



National Qualifications 2024 Research: Technical Appendix

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Methodology

National Qualifications Survey 2024

Three surveys were developed by researchers in SQA's Policy, Analysis and Standards Directorate in the autumn of 2024. They were based on those used for the evaluations of the 2021¹, 2022² and 2023³ assessment approaches, and in line with our ambition to develop a wave-based quantitative approach to this research. The surveys were open from 24 September 2024 to 11 October 2024. This three-week timescale was chosen because it meant that all aspects of the NQ 2023–24 assessment process were complete, and it was close enough to the events for participants to clearly recall their experiences.

The surveys were distributed through SQA co-ordinators in schools and colleges in Scotland that offered National Qualifications in 2023–24. SQA co-ordinators were asked to pass on a survey link to learners and educators with direct involvement in National Qualifications in 2024. Senior appointees (SA) and Qualifications Directorate (QD) colleagues were invited to complete the survey via an email. For more information please refer to the [National Qualifications Survey 2024: Methodology](#).

User testing

Members of the research team carried out user testing by filling in the survey from the point of view of a range of user personas in test mode to ensure that question routing was correct and that the survey made sense from these different perspectives. Examples of user personas tested were learners that studied combinations of different qualifications, learners from different year groups and types of schools, educators that taught different combinations of qualifications at different types of schools, and SA or QD colleagues that held different roles and were responsible for different qualification levels. The survey was then adapted to account for any errors identified and retested until all problems were identified and resolved.

Respondent demographics

In total, full responses were received from 2,349 learners, 1,113 educators and 105 senior appointees and QD colleagues. It is possible, as with any survey activity of this type, that those who chose to respond were motivated to do so by having particularly strong opinions that they wished to share with SQA. It is also possible that the schools and colleges that chose to take part in this research may not have been entirely representative of Scottish schools and colleges as a whole.

The more detailed analyses of respondents in this report and in the [National Qualifications 2024: Learner Experiences](#) and [National Qualifications 2024: Educator Experiences](#) reports indicate that there was a good geographical spread of respondents, and a spread of educators who taught a wide range of subjects.

Centre type

In terms of types of schools and colleges:

- ♦ 85% of learner respondents and 89% of educator respondents came from local authority schools; this compares to 92% of entries at National 5, Higher and Advanced Higher which came from local authority schools in 2023–24.
- ♦ 12% of learner respondents and 9% of educator respondents came from independent schools; this compares to 7% of entries at National 5, Higher and Advanced Higher which came from independent schools in 2023–24.
- ♦ 1% of learner respondents and 1% of educator respondents came from further education (FE) colleges; this compares to 1% of entries at National 5, Higher and Advanced Higher which came from FE colleges in 2023–24.

Educator

The educator survey asked the respondent to share the centre postcode. Lookup tables were used to determine the Scottish Index of Multiple Deprivation (SIMD) from the postcode.

In terms of responses:

- ♦ 111 (10%) of educator respondents were from centres in SIMD quintile 1.
- ♦ 165 (15%) were from centres in SIMD quintile 2.
- ♦ 176 (16%) were from centres in SIMD quintile 3.
- ♦ 186 (17%) were from centres in SIMD quintile 4.
- ♦ 232 (21%) were from centres in SIMD quintile 5.
- ♦ 243 (22%) preferred not to say.

Educator respondents came from across all 32 local authority areas. Table 1 compares the proportion of educator survey respondents by local authority area with the proportion of secondary teachers in Scotland by local authority⁴. Note, however, that survey respondents also included those from independent schools and FE colleges.

Table 1: Comparison of proportion of educator respondents and secondary school teachers in Scotland by local authority area

Local authority area	Percentage of educator survey respondents	Percentage of local authority secondary teachers
City of Edinburgh	11%	7%
North Lanarkshire	8%	7%
Fife	8%	7%
South Lanarkshire	7%	7%
Aberdeenshire	5%	5%
Glasgow City	5%	10%
Renfrewshire	5%	3%
West Lothian	4%	4%
Aberdeen City	4%	3%
Highland	4%	5%

Local authority area	Percentage of educator survey respondents	Percentage of local authority secondary teachers
Dundee City	4%	3%
Dumfries and Galloway	4%	3%
East Lothian	3%	2%
Perth and Kinross	2%	3%
Argyll and Bute	2%	2%
East Dunbartonshire	2%	3%
Scottish Borders	2%	2%
Angus	2%	2%
South Ayrshire	2%	2%
Midlothian	2%	2%
North Ayrshire	2%	3%
West Dunbartonshire	2%	2%
Falkirk	1%	3%
Inverclyde	1%	1%
Moray	1%	2%
Stirling	1%	2%
East Renfrewshire	1%	3%
Clackmannanshire	1%	1%
East Ayrshire	0%	2%
Orkney Islands	0%	1%
Na h-Eileanan Siar	0%	1%
Shetland Islands	0%	1%

Table 2 shows the proportion of educator survey respondents by subject area with the proportion of all local authority secondary educators by main subject taught⁵. Note that because survey respondents also included those from independent schools and FE colleges, we were unable to directly compare the proportion of educator survey respondents by subject with the wider population, as comparable data is not available.

Table 2: Comparison of proportion of educator survey respondents and secondary school teachers by subject area

Subject area	Percentage of educator survey respondents	Percentage of local authority secondary teachers (Scottish Government census data 2023)
Social Sciences	25%	13%
Sciences	21%	14%
English	13%	11%
Creative	11%	11%
Technology	10%	8%

Subject area	Percentage of educator survey respondents	Percentage of local authority secondary teachers (Scottish Government census data 2023)
Mathematics	10%	10%
Languages	7%	6%
Business	5%	4%
Home Economics	5%	4%
Physical Education	3%	9%
Care	1%	NA
Other (Support for Learning, PSE/Guidance, Other)	NA	10%

Learner

Table 3 shows how the proportion of learner survey respondents by local authority area compares with the proportion of S4 to S6 learners by local authority⁶. Again, note that the survey responses included those from non-local authority schools so the data is not directly comparable.

Table 3: Comparison of proportion of learner respondents and S4 to S6 local authority learners by local authority area

Local authority area	Percentage of learner survey respondents	Percentage of local authority S4 to S6 learners
City of Edinburgh	13%	8%
South Lanarkshire	12%	7%
Renfrewshire	7%	3%
Glasgow City	6%	10%
Fife	6%	7%
Highland	5%	4%
Dumfries and Galloway	4%	3%
Midlothian	4%	2%
Aberdeenshire	4%	5%
East Lothian	4%	2%
East Dunbartonshire	3%	3%
Angus	3%	2%
West Lothian	3%	4%
Scottish Borders	3%	2%
Aberdeen City	2%	3%
Dundee City	2%	3%

Local authority area	Percentage of learner survey respondents	Percentage of local authority S4 to S6 learners
North Lanarkshire	2%	7%
North Ayrshire	2%	7%
West Dunbartonshire	2%	2%
Perth and Kinross	1%	2%
East Ayrshire	1%	2%
Inverclyde	1%	1%
Moray	1%	2%
South Ayrshire	1%	2%
Clackmannanshire	1%	1%
Na h-Eileanan Siar	1%	0%
Falkirk	1%	3%
East Renfrewshire	0%	3%
Argyll and Bute	0%	2%
Stirling	0%	2%
Shetland Islands	0%	0%
Orkney Islands	0%	0%

As shown in Table 4, learners with additional support needs (ASN) were under-represented in our sample compared to the general population. It is possible that learners with ASN did not answer 'yes' to the question 'Are you disabled and/or do you have an additional support need?' if they were not also disabled or if they had not required assessment arrangements. Men and boys were also under-represented compared to the general population.

Table 4: Proportion of learner respondents with specific characteristics compared to the wider population

Learner survey respondents	Wider population
<ul style="list-style-type: none"> ◆ 17% of survey respondents said that they were disabled and/or had an ASN. 	<p>Scottish Government pupil census data for 2023⁷ indicates that:</p> <ul style="list-style-type: none"> ◆ 43% of secondary school pupils had an ASN. ◆ 3% of secondary school pupils were assessed or declared as having a disability.
<ul style="list-style-type: none"> ◆ 61% of survey respondents described their gender as woman or girl. ◆ 35% described their gender as man or boy. ◆ 1% described their gender as non-binary. 	<p>Although not directly comparable to the survey question, pupil census data for 2023 on S4 to S6 secondary pupils indicates that:</p> <ul style="list-style-type: none"> ◆ 50% were female. ◆ 50% were male.

Learner survey respondents	Wider population
<ul style="list-style-type: none"> ◆ 15% of survey respondents identified as part of the LGBTQIA+ community. 	<p>Although not directly comparable to the survey question⁸, according to the ONS⁹:</p> <ul style="list-style-type: none"> ◆ 4% of the UK population aged 16 years and over identified as lesbian, gay or bisexual (LGB) in 2022. ◆ For those aged 16 to 24 years, 9% identified as LGB.
<ul style="list-style-type: none"> ◆ 83% of survey respondents were from the aggregated White ethnic group (White – Scottish, White – British, White – Irish, White – Gypsy/Traveller/Roma, White – other). ◆ 8% were from the aggregated Asian ethnic group (Bangladeshi, Bangladeshi Scottish or Bangladeshi British, Chinese, Chinese Scottish or Chinese British, Indian, Indian Scottish or Indian British, Pakistani, Pakistani Scottish or Pakistani British, Asian – other). ◆ 3% were from the aggregated African ethnic group (African, African Scottish or African British, African – other). ◆ 2% were from mixed or multiple ethnic groups. ◆ 1% were from the aggregated Arab ethnic group (Arab, Arab Scottish or Arab British, Arab – other). ◆ 1% were from the aggregated Caribbean or Black ethnic group (Caribbean, Caribbean Scottish or Caribbean British, Black, Black Scottish or Black British, Caribbean or Black – other). 	<p>Pupil census data for 2023 for S4 to S6 secondary pupils indicates that¹⁰:</p> <ul style="list-style-type: none"> ◆ 88% were from the aggregated White ethnic group (White – Scottish, White – Other British, White – Irish, White – Polish, White – Gypsy/Traveller, White – Other). ◆ 5% were from aggregated Asian ethnic groups (Mixed, Asian – Indian, Asian – Pakistani, Asian – Bangladeshi, Asian – Chinese, Asian – Other). ◆ 2% were from African ethnic groups. ◆ 1% were from mixed ethnic groups. ◆ 1% were from Arab ethnic groups. ◆ <1% were from Black/Caribbean ethnic groups.
<ul style="list-style-type: none"> ◆ 5% of survey respondents said that they were care experienced. 	<p>Although not directly comparable to the survey question¹¹, according to Scottish Government statistics¹²:</p> <ul style="list-style-type: none"> ◆ 1% of children were looked after in 2022.
<p>Of those learners who submitted a postcode recognised by the Scottish Government's SIMD postcode lookup tool¹³:</p> <ul style="list-style-type: none"> ◆ 15% had postcodes in SIMD quintile 1. ◆ 17% had postcodes in SIMD quintile 2. ◆ 20% had postcodes in SIMD quintile 3. ◆ 22% had postcodes in SIMD quintile 4. ◆ 26% had postcodes in SIMD quintile 5. 	<p>Pupil census data for 2023 for secondary pupils indicates that¹⁴:</p> <ul style="list-style-type: none"> ◆ 22% had postcodes in SIMD quintile 1. ◆ 19% had postcodes in SIMD quintile 2. ◆ 18% had postcodes in SIMD quintile 3. ◆ 21% had postcodes in SIMD quintile 4. ◆ 20% had postcodes in SIMD quintile 5.

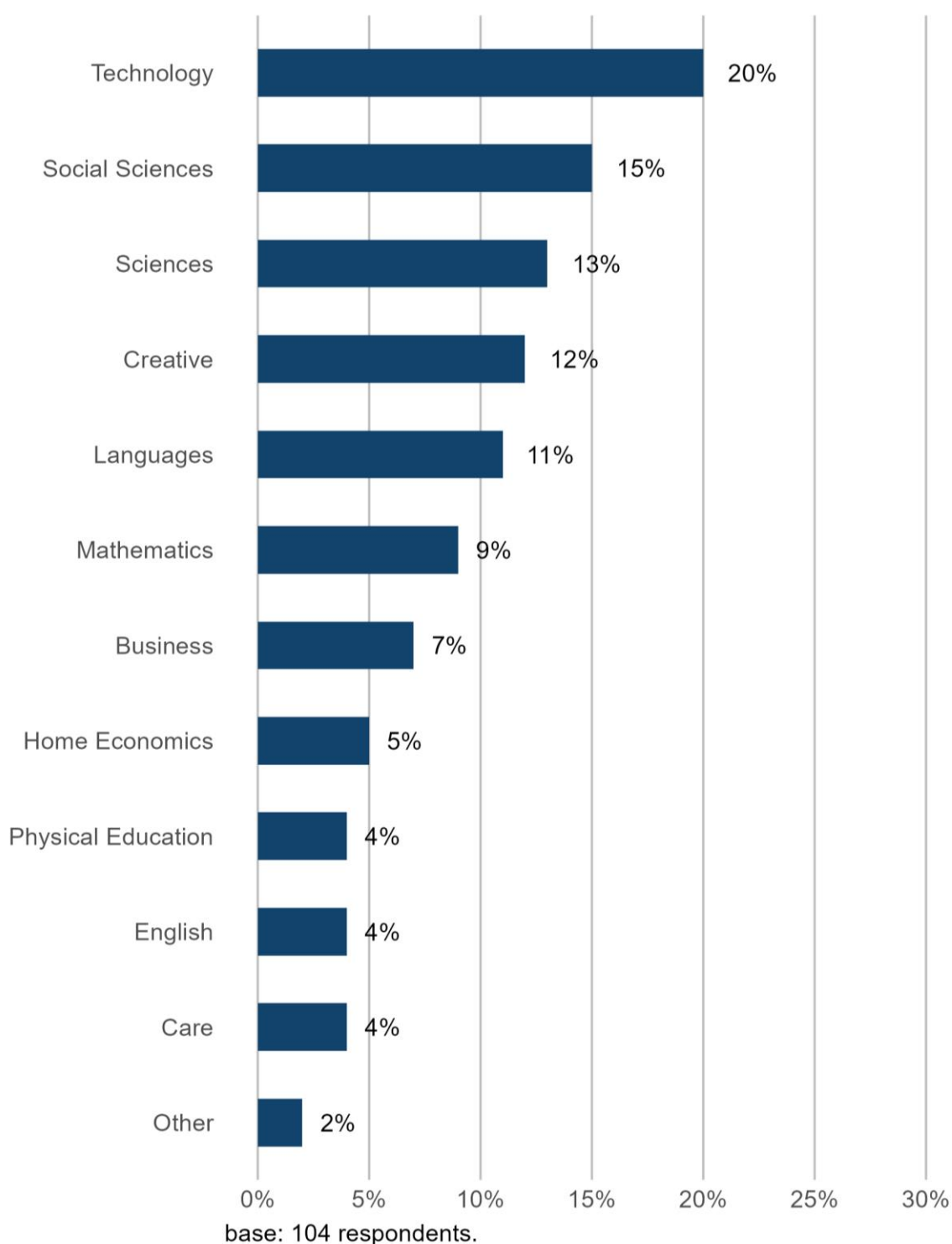
Senior appointees and Qualification Development colleagues

A total of 105 participants completed the survey in full. The sample comprised senior appointees (70%) and QD colleagues (30%). Within the sample, 39% were people who had

been in their role for 6 to 10 years, while 27% had been in their role for 2 to 5 years, 24% for more than 10 years, and 10% for less than 2 years.

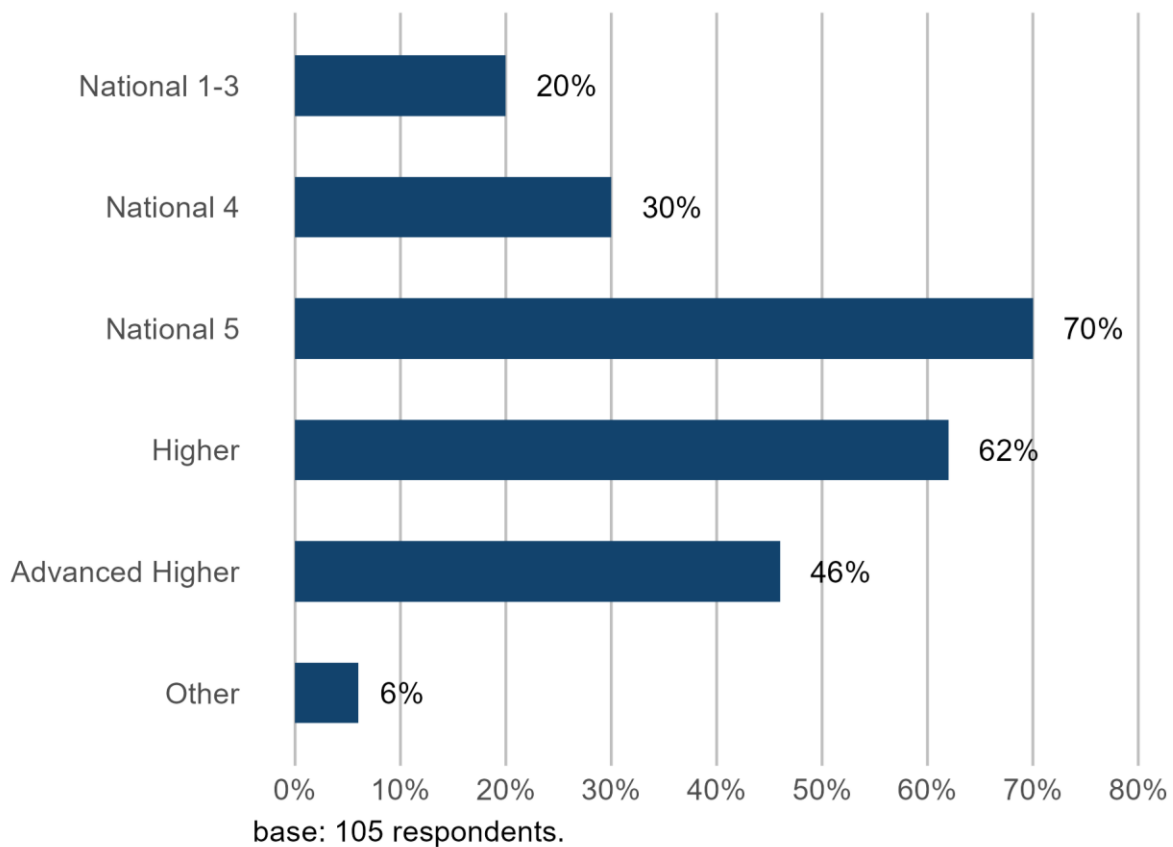
Respondents were responsible for different subjects and qualification levels. Individual subjects that respondents were assigned to were coded into the wider categories shown in Figure 1. Respondents could choose more than one subject.

Figure 1: Proportion of SA/QD respondents by subject area



In total, 30% of respondents were responsible for National 4 subjects, 70% were responsible for National 5 subjects, 62% were responsible for Higher subjects, and 46% were responsible for Advanced Higher subjects. Respondents could choose more than one level. Responses are shown in Figure 2.

Figure 2: Proportion of SA/QD respondents by qualification level represented



Approach to analysis

A quantitative approach to collecting data was utilised for each survey, and therefore surveys were designed to contain only closed-ended questions.

Individual survey questions

Quantitative survey questions, which asked respondents to choose from two or more options or give a rating on a scale, were analysed numerically, and supported with graphs and tables where appropriate.

Throughout the reports, in graphs and text, percentages may not add up to 100% due to rounding.

Composite analysis

The three surveys had their responses analysed both for consistency, and for differences by sub-group of respondents, through the use of composite scores. A composite score is a single variable or data point that represents a combination of information from multiple variables or data points.

Table 5: The composite score groups for each survey

Survey	Composite score groups
Learner	<ul style="list-style-type: none">◆ Communications satisfaction◆ Teaching and learning◆ National 4 Qualifications◆ National 5 Qualifications◆ Higher Qualifications◆ Advanced Higher Qualifications◆ Assessment and Awarding
Educator	<ul style="list-style-type: none">◆ Communications satisfaction◆ Understanding assessment standards◆ Teaching and learning◆ National 4 Qualifications◆ National 5 Qualifications◆ Higher Qualifications◆ Advanced Higher Qualifications◆ Assessment and Awarding
Senior appointee and Qualification Development colleagues	<ul style="list-style-type: none">◆ Communications satisfaction◆ Understanding assessment standards◆ Teaching and learning◆ National 4 Qualifications◆ National 5 Qualifications◆ Higher Qualifications◆ Advanced Higher Qualifications

For example, in the learner survey, the communications satisfaction composite score was the average (mean) score given by respondents across three statements:

- ◆ Q17a I received information on how my grades would be determined early enough in the academic year.
- ◆ Q17b The assessment process was communicated to me effectively.
- ◆ Q17c I understood how my grades would be determined.

For each of these statements, respondents could rate them from a Likert scale of 'Strongly agree' to 'Strongly disagree'. The Likert responses were encoded onto an ordinal numerical scale that captured the logical order of the responses.

- ◆ Strongly agree = 5
- ◆ Agree = 4
- ◆ Neither agree nor disagree = 3
- ◆ Disagree = 2
- ◆ Strongly disagree = 1
- ◆ Set any missing responses to no numerical value

The numerical difference of 1 between each response does not imply equally distributed opinions; that is, 'strongly agree' may be much further away from 'agree' than 'agree' is away from 'neither agree nor disagree', and so on.

In the learner survey, the question 'How would you say you feel about the results of your National Qualifications in 2024?' had only three options, which were encoded thus:

- ◆ Overall, my results exceeded what I was expecting = 4
- ◆ My results broadly matched my expectations = 3
- ◆ Overall, my results fell below what I was expecting = 2

For composite scores to be meaningful, question responses in each group needed to be checked for consistency, which would indicate that the issues being investigated were linked. In the context of these surveys, these were questions that asked about the same concept or topic.

To verify that the responses to the selected questions that made up each composite score were consistent, Cronbach's alpha was calculated from the respondents' encoded Likert scale scores.

Cronbach's alpha ranges in value from 0 to 1, with higher values indicating better internal consistency. Table 6 shows how to interpret different ranges of Cronbach's alpha:

Table 6: Summary of interpretation of Cronbach's alpha

Cronbach's alpha range	Interpretation
$0.9 \leq \alpha < 1.0$	Excellent internal consistency
$0.8 \leq \alpha < 0.9$	Good internal consistency
$0.7 \leq \alpha < 0.8$	Acceptable internal consistency

Cronbach's alpha range	Interpretation
$0.6 \leq \alpha < 0.7$	Questionable internal consistency
$0.5 \leq \alpha < 0.6$	Poor internal consistency
$0 \leq \alpha < 0.5$	Unacceptable internal consistency

All Cronbach's alpha values are estimates of the theoretically true value and given with 95% confidence intervals. Across all three surveys, all of the calculated Cronbach's alpha values exceeded 0.7, with the majority exceeding 0.8. All confidence intervals had tolerances of less than ± 0.1 .

Tables 9, 10 and 13 summarise the Cronbach's alpha values for the associated composite score questions in each of the three surveys.

Comparing composite scores between groups of respondents

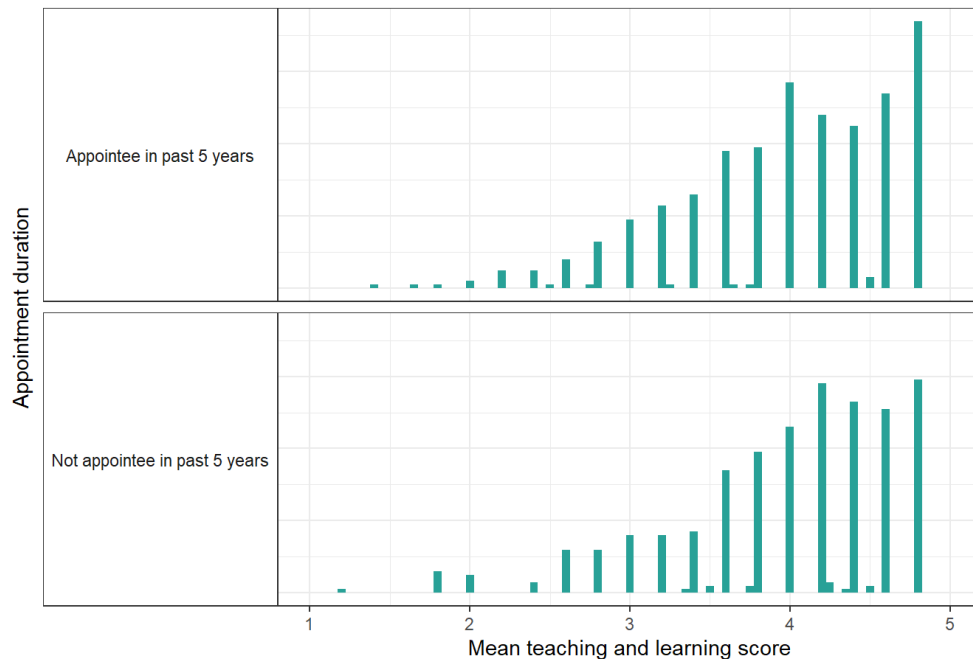
Once the questions to include in a single composite score had been confirmed as consistent through Cronbach's alpha, composite scores were compared between different groups of respondents within each survey.

For example, in the educator survey, comparisons were made for the teaching and learning composite score based on the respondent's length of time as an SQA appointee.

For each survey respondent, the mean response score across all five questions about teaching and learning was calculated. If a respondent did not answer all questions, then the mean of the questions which they responded to was calculated.

The mean response scores were split into two groups: 'Appointee in past 5 years' and 'Not appointee in past 5 years'. The distribution of the two groups of mean response scores was visualised using a histogram, as shown in Figure 3.

Figure 3: Histogram of distribution of mean response scores for two appointee groups.



The histogram was used to check the assumption that the two groups had similar shaped distributions to each other, which would indicate that the samples may have come from populations that had similar shaped distributions. This assumption must be valid for subsequent analysis using the Kruskal-Wallis non-parametric test.

The Kruskal-Wallis non-parametric test was used to establish whether the population median score across all groups could be the same value. If the p-value from the Kruskal-Wallis test was lower than the significance level, then it suggested that at least one of the groups had a different median score. However, the Kruskal-Wallis test would not indicate which group(s) had the different median score.

Groups with fewer than five responses were excluded from the Kruskal-Wallis test procedures.

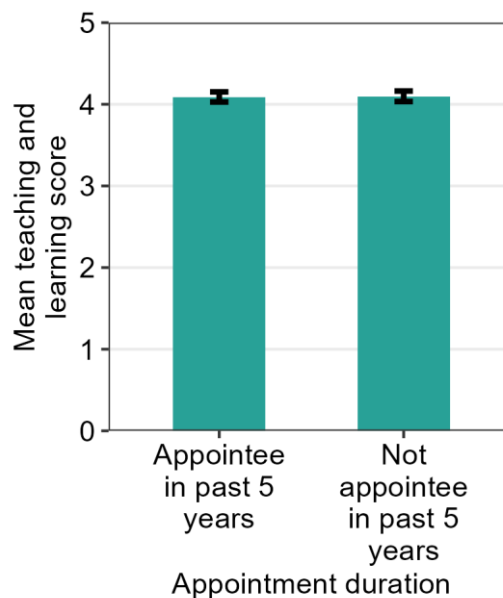
For the educator survey's teaching and learning composite score across the two appointment duration groups, the Kruskal-Wallis test's p-value was 0.5244. Using a significance level of 1%, the conclusion was that there was no evidence to suggest that either of the groups had a different median score.

Table 7 shows further summary information that was calculated for the two groups' responses, and Figure 4 displays this same information in a column chart. The number of respondents has been rounded to the nearest 5.

Table 7: Summary information of mean scores and confidence intervals by appointee duration

Appointment duration	Number of respondents	Mean teaching and learning score	Confidence interval lower bound	Confidence interval upper bound
Appointee in past 5 years	530	4.1	4	4.2
Not appointee in past 5 years	500	4.1	4	4.2

Figure 4: Column chart of mean scores and their confidence intervals by appointee duration



The construction of confidence intervals requires minimum group sample sizes and assumptions about the population scores being normally distributed, which are not always supported by the survey sample's data. Hence, the column chart only gives an approximate visual representation of the data, providing a broad overview of how similar each group responded to the selected composite score's questions.

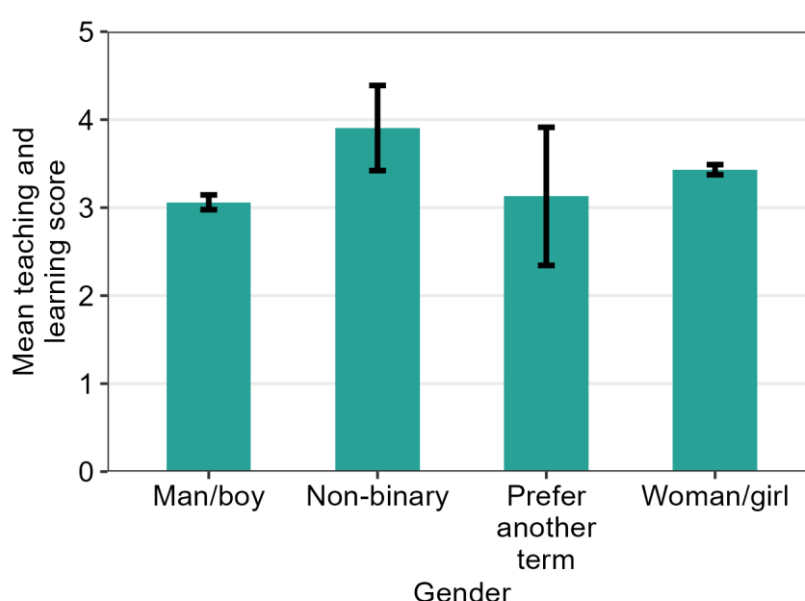
The Kruskal-Wallis test does not require the same assumptions of normality, does not use means or confidence intervals, and it can accommodate smaller group sample sizes. In addition, it is well suited to the underlying ordinal Likert response data.

As a second example, Table 8 and Figure 5 show the learner survey's teaching and learning composite score by gender group.

Table 8: Summary information of mean scores and confidence intervals by gender

Gender	Number of respondents	Mean teaching and learning score	Confidence interval lower bound	Confidence interval upper bound
Man/boy	745	3.1	3	3.1
Non-binary	20	3.9	3.4	4.4
Prefer another term	15	3.1	2.3	3.9
Woman/girl	1,300	3.4	3.4	3.5

Figure 5: Column chart of mean scores and their confidence intervals by gender



For the learner survey's teaching and learning composite score by gender group, the Kruskal-Wallis test's p-value was 0.0000, to 4 decimal places. Using a significance level of 1%, the conclusion was that there was evidence to suggest that at least one of the gender groupings had a different median score.

From Figure 5, the confidence intervals for 'Non-binary', 'Prefer another term', and 'Woman/girl' appear to overlap. The 'Man/boy' group appear to have a lower mean teaching and learning score than either the 'Non-binary' or 'Woman/girl' groups – although does not seem to differ significantly from the 'Prefer another term' group. The latter three groups do not seem to differ significantly from each other.

Learner survey respondents

A range of learner characteristic data was collected as part of the learner survey. This was for two main reasons: firstly, to help monitor whether respondents to the survey were representative of the wider population; and secondly, so that SQA could understand better how learners with different characteristics experienced the assessment process for National

Qualifications in 2024. Full respondent profile information is available in the [National Qualifications 2024: Learner Experiences](#) report.

Representativeness

The demographic profile of learner respondents was compared to the general population of learners who studied National Qualifications in 2023–24. Analysis of the raw data indicated that, compared to the general population, there was an over representation of participants who identified as ‘woman/girl’, was from SIMD quintiles 4 or 5, or did not have an additional support need or disability.

To attempt to improve the representativeness of the survey findings, the research team considered weighting the learner data by gender and SIMD to account for this. Weighting is a statistical process whereby raw data is adjusted to make it more representative of the target population. This means giving more importance to the responses from under-represented groups in the sample and less importance to those from over-represented groups.

However, we found that there was only around one percentage point's difference between the weighted data's results and the unadjusted data's results. After considering these minor differences, alongside the assumptions required to fully support the weighting procedures, we decided to use the unadjusted data for analysis. In addition, any possible gains that might have been achieved from using weighted data would be negated by the increased complexity of subsequent analysis and its interpretation.

Table 9: Learner survey composite variables and key questions

Composite variable	Key questions
Communications satisfaction (Cronbach's alpha = 0.80±0.02)	<ul style="list-style-type: none"> ◆ I received information on how my grades would be determined early enough in the academic year. ◆ The assessment process was communicated to me effectively. ◆ I understood how my grades would be determined.
Teaching and learning (Cronbach's alpha = 0.83±0.01)	<ul style="list-style-type: none"> ◆ The pandemic continues to have an impact on my learning. ◆ I feel that the pandemic has had an effect on the development of my skills and knowledge. ◆ I feel that the pandemic continues to affect my mental wellbeing.
National 4 Qualifications (Cronbach's alpha = 0.84±0.02)	<ul style="list-style-type: none"> ◆ National 4s are well understood by the general public. ◆ National 4s are trusted qualifications. ◆ National 4 standards are maintained year on year. ◆ National 4s are good preparation for further study. ◆ National 4s are good preparation for work. ◆ National 4s develop a broad range of skills for learners.
National 5 Qualifications	<ul style="list-style-type: none"> ◆ National 5s are well understood by the general public. ◆ National 5s are trusted qualifications. ◆ National 5 standards are maintained year on year.

Composite variable	Key questions
(Cronbach's alpha = 0.82±0.01)	<ul style="list-style-type: none"> ◆ National 5s are good preparation for further study. ◆ National 5s are good preparation for work. ◆ National 5s develop a broad range of skills for learners.
Higher Qualifications (Cronbach's alpha = 0.80±0.01)	<ul style="list-style-type: none"> ◆ Highers are well understood by the general public. ◆ Highers are trusted qualifications. ◆ Higher standards are maintained year on year. ◆ Highers are good preparation for further study. ◆ Highers are good preparation for work. ◆ Highers develop a broad range of skills for learners.
Advanced Higher Qualifications (Cronbach's alpha = 0.83±0.01)	<ul style="list-style-type: none"> ◆ Advanced Highers are well understood by the general public. ◆ Advanced Highers are trusted qualifications. ◆ Advanced Higher standards are maintained year on year. ◆ Advanced Highers are good preparation for further study. ◆ Advanced Highers are good preparation for work. ◆ Advanced Highers develop a broad range of skills for learners.
Assessment and Awarding (Cronbach's alpha = 0.88±0.01)	<ul style="list-style-type: none"> ◆ The assessment process was fair to me. ◆ I was satisfied with the assessment process.

In the comparative analysis, we looked for differences across different equalities characteristics: ASN status, ethnicity, gender, and LGBTQIA+ identity. Additionally, we examined differences in levels of care experience and SIMD quintile.

ASN was measured as a Yes or No response to the question 'Are you disabled, or do you have an additional support need?.'

Gender was measured as a response to the question 'How would you describe your gender?'. Response choices were 'man/boy', 'woman/girl', 'non-binary', or learners could enter another term. Gender counts excluded learners who entered their own gender term in response to this question.

For ethnicity, to avoid potential issues of statistical unreliability, more detailed responses to a multi-category race and ethnicity question were collapsed into two categories: minority ethnic and white. This is consistent with the Scottish Government's use of the term 'minority ethnic' to refer to people whose self-defined ethnicity is not white Scottish or British¹⁵.

Minority ethnic learners, then, were those that described their identity as:

- ◆ African, African Scottish or African British
- ◆ any other African ethnic group
- ◆ Arab, Arab Scottish or Arab British
- ◆ any other Arab ethnic group
- ◆ Bangladeshi, Bangladeshi Scottish or Bangladeshi British
- ◆ Chinese, Chinese Scottish or Chinese British

- ◆ Indian, Indian Scottish or Indian British
- ◆ Pakistani, Pakistani Scottish, Pakistani British
- ◆ any other Asian ethnic group
- ◆ Caribbean, Caribbean Scottish or Caribbean British
- ◆ Black, Black Scottish or Black British
- ◆ any other Caribbean or Black ethnic group
- ◆ any Mixed or Multiple ethnic groups
- ◆ Irish
- ◆ Gypsy/Traveller/Roma
- ◆ any other White ethnic group

Ethnicity counts excluded learners who entered their own ethnicity term in response to this question. While SQA acknowledges the importance of allowing learners to self-define in response to questions relating to race and ethnicity, this question produced some free-text data which was challenging to include in the analysis.

LGBTQIA+ identity was measured as a Yes or No response to the question 'Do you identify as part of the LGBTQIA community?'.

Care experience was measured as a Yes or No response to the question: 'Do you consider yourself to be care experienced based on the definition below? The term 'care experienced' refers to any person who is or has ever been in care or looked after for any length of time. This includes anyone who has ever been provided with care in a range of settings, such as foster care, residential care, kinship care (with relatives or friends) or through being looked after at home with supervision requirements.'

Learners' SIMD quintile was obtained by converting the postcode they submitted using the Scottish Government's 2023 SIMD postcode lookup tool.

How learners felt about their results was measured by whether they said their National Qualifications results in 2024 matched, exceeded, or fell below their expectations.

Educator survey respondents

For educators, data was collected on their centre's SIMD quintile and on whether they had been an SQA appointee in the past five years or not. This cut-off was chosen to identify those who had been recently involved with SQA's assessment processes. Again, as with learners, these categories were chosen so that SQA could understand better how educators in different contexts experienced the assessment process for National Qualifications in 2024. Full respondent profile information is available in the [National Qualifications 2024: Educator Experiences](#) Report.

Table 10: Educator survey composite variables and key questions

Composite variable	Key questions
Communications satisfaction (Cronbach's alpha = 0.80±0.02)	<ul style="list-style-type: none"> ♦ I received information on how learners' grades would be determined early enough in the academic year. ♦ The assessment process was communicated to me effectively. ♦ I understood how learners' grades would be determined.
Understanding assessment standards (Cronbach's alpha = 0.84±0.02)	<ul style="list-style-type: none"> ♦ The national standard is articulated clearly in the course specification and other documentation (course reports and marking instructions). ♦ I have a good understanding of the national standard. ♦ Understanding Standards provides educators with the resources they need to understand the national standard. ♦ Educators are given the opportunity to engage with Understanding Standards resources to enable a strong understanding of the national standard.
Teaching and learning (Cronbach's alpha = 0.76±0.02)	<ul style="list-style-type: none"> ♦ The education system as a whole has recovered well from the pandemic. ♦ Many learners are less resilient than their predecessors were prior to the pandemic. ♦ Many learners find external assessment more stressful than their predecessors did prior to the pandemic. ♦ Many learners are not as well prepared to study for National Qualifications as their predecessors were prior to the pandemic. ♦ Many learners have lower levels of focus in class than their predecessors did prior to the pandemic.
National 4 Qualifications (Cronbach's alpha = 0.84±0.02)	<ul style="list-style-type: none"> ♦ National 4s are well understood by the general public. ♦ National 4s are trusted qualifications. ♦ National 4 standards are maintained year on year. ♦ National 4s are good preparation for further study. ♦ National 4s are good preparation for work. ♦ National 4s develop a broad range of skills for learners.
National 5 Qualifications (Cronbach's alpha = 0.84±0.02)	<ul style="list-style-type: none"> ♦ National 5s are well understood by the general public. ♦ National 5s are trusted qualifications. ♦ National 5 standards are maintained year on year. ♦ National 5s are good preparation for further study. ♦ National 5s are good preparation for work. ♦ National 5s develop a broad range of skills for learners.
Higher Qualifications (Cronbach's alpha = 0.85±0.02)	<ul style="list-style-type: none"> ♦ Highers are well understood by the general public. ♦ Highers are trusted qualifications. ♦ Higher standards are maintained year on year. ♦ Highers are good preparation for further study. ♦ Highers are good preparation for work. ♦ Highers develop a broad range of skills for learners.

Composite variable	Key questions
Advanced Higher Qualifications (Cronbach's alpha = 0.79±0.02)	<ul style="list-style-type: none"> ◆ Advanced Highers are well understood by the general public. ◆ Advanced Highers are trusted qualifications. ◆ Advanced Higher standards are maintained year on year. ◆ Advanced Highers are good preparation for further study. ◆ Advanced Highers are good preparation for work. ◆ Advanced Highers develop a broad range of skills for learners.
Assessment and Awarding (Cronbach's alpha = 0.93±0.01)	<ul style="list-style-type: none"> ◆ The assessment process was fair to all learners. ◆ I was satisfied with the assessment process.

In the comparative analysis, we looked for differences across SIMD for the centre, length of time in an SQA appointee role, and whether the educator had taught ASN learners.

SQA senior appointee and Qualification Development respondents

A broad range of characteristic data was collected as a part of the SQA senior appointee and Qualification Development survey. This allowed the results of the research to be analysed based upon the respondent's role at SQA, time in their current position and their subject responsibility. This data allowed us to understand whether specific characteristics impacted respondents' perspectives. A full respondent profile is available in the [National Qualifications 2024: Senior Appointee and Qualifications Development Colleagues Experiences](#) report.

Representativeness

The survey was sent to all SA and QD colleagues. At the time of the survey, there were 298 SA and 144 QD colleagues. Out of the 442 potential participants, we received 105 full responses. The response rate was 24%.

Table 11 indicates how the representativeness of the SA/QD sample compared with the total population of SA/QD colleagues.

Table 11: Distribution of survey respondents and total SA/QD colleagues by role

Role	Distribution of survey respondents	Distribution of all SA and QD colleagues
Qualifications Development	70%	67%
Senior appointee	30%	33%

Table 12 summarises the criteria used to group survey responses into different sub-categories.

Table 12: Description of variables and sub-categories

Description of variable	New variable categories and original variable categories
Respondent's role at SQA	<p>Qualifications Development = qualifications manager; qualifications coordinator; qualifications officer; subject implementation manager; other (where appropriate)</p> <p>Senior appointee = principal assessor; depute principal assessor; other (where appropriate)</p>
Length of time in current role at SQA in years (open text responses)	<p><2 = 0, x months, 1, 1 year and x months</p> <p>2 to 5 = 2, 3, 4, 5, 5 years and x months</p> <p>6 to 10 = 6, 7, 8, 9, 10 years</p> <p>>10 = 10 years and x months, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 years and more</p>
Subject respondent is responsible for	<p>Sciences = Biology, Chemistry, Environmental Science, Human Biology, Physics</p> <p>Social Sciences = Classical Studies, Cruinn-eòlas, Eachdraidh, Geography, History, Modern Studies, Nuadh-eòlas, Philosophy, Politics, Psychology, RMPS, Sociology</p> <p>Creative = Art and Design, Dance, Drama, Media, Music, Music Technology, Photography</p> <p>English = English</p> <p>Technology = Computing Science, Design and Manufacture, Engineering Science, Graphic Communication, Practical Electronics, Practical Metalworking, Practical Woodworking</p> <p>Mathematics = Applications of Mathematics, Gnìomhachas Matamataigs, Matamