seemed irrelevant to some and a more appropriate question for someone who is in an environmental related industry.

As previously highlighted, there is a double meaning here; a negative answer can be selected where nothing relevant has been learned or where something relevant has been learned but the student does not intend to use it. Where these scenarios arose, students varied in their choice of answer category; some chose from the 'Disagree' options, some N/A and some the middle category.

As at the previous statement, students included a wide range of factors in their answers (e.g. some students were not actively seeking to be 'green' but would pick an agree answer where they used recycle bins correctly). It should also be noted that it is socially desirable to appear to be 'green' and in support of environmental issues. These points question the usefulness of the data yielded.

Considerations when developing the 2017 NSS

Confirm measurement objectives and consider whether the quality of data yielded can adequately address these objectives.

Consider whether the agree/disagree answer scale is appropriate for these statements. Re-phrasing the statements to ask about extent at each may be clearer for students.

Consider deleting the third and fourth statements.

Consider amending 'institution' to 'University or College'.

Consider shortening the second statement and anchoring it to the course.

Consider re-phrasing 'I took part' to fit better with the other statements in this section.

As students interpreted 'Environmental sustainability' in a wide variety of ways, consider including a clear definition in the statement wording.

Recommended statements:
- *My University or College supports good environmental practice*
- *The course has encouraged me to think about environmental sustainability*
- *I have had opportunities to take part in activities supporting environmental sustainability*

Students' Union

The section could feel very repetitive, especially when the student had had little to do with the SU. As previously highlighted, the agree/disagree answer scale does not lend itself to these statements; a statement or question asking about the extent of impact the SU has had on the student would be easier to interpret and answer.

As it stands a negative answer can be given for two reasons: 1. where the student had no or little contact with the SU and therefore there was NO impact (an N/A answer would be a better fit); and 2. where the SU had had a negative impact. Students are unlikely to decide that the SU has had a negative impact and those who felt there had been no impact struggled to choose an answer category. During Think Aloud students wondered whether it was the 'fault' of the SU that there had been no positive impact or whether they themselves were to 'blame' for not seeking out opportunities. In some of these cases students were reluctant to give a negative answer despite there being no positive impact. In other cases students gave negative answers to indicate there had been no contact with the SU. A knock-on effect of this was that students could give positive answers, using the rationale that there had been no negative impact (e.g. there's a lot on offer and it hasn't had a negative impact so the student selects 'Mostly agree').

As previously found, students did not associate their Students' Union (Association or Guild) with the academic experience at their institution; it was seen as playing a social role.

8. **The Students' Union (Association or Guild) has had a positive impact on my personal development and growth**

Students tended to answer generally in terms of how they felt about the SU at this statement rather than in specific relation to 'my personal development and growth'. This applied to both positive and negative answers.

While some were able to think about the impact of the SU on their personal development and growth, it could be difficult to make the connection between the two (e.g. "I don't know how the SU would impact on personal development" (University, Adult Nursing)).

Some students were unaware of the set-up of the SU, what it was and even whether or not there was one. The part-time student commented that these questions were more relevant for full-time students. Students attending the FEC, private institution and those that were part of a smaller separate campus were less aware of, and involved in, the SU than students at larger universities, although there were exceptions to this pattern.

The SU was described as a body run by students, for students and everything which is not academic at the institution. It organises social activities and nights out and is somewhere to go if you need help, advice or support.

While students did not generally consider their 'personal development and growth' when answering, they provided some definitions of this during probing: building confidence; making friends; support; relationships with staff; learning; and maturing.

9. **The Students' Union (Association or Guild) has had a positive impact on my sense of belonging to the University/College community**

Students used similar strategies to those employed at the previous statement. Answers focused on the SU in general where students thought about how 'good' it is. As at the previous question, students were inconsistent in whether they chose N/A or the middle category or one of the disagree options when feeling the SU had had no impact. Similarly students would choose one of the agree categories where there had been no negative impact.

Students again considered whether the answers were fair to the SU; some asked whether it was fair to give a disagree answer when they had chosen not to get involved. These students felt the opportunity or chance had been there but they had not taken it and this was not the 'fault' of the SU. The question is really whether the SU gave students the opportunity to belong to the community as it is up to the student whether or not they get involved and difficult to credit to the SU. One student said "you couldn't get a negative sense of belonging" (University, Journalism).

Students who had considered the concept of 'sense of belonging' gave examples of: getting involved and being in the university spirit; meeting people across all courses and levels; networking; being inclusive; feeling welcome and at home; being part of a big family; being proud to be part of your university; and something just for students ("it's ours in theory" (Specialist institution, Product design)).

