

National Student Survey 2022: quality report

Introduction

1. The National Student Survey (NSS) is an annual census survey of final year undergraduate students at UK universities and colleges. It has been conducted since 2005 and achieves a response rate of around 70 per cent each year. The survey window is between January and April each year before most students have completed their final exams or assessments. The NSS currently asks 27 questions, covering various aspects of the student academic experience. It is also used to ask topical questions.
2. The purpose of the NSS is to collect data which supports:
 - the choices of prospective students
 - universities and colleges as they work to improve the student experience
 - public accountability.
3. To assure the quality and reliability of the NSS 2022 publication we have reviewed the data, survey approach and analysis process against the European Statistical System Five Dimensions of Quality.¹ This is the approach recommended by the Office for Statistics Regulation² and the ONS (as part of the Government Data Quality Hub).³
4. The five dimensions of quality are:
 - relevance
 - accuracy and reliability
 - timeliness and punctuality
 - coherence and comparability
 - accessibility and clarity.

¹ See ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/qaf_2012.

² See osr.statisticsauthority.gov.uk/data-quality-and-the-code/.

³ See www.gov.uk/government/organisations/government-data-quality-hub.

5. This quality report sets out the key findings from considering these dimensions and publishes the accompanying charts which informed these outcomes.⁴ The most substantive part of the review relates to accuracy and reliability, and we therefore discuss this quality dimension first.

Accuracy and reliability

6. In reviewing the accuracy and reliability of the NSS, we considered the following:

Response rates⁵

7. Risk: There is a potential risk of non-response bias due to low or variable response rates.

8. The overall response rate for NSS 2022 is 68.6 per cent (324,329 respondents). This is broadly the same as the response rates for the previous two years (NSS 2021 and 2020) but lower than that observed in NSS 2019 (71.9 per cent). In 2020, we removed the requirement on providers to promote the survey to their students. This, alongside the effects of the pandemic, may explain the lower response rates.

9. Response rates are high across all four participating nations, as shown in Table 1 below

Table 1: Response rates for the 2022 by nation of registering provider

	UK	England	Wales	Scotland	Northern Ireland
Number of students on target list	472,895	405,006	20,900	36,800	10,189
Number of valid survey responses	324,329	276,344	14,417	26,410	7,158
Response rate	68.6%	68.2%	69.0%	71.8%	70.3%

10. Response rates for student sub-groups are also high in NSS 2022, although to some extent variable. Considering students by age, disability, domicile, ethnicity and sex, all sub-groups achieved a response rate of at least 60 per cent. The response rate for distance learners (53.0 per cent), part-time students (56.7 per cent) and the subject of Combined Studies (57.3 per cent) did not reach this level. This is a drop from the response rates for these subgroups compared with NSS 2021, where all three were close to 60 per cent. This is largely a single issue: most distance learners study part-time, and most studying Combined Studies are distance learners.

11. The generally strong response rates do not raise any new concerns about non-response bias. As a further safeguard against bias, we do not publish results for a population when the response rate is lower than 50 per cent.

⁴ See www.officeforstudents.org.uk/advice-and-guidance/student-information-and-data/national-student-survey-nss/nss-data-quality-report/.

⁵ Chart 3: Response rates by characteristic during the survey period, available at www.officeforstudents.org.uk/advice-and-guidance/student-information-and-data/national-student-survey-nss/nss-data-quality-report/.

Mode of response⁶

12. Risk: There is a risk of bias if students are more or less likely to agree depending on their mode of response.
13. The two main methods of response for the NSS are by phone and online, with a small number of students responding by post every year (0.01 per cent for NSS 2022).
14. The split between phone and online responses has remained relatively stable in the past three years. In NSS 2022, 22.9 per cent of respondents responded via phone interview and 77.1 per cent responded online.
15. We know from previous research that telephone respondents tend to be more positive than online respondents, even when we take into account other factors.⁷ In our current development work on the NSS, we consider whether changes to the format of the questionnaire could reduce this mode effect.
16. Regarding NSS 2022, we conclude that the risk of bias relating to mode of response has not increased.

