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Issues paper

This report is for information

This report describes the findings of a research study to inform the review of the National Student Survey, aimed at examining whether new and revised questions developed during the review are valid and reliable across a range of students, provision and institution types.

UK review of information about higher education

Results and analysis for the 2015 pilot of the National Student Survey

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UK review of the provision of information about higher education: Results and analysis for the 2015 pilot of the National Student Survey

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Of interest to those responsible for	Student information; Quality assurance; Admissions; Liaison with schools and colleges; Widening participation and marketing
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Executive summary

Purpose

1. This report describes the findings of a research study to inform the review of the National Student Survey (NSS). The research consisted of running a pilot questionnaire with students who had completed the main NSS. The pilot combined existing NSS questions with new and revised questions developed as part of the review. The aim was to examine whether the questions were valid and reliable across a range of students, provision and institution types.
2. As the research focuses solely on testing the robustness of the questions, the actual student responses have not been analysed.
3. This report is part of a series of reports published as part of the review of information.

Key points

4. Over 16,500 students participated in the pilot project, providing a representative sample of the students who participated in the main 2015 survey.
5. All questions were broadly understood by participants and no significant differences in understanding were found when analysed against different characteristics (disability, ethnicity,

institution type, gender and subject). However, a small number of questions displayed higher use of the 'Neither agree nor disagree' and 'Not applicable' responses. The reasons behind this should be considered further.

6. A negatively worded question was included in the pilot to assess the feasibility of using such questions to test whether students are considering their answers, as previous HEFCE analysis of the NSS shows an increasing proportion of students providing the same answer for all questions (known as 'acquiescence bias' or 'yea-saying'). This question was the least well understood, albeit at a low proportion of 0.7 per cent responding 'I do not understand the question'.

7. The extent of yea-saying in the pilot was examined both including and excluding the negatively worded question, and in both cases found to be lower than in the main NSS.

Action required

8. No action is required.

Introduction

9. In 2015 HEFCE, on behalf of the UK funding bodies, commissioned a pilot of the National Student Survey (NSS) that contained some revised and new questions. This pilot formed part of the review of information and was designed to inform development of a new NSS for 2017. This pilot was carried out in spring 2015, and this report describes the findings.

10. Following a programme of cognitive testing of potential questions in autumn 2014, based on the recommendations of the Review of the NSS, a revised set of NSS questions was developed, and these formed the basis of the questions to be used in the pilot survey¹. Annex A lists the questions used in the pilot.

11. The main purpose of the pilot was to test the validity and reliability of the newly developed questions across a far wider range of students than is possible during deep cognitive testing, specifically to determine whether any of these were problematic, and if so, whether these issues related to any particular groups of students. The overall questionnaire format was not being assessed.

12. In 2014 the UK funding bodies published a nine-year analysis of the NSS dataset, which highlighted that an increasing proportion of students over the years were providing the same response to all questions ('acquiescence bias', or 'yea-saying')². Negatively worded questions were identified in the NSS review as a mechanism for minimising acquiescence bias³. As a response to this, a negatively worded question was developed, and tested during the pilot, to establish whether it was a suitable approach for the survey.

Methodology

13. The pilot took place alongside the 2015 main NSS and was carried out by Ipsos MORI, the company that runs the main survey. The NSS is of great importance to many stakeholders as well as prospective students and the general public, and great care was taken not to impact the main survey. Therefore, students were invited to participate in the pilot survey only once they had completed the routine 2015 NSS survey (including any optional bank questions). There was no additional promotion of the pilot.

14. Students who opted to take part in the survey were contacted by email two weeks after completing the main survey, and were initially invited to answer questions online. A two-week window was chosen to avoid the main survey influencing responses to the pilot. Where responses were not made two weeks after the invitation was made, non-respondents were added to the phone sample.

15. The target number of responses was 15,000, of which it was expected a minimum of 12,000 would be achieved online and a maximum of 3,000 by phone. The survey was provided in English and Welsh, to ensure that the translations of the questions also worked for Welsh-

¹ See 'UK review of information about higher education: Cognitively testing questions for the National Student Survey' and 'Review of the National Student Survey' (NatCen Social Research, the Institute of Education, University of London and the Institute for Employment Studies), available at a www.hefce.ac.uk/it/roiconsult/ and www.hefce.ac.uk/pubs/rereports/Year/2014/nssreview/ respectively.

² See 'UK review of the provision of information about higher education: National Student Survey results and trends analysis 2005-2013' (HEFCE 2014/13), available at www.hefce.ac.uk/pubs/year/2014/201413/.

³ See 'Review of the National Student Survey'.

speaking students. Throughout the survey, responses were monitored to ensure that a representative mix of students was achieved by subject group.

16. The survey was presented in the format of the current survey with the addition of a 'I do not understand' option to the response scale, alongside the current responses (see Annex A). An optional free text response was also included at the end of the survey, to gather feedback from participants about their experience of answering the questions.

Results

Overview

17. Over 16,500 students undertook the NSS 2015 pilot survey, roughly 4 per cent of those invited to take the NSS 2015.

18. Students responded to the pilot survey predominantly online (81.6 per cent), with the remainder responding by phone (18.4 per cent).

19. Responses were received from students covering all Joint Academic Coding System (JACS) Subject Level 1 groupings, to ensure that a representative sample of students was surveyed and that the understanding of the questions could be considered across a range of subject groups. Table 1 contains full details of the responses per subject area, which are broadly comparable with response proportions in the main NSS.

Table 1: Percentage of respondents to the NSS pilot and main NSS by subject level 1 groupings.

Subject	Breakdown of responses to the NSS pilot by JACS subject level 1 (per cent)	Breakdown of responses to the main NSS by JACS subject level 1 (per cent)
(1) Medicine and dentistry	1.99	2.09
(2) Subjects allied to medicine	13.36	10.25
(3) Biological sciences	12.21	10.6
(4) Veterinary sciences	0.26	0.23
(5) Agriculture and related subjects	0.96	1.01
(6) Physical sciences	3.51	3.05
(7) Mathematical sciences	1.85	2.15
(8) Computer science	3.82	4.26
(9) Engineering and technology	5.09	6.16
(A) Architecture, building and planning	1.4	1.97
(B) Social studies	9.32	9.31
(C) Law	3.46	4.38
(D) Business and administrative studies	10.55	13.3
(E) Mass communications and documentation	1.95	2.45
(F) Languages	5.96	5.65
(G) Historical and philosophical studies	5.29	4.41
(H) Creative arts and design	9.48	10.29
(I) Education	5.17	4.95
(J) Combined	2.42	1.75
(L) Geographical studies	1.93	1.76

20. Analysis of the proportion of students responding 'I do not understand the question' showed that all questions were broadly understood by respondents. Table 2 shows the percentage of respondents who responded 'I do not understand the question', 'Not applicable', or 'Neither agree nor disagree' to each question.

Table 2: Percentage of students who responded 'I do not understand the question', 'Not applicable' or 'Neither agree nor disagree' in the pilot survey.

Question	Not understanding (per cent)	Not applicable (per cent)	Neither agree nor disagree (per cent)
Q1	0.21	0.30	4.32
Q2	0.29	0.43	7.72
Q3	0.42	0.35	6.73
Q4	0.56	0.04	6.83
Q5	0.54	0.13	8.87
Q6	0.31	0.07	6.44
Q7	0.38	0.18	7.80
Q8	0.38	0.43	8.96
Q9	0.12	0.09	10.90
Q10	0.15	0.17	13.30
Q11	0.38	0.18	11.90
Q12	0.14	0.20	12.70
Q13	0.15	0.49	5.78
Q14	0.17	0.32	9.28
Q15	0.27	3.00	13.10
Q16	0.14	0.04	10.80
Q17	0.21	0.25	10.10
Q18	0.11	1.45	7.55
Q19	0.16	3.15	7.55
Q20	0.16	2.58	9.52
Q21	0.24	0.67	15.00
Q22	0.22	1.21	8.73
Q23	0.38	0.24	9.16
Q24	0.19	0.47	14.70
Q25	0.32	0.79	21.80
Q26	0.70	0.79	7.78
Q27	0.11	0.04	6.57
Q28	0.16	8.37	25.40
Q29	0.31	7.98	28.90

21. Question 26 ('Overall, I am dissatisfied with the teaching on my course') was the least well understood question, with 0.7 per cent of students responding 'I do not understand the question'. This may be due to the fact that this is the only negatively worded question in the survey; however, this percentage is not material.
22. All other questions were understood by at least 99.4 per cent of respondents.
23. Questions 28 ('I am satisfied with my Students' Union (Association or Guild) at my institution') and 29 ('The Students' Union (Association or Guild) effectively represents students')

academic interests') were the least applicable questions to students, with 8.37 per cent and 7.98 per cent of students respectively marking these questions as 'Not applicable'.