The 'University/College community' was defined as: where everyone knows each other, getting people together; connecting with students and staff; and being involved in societies. 'Community' was felt to be quite a strong word; one student suggested deleting 'community' and referring to sense of belonging to the University or College. It is also a very large community to relate to; it may be better to ask about the student community or experience.

10. **The Students' Union (Association or Guild) has had a positive impact on my engagement with the wider community**

Students found this more difficult to interpret that the previous question. Some questioned whether they should restrict their thinking to within the institution (particularly relevant where the institution was spread across multiple sites) or to consider the community outside the institution.

Students' experiences of interacting with the wider community tended to be unconnected to the SU. Some referred to work as part of their course or their placements.

Again, students for whom there had been no impact answered inconsistently (choosing the N/A, middle category or disagree options). The questions became quite repetitive for these students who used the same category as at previous answers in this section.

Students again highlighted the importance of whether there had been the opportunity, whether or not they had taken it. As before, some were unwilling to give a negative answer where they had personally decided not to pursue activities offered by the SU.

'Wider community' was interpreted as: students on other campuses; anyone you didn't know before starting university; different social groups; the public community of 'non-students'; local companies and charities; anything outside college; general residents of the town; and supporting local people (e.g. children at local schools or older people). Some saw their SU as only relating to students and described how they live in their own "bubble" (University, Psychology).

11. The Students' Union (Association or Guild) has had a positive impact on my academic experience

Interestingly, students appeared to better understand this question than when previously tested as part of the main survey and understood that this statement related to their academic experience. This is likely to be attributable to having been previously asked a set of three questions about other roles held by the SU and as such the students are more able to distinguish that this statement focuses specifically on the academic experience. This lends support to our recommendation to ask two questions about the SU as part of the main survey: the first a general question about the SU; and the second more specifically about the academic experience.

While some students had been involved in representing their course to the SU or saw some connection between learning and the SU, as expected, a common response was that the SU had little or nothing to do with the academic experience; their role was a social one.

Where students felt the SU had had no or little impact these statements began to get very repetitive as the same answer was given each time. Some felt the questions could be combined or cut down due to overlap.

Students interpreted the 'academic experience' as: education; whether gained skills; anything to help with or contribute to your course rather than the social side; and anything about university which is more formal.

Examples of ways the SU could have impacted on the academic experience were: organising revision sessions; providing revision aids; offering someone to talk to about your course; and helping with studying in any way.

Considerations when developing the 2017 NSS

Confirm measurement objectives and consider whether the quality of data yielded can adequately address these objectives.

Consider whether the agree/disagree answer scale is appropriate for these statements. An alternative could be to measure via a clearer and more balanced answer scale the extent of the impact the SU has had on each of the four items.

Consider reducing number of items.

Consider amending 'University/College' to 'University or College'.

Consider dropping 'community'.

As students interpreted 'wider community' in a wide variety of ways, consider including a clear definition in the statement wording.

Recommended statements:

These statements do not work in the intended way as they are currently phrased. Our recommendation is to consider measuring the extent of the impact of the SU for each of the four items via a balanced and dedicated answer scale for this optional bank. For example:

How would you describe the impact of the Students' Union (Association or Guild) on your personal development and growth?

1. Very positive impact

2. Fairly positive impact

3. No impact

4. Fairly negative impact

Practice Placements

Students understood the statements in this section fairly well but importantly they tended to have taken **multiple placements**, some saying they would take as many as 15 across the whole course. This caused an issue when experiences had been different; students did not know how to go about choosing answers. Where there had been a lot of different placements it was more difficult to discern differences and students were more likely to think back to the more memorable ones. Students were asked whether 'practice placements' was a meaningful section heading. While students did not necessarily notice it, heading directly for the statements and answer categories, it was felt to be meaningful. One student commented that they tend to use the term 'placements' but 'practice placements' was understood well.

12. I received sufficient preparatory information prior to my placement(s)

This statement was well understood by students but could cause difficulty where experiences had differed across placements. Where this occurred students were able to average across their experiences to give an answer.
When deciding on their answers students considered: the information that had been available; how structured it had been; whether it was enough or whether there was anything missing that they'd needed to chase up; and whether the objectives they had been set were clear. Students also thought about whether the information had been timely, i.e. how far in advance of the placement it had been sent. Some had received information at the last minute and this impacted on their answer. One student commented that you would not necessarily know if the information was sufficient until after the placement.
Preparatory information was understood as: an overview of the placement; a timetable; contact details; information about transport and accommodation; the length of the placement; and general guidelines.