Disruption during the survey window⁸

17. Risk: There is a risk that fundamental changes to the student experience during the survey window, mean that students respond differently depending on when they were surveyed, hence that results cannot be compared and/or aggregated.
18. This risk was examined extensively in 2020, following the declaration of a pandemic and the instigation of national lockdown during the survey window.⁹
19. For NSS 2022, we assessed whether any events had taken place in England, Wales, Scotland or Northern Ireland which could cause widespread changes to the student experience, or students' perceptions of their experience. We determined that no such events had occurred.
20. We acknowledged that some university staff took strike action in February and March 2022. These events were confined to a minority of the universities and colleges participating in the NSS. This may have affected how some students responded to the survey, but this would be very hard to detect. Neither do we see it as problematic, given that strikes may have had a real, relevant impact on the student experience.
21. Reviewing responses to the survey over the survey window, we find no clear spike or dip in agreement rates. As with NSS 2021, there is a decline seen in agreement rate from between weeks 10 to 12 until the end of the survey for nearly all the questions and scales. This may be

⁶ Chart 4: Mode of response 2018 to 2022, available at www.officeforstudents.org.uk/advice-and-guidance/student-information-and-data/national-student-survey-nss/nss-data-quality-report/.

⁷ See 'National Student Survey 2020: Analysis of the impact of the coronavirus pandemic', available at www.officeforstudents.org.uk/publications/nss-2020-analysis-of-impact-of-coronavirus/ paragraphs 24 to 27.

⁸ Chart 5: Sector agreement rate over survey period, available at www.officeforstudents.org.uk/advice-and-guidance/student-information-and-data/national-student-survey-nss/nss-data-quality-report/.

⁹ See www.officeforstudents.org.uk/publications/nss-2020-analysis-of-impact-of-coronavirus/.

due to the characteristics of later respondents, including the fact that more positive respondents may be proactive in responding to the survey early in the period.

Inappropriate influence

22. Risk: There is a risk that students may be influenced by teaching staff, and others, to respond to the survey in a way that does not reflect their experience. This would distort the survey results.
23. Inappropriate influence, in terms of the NSS, means any activity which may encourage students to reflect anything other than their true opinion of their experiences during their course in their survey responses.
24. We have a process for identifying and dealing with inappropriate influence.¹⁰ As part of the NSS 2022 cycle, this was strengthened, primarily to raise awareness of the process among students. The changes included increased reference to inappropriate influence as part of survey marketing and social media campaigns, further development of an online student guide to inappropriate influence, and increased signposting and information as part of the online survey itself.
25. All allegations of inappropriate influence are investigated by the OfS. In 2022, we did not identify any cases in which inappropriate influence was likely to have a material impact on students' responses.

Acquiescence and pattern-responding

26. Risk: There is a risk that instead of engaging with the survey questions, respondents develop strategies for completing the survey quickly, such as giving the same response to every question. For agree/disagree format questionnaire, such as the NSS, this often materialises as acquiescence: agreeing with every statement.
27. As a gauge of pattern-responding, we measure the proportion of respondents giving the same response to every question. In NSS 2022, 3.8 per cent of respondents gave the same answer to every question. This compares with 3.0 per cent of respondents in NSS 2021, 3.7 per cent of responses in 2020 and 4.0 per cent in 2019. While we expect some students to have the same attitude towards all statements in the questionnaire, the proportion giving the same response to all 27 questions (3.8 per cent) is markedly higher than the proportion giving the same response to 26 questions (2.0 per cent). This suggests that at least some of the 3.8 per cent of students who gave the same answer are not fully engaged with the survey.
28. While some form of pattern-responding or acquiescence is present in the survey, the issue has remained stable and only relates only to a small proportion of students. In our developmental work on the questionnaire, we consider approaches to increasing engagement and reducing acquiescence.

Data processing

29. Risk: There is a risk that errors in data processing by OfS, or its partners, mean that the published statistics are not accurate.

¹⁰ See www.officeforstudents.org.uk/for-students/teaching-quality-and-tef/national-student-survey/inappropriate-influence/.

30. From loading to the production of the final outputs, the NSS data is processed using reproducible analytical pipelines. These are currently coded in SAS statistical software and stored using a version control system.
31. We carry out systematic checks and comparisons throughout processing. These include comparing changes in outcomes between years, and between versions of the results that have been independently generated using different code. Comparisons are also made between data provided by our delivery partner IPSOS and internally held NSS data. The outcome of these checks is reviewed and signed off by a senior analyst, and ultimately by the Principal Analyst responsible for the statistic.

Accuracy of underlying data

32. Risk: The NSS statistic draws on individualised student data submitted to the OfS' designated data body, HESA, and to the Education and Skill Agency. There is a risk that if this data is incorrect, then students may be omitted from the survey; students may be surveyed incorrectly; and statistics based on students' characteristics, such as benchmarking, may be inaccurate.
33. While generating the NSS statistics, we assessed the completeness of the underlying student data. Although the data is generally very comprehensive, we found the following:
 - a. Missing date of birth (DOB) for one student.
 - b. Missing sex field information for one student.
 - c. Missing or unknown ethnicity status for 4527 students.
 - d. Missing or unknown disability 28 students.
34. The number of students with missing DOB and sex field is similar to NSS 2021. The number of students with a missing or unknown disability has increased from one student in NSS 2021. This increase has been driven by the incorporation, for the first time, of students on reduced records as part of the NSS additions and removals process (see paragraph 39).
35. The missing or unknown ethnicity values were dominated by international students as this is not a compulsory field for completion for this subgroup – though 1.1 per cent of the students in the survey population from the UK had a missing or unknown ethnicity. Focusing on UK domiciled students and returns where the ethnicity field is compulsory – 13 providers which submitted to HESA returned 'unknown' ethnicity for 5 per cent or over of the students in the NSS 2022 target list. Although this is an increase on the nine providers from NSS 2021, the total number of students is comparable, and we consider the volume of missing data for ethnicity, while undesirable, tolerable.
36. The underlying data we use to generate the NSS statistics includes amendments to the data made by universities and colleges and signed off on or before 4 May 2022. During the next two years, we will carry out quarterly updates to the statistics (September 2022, December 2022, March 2023 and June 2023 and at similar points the year after). These updates ensure that the source data for the results reflects any changes in terms of data amendments and provider mergers or name changes which have occurred in the respective quarter and the effect that this may have on NSS outcomes.

Relevance

37. We assess that the statistics remain relevant and valuable to users through the following mechanisms:

- An annual survey of users of the dissemination site. The results of this survey are used to inform developments to the site.
- Each of our publications on the OfS website invites users to provide feedback on their experience of the data which we consider and feed into enhancements (where appropriate).
- Ad hoc feedback can be sent to the NSS team at nss@officeforstudents.org.uk. This feedback is logged, and considered as part of annual and major reviews.
- Periodic major reviews, involving formal and informal consultation with data users. A major review is underway at present, and is likely to lead to changes to the statistics in 2023 and 2024¹¹.

Recent improvements in relevance

38. As part of an annual review, we made technical improvements to include in the NSS population students who were eligible, but not included in the population.

39. In some circumstances students can be returned in the HESA student returns using an 'reduced record' in which only minimal information is provided. Before NSS 2022, these students were excluded from the eligibility for the NSS population because such HESA records did not include the information needed for NSS analysis. By using a previous years' HESA data to obtain the data for these students, this has allowed a previously un-surveyed group of students to be included and improved the relevance of the NSS 2022 dataset.

Timeliness and punctuality

40. The NSS 2022 is an official statistic and was published to schedule at 0930 on 6 July 2022. As part of this process, publicly accessible data is released on the OfS website and there is a simultaneous release of more detailed datasets, for providers only, via the NSS dissemination portal. The date and time for release of the publicly available data (and its subsequent quarterly updates) are published in advance on the OfS official statistics release schedule.¹²

41. The July publication date is chosen to allow staff at universities and colleges to view the data before the start of the summer vacation, and with time to consider any immediate actions needed before the start of the next academic year. It also allows the data to be included in the Unistats collection, and ultimately to be published on the Discover Uni website, which will be updated to include the new NSS data in September 2022.

¹¹ See www.officeforstudents.org.uk/advice-and-guidance/student-information-and-data/national-student-survey-nss/review-of-the-nss.

¹² See www.officeforstudents.org.uk/data-and-analysis/official-statistics/release-schedules/.

42. The release of quarterly updates to the NSS means that the quality of the data does not diminish over time, and it remains relevant and accurate for providers. The timing of the quarterly updates is also coordinated with the regular updates to the Discover Uni website.
43. The timing of the survey window itself is chosen to capture views of final-year undergraduates, who are typically nearing the end of their course but who have not yet begun their final exams. Within the four-month survey window, universities and colleges can choose when the survey contractor begins contacting students, to fit around their own schedules. However, students can access and complete the survey any time in the survey period (including in advance of their providers' chosen start week). This allows them to complete the survey when it is most convenient to them.

Coherence and comparability

Internal coherence and comparability

44. The NSS statistics use consistent definitions throughout. For example, the same methods of calculating agreement rates and scale scores (score for a group of similar questions, often grouped around a theme) are used in every statistic. These definitions have been maintained over time. No changes have been made to definitions and methods in the NSS 2022 statistics, other than the inclusion of students returned on a reduced record (as described in paragraph 39 above).
45. The questionnaire has not been changed for NSS 2022, other than the removal of the NSS 2021 questions related to the student experience during the pandemic. The same questionnaire has been used since 2017, meaning that we can now present a six-year timeline.
46. For NSS 2022 and NSS 2021, we changed our approach to aggregation. This is discussed in paragraphs 48 to 51 below.

Coherence with other data sources

47. The definitions of populations and student characteristics are the same as those used by HESA in their key statistical publications. This means that the statistics are compiled using common standards and facilitates linking between the NSS and HESA datasets. When we source data from the Education and Skills Funding Agency we map and convert ILR fields to match those used in the HESA data. This allows us to present the data from all providers in a unified manner.

Changed approach to aggregation¹³

48. Before the coronavirus pandemic, when a provider did not have enough responses in a single year to meet publication thresholds (at least 10 respondents and 50 per cent of potential respondents), we drew on responses from the previous year to allow them to reach this target. We viewed this as acceptable because the survey results were very stable between years.

¹³ See Chart 1: Sector agreement rates 2017-2022 and Chart 2: Agreement rates 2018-2022 by characteristic, available at www.officeforstudents.org.uk/advice-and-guidance/student-information-and-data/national-student-survey-nss/nss-data-quality-report/.

Only a small proportion of results were based on aggregated data: in most cases, we have enough data from a single year to meet publication thresholds.

49. For NSS 2021, we did not apply this approach. There were notable differences in the agreement rates for the two years in question, with results from 2020 tending to be more positive than results from 2021. We judged that it was potentially misleading to compile statistics that invited the comparison of aggregated data with single-year data.
50. For NSS 2022, the OfS and the other NSS decision-makers agreed that, given continued turbulence in the data following the pandemic, aggregation should again not be applied. As in 2021, the impact is that slightly less data is available to be published, but that the risk of compiling incomparable statistics is removed.
51. This changed approach does not affect sector-level statistics, as all such statistics achieve publication thresholds without aggregation. At a provider level, the impact is to slightly reduce comparability over time, but to improve comparability across providers (or across subjects within providers) over a single year.

Accessibility and clarity

52. Our intention is to release the NSS results in a format that is accessible to a variety of users, and which facilitates meaningful use of the data.
53. The NSS statistics are available at sector level, provider level, and at the more detailed level of subjects within providers.
54. The statistics are available both as data downloads, and via an interactive visualisation tool.
55. For the NSS 2022 release, we have reviewed the data downloads and made changes to improve their usability, accessibility and machine readability, including adding a contents page for ease of navigation.
56. The statistics are accompanied by a brief and neutral summary of key points and a 'frequently asked questions' section which provides additional information on the data methodology and how it can be interpreted.
57. In September 2022, the NSS data will be included in the Discover Uni website. Here the data is presented in language designed to be accessible to prospective students. We provide guidance about the source of the data, how it can be interpreted and also how (and if) comparisons should be made.¹⁴
58. The dissemination of the NSS 2022 data via the Texuna portal is provided in a number of formats to allow users with different needs and experience to access and understand the data – this includes pre-populated data dashboards, Excel Spreadsheets, custom reporting tools and Open Data formats. Before accessing the Texuna portal users also must accept the guidelines of access and use of NSS.¹⁵ This sets out principles providers should follow when

¹⁴ See www.discoveruni.gov.uk/about-our-data/#the_national_student_survey.

¹⁵ See nss.texunatech.com/ui/guidance.

using any additional (unpublished) data submitted by their own students in the 2005 to 2022 NSS and how it can be used in public marketing materials.