Yea-saying

24. Yea-saying in the main NSS has been increasing since the survey's inception, and one of the purposes of the pilot survey was to test whether negatively worded questions could provide a way to minimise it. A negatively worded question was included in the pilot, to assess the feasibility of using such questions to test whether students are considering their answers.

25. Overall, yea-saying in the pilot survey stands at 1 per cent. This figure includes the negatively worded question (Question 26). This is significantly lower than in the main NSS which was just over 6 per cent in 2014.

26. Around 40 per cent of those who responded the same way to all questions also provided a response to the open-ended question at the end of the survey, which asked students their overall thoughts on the questions they were asked. This suggests that there is some consideration of the answers within the pilot for those who are yea-saying.

27. Yea-saying in Questions 1 to 25 is 3.7 per cent, which is higher than the 1 per cent seen across all questions. Both figures are distinctly lower than the yea-saying in the main NSS survey. The decreased rate of yea-saying in the pilot survey may be due in part to the fact that students who are less likely to engage in the survey would not actively opt to undertake the pilot questionnaire.

28. 0.9 per cent of students exhibited yea-saying in both the pilot and main NSS survey.

29. Yea-saying will be considered further in the 2016 pilot where the whole survey instrument will be tested.

Detailed data breakdown

30. Breakdown of responses by key variables demonstrated that most questions were understandable and applicable across all key groupings. Groupings used included:

- student ethnicity
- disability status
- gender
- JACS subject level 1 to 3.

31. Elevated levels of the 'I do not understand the question' response were noted among students with a declared learning disability, such as dyslexia, with 1.16 per cent of students in this category not understanding Question 26. Although higher than average for this survey, this is still a markedly low number of students not understanding the question.

32. Questions 28 and 29 are consistently marked as 'Not applicable' by a significant portion of students, regardless of gender, disability status, or ethnicity.

Question correlation

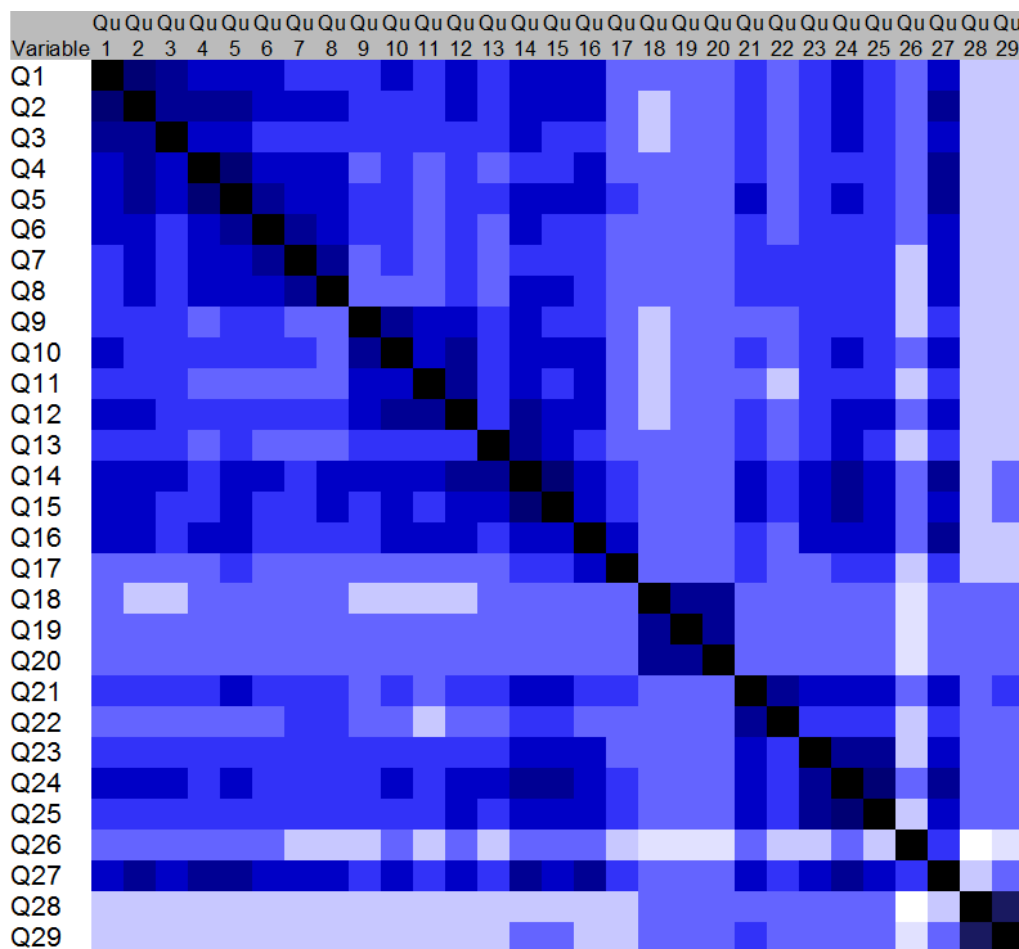
33. As in the nine-year analysis, principal component analysis was conducted to consider the relationship between responses to questions. This highlighted distinct grouping of questions where responses were highly correlated (Questions 1 to 8, Questions 9 to 12, Questions 18 to

20, Questions 21 to 25 and 27, and Questions 28 to 29). This correlation is noticeable in Figure 1, where distinct blocks of dark shading indicate a high degree of correlation of responses to questions.

34. This high degree of correlation suggests that some questions are obtaining the same information from students, providing an opportunity to remove some questions from any finalised updated survey. For example, the responses to Questions 2 and 3 are very similar, suggesting that both questions are really gathering the same type of information.

35. Question 27 asks about students' overall opinion of the course. From Figure 1 it is clear that responses to this question correlated strongly with all questions, with the exceptions of Questions 17 to 20, 28 and 29. This suggests that when responding to this question, students are indeed considering all aspects of their course and are responding consistently with how they answered the other questions.

Figure 1: Heat map of responses to NSS pilot survey



36. Responses to Questions 17 to 20 seem to be less correlated with the responses to other questions. A possible explanation for this is that, like Questions 28 to 29, these questions are not really course-specific. They focus on issues which may behave independently of the course content and lecturers, such as timetabling, facilities, general institutional resources and the student union. Students may be broadly happy or unhappy with course-specific issues, which are covered by most of the other questions, but have different opinions on overall institution resource and timetabling.

Conclusions

37. The pilot survey conducted as part of the NSS 2015 achieved the aim of testing the applicability and intelligibility of potential new NSS questions.
38. The questions in general were easily understood and applicable to most students, and could be used in future surveys.
39. Responses to Question 27 heavily correlate with the responses to the majority of other questions, suggesting that all these questions are related to students' overall satisfaction.

Annex A

Pilot questions

Question number	Question wording
1	Staff are good at explaining things
2	Staff have made the subject interesting
3	Staff are enthusiastic about what they are teaching
4	The course is intellectually stimulating
5	My course has challenged me to achieve my best work
6	My course has provided me with opportunities to explore ideas or concepts in depth
7	My course has provided me with opportunities to bring information and ideas together from different topics
8	My course has provided me with opportunities to apply what I have learnt
9	The criteria used in marking have been clear in advance
10	Marking and assessment has been fair
11	Feedback on my work has been timely
12	I have received helpful comments on my work
13	I have been able to contact staff when I needed to
14	I have received sufficient advice and guidance in relation to my course
15	Good advice was available when I needed to make study choices
16	The course is well organised and running smoothly
17	The timetable works efficiently for me
18	The library resources (e.g. books, online services) have supported my learning well
19	I have been able to access subject specific resources (e.g. equipment, facilities, software, collections) when I needed to
20	The University's /College's IT resources and facilities have supported my learning well
21	I feel part of a community of staff and students
22	I have had appropriate opportunities to work with other students as part of my course

23	I have had the right opportunities to provide feedback on my course
24	Staff value students' views and opinions about the course
25	It is clear how students' feedback on the course has been acted on
26	Overall, I am dissatisfied with the teaching on my course
27	Overall, I am satisfied with the quality of the course
28	I am satisfied with my Students' Union (Association or Guild) at my institution
29	The Students' Union (Association or Guild) effectively represents students' academic interests

Response options

I do not understand the question

Definitely agree

Mostly agree

Neither agree nor disagree

Mostly disagree

Definitely disagree

Not applicable