13. I was allocated placement(s) suitable for my course

As with the first statement, this was well understood by students. However, experiences had differed across placements; some had been more suitable than others. Students were able to provide an average but some commented that this was difficult.
When deciding whether placements were 'suitable' students thought about: how relevant or linked the placement was to the course; how it had been allocated; the length of the placement; how much they had enjoyed it; whether they had met their set learning objectives; and how practical it had been (e.g. how easy it had been to travel there).

14. I received appropriate supervision on placement(s)

When answering this statement students thought about the presence of a tutor or mentor. For some placements this is a requirement and so there would have to be someone with responsibility present. Students were not always clear what was meant by 'appropriate supervision'. There is no written guidance about what they should expect. This was interpreted to mean: someone with the necessary knowledge who could provide consistent advice or guidance where needed (e.g. medical staff – GPs, doctors).

15. I was given opportunities to meet my required practice learning outcomes/competences

Students found the wording lengthy especially where it needed to be read out by the interviewer.

'Practice learning outcomes' was meaningful to students; this language is used within their courses and went hand in hand with 'objectives'. These were understood to mean the objectives set at the beginning of the placement. Students mentioned 'ticking boxes' or 'signing off' their work to indicate that they had achieved what they needed to.

'Opportunities' was interpreted to mean 'on top of' the learning outcomes and referred to circumstances where students would have needed to be proactive to look for additional extra-curricular opportunities. In contrast 'required learning outcomes/competences' were the essence of why they were there and accomplishing them is a necessity to becoming qualified. These two parts did not seem to fit well together.

16. My contribution during placement(s) as part of the clinical team was valued

As before, this was well understood but again students found it difficult to answer where they had taken multiple placements as experiences differed greatly across placements.

The answer also depended on the nature of the placement; some placements were observational rather than hands on and for these it was more difficult to make a contribution.

One student commented that the statement should be phrased the opposite way, the emphasis should be on the student to value the contribution to their learning made by the medical staff they are working with.

The 'clinical team' was generally considered to be medical staff (e.g. doctors and nurses); one student extended this to also include the students on placement.

'Contribution' was interpreted to mean students' help and not being a hindrance or getting in the way.

17. My practice supervisor(s) understood how many placement(s) related to the broader requirements of my course

Students understanding of this statement was muddled; 'broader requirements of my course' was interpreted' in a variety of ways. Some students thought this related to material over and above the set learning outcomes; it was also interpreted as referring to future careers (in this instance 'of my course' was missed so the student was thinking only about general broader requirements).

Students thought about the following issues here: whether supervisors understood the course they were taking and what they needed to learn; whether supervisors were understanding in general having 'been through it' themselves; and whether supervisors were clear about what they wanted from the student, putting what they had learnt into practice.

Again, this was difficult to answer where students had taken multiple placements and experiences differed wildly.

Students did not necessarily consider this to be relevant or a requirement; one pointed out that there are many different students studying different courses so it would be difficult for supervisors to be aware of each individual course.

Considerations when developing the 2017 NSS

Confirm measurement objectives.

Consider anchoring thinking to the most recent placement.

Consider reducing number of items to 4.

Consider amending 'given opportunities' to 'I was able to' or 'It was possible to'.

Consider dropping 'competences' as 'outcomes' may suffice. Additionally statements that include slashes are difficult to read out when conducting an interviewer administered questionnaire.

Consider dropping 'My contribution during placement(s) as part of the clinical team was valued'.

Consider dropping 'My practice supervisor(s) understood how many placement(s) related to the broader requirements of my course'.

Recommended statements:

- *I received sufficient preparatory information prior to my placement*
- *The allocated placement was suitable for my course*
- *I received appropriate supervision on placement*
- *I was able to meet my required practice learning outcomes*

Appendix C: List of abbreviations

DELNI	Department for Employment and Learning, Northern Ireland
FE	Further Education
FEC	Further Education College
HE	Higher Education
HEE	Health Education England
HEFCE	Higher Education Funding Council for England
HEFCW	Higher Education Funding Council for Wales
HEI	Higher Education Institute
HEPISG	Higher Education Public Information Steering Group
HESA	Higher Education Statistics Agency
NSS	National Student Survey
NUS	National Union of Students
QAF	Questionnaire Appraisal Framework
SFC	Scottish Funding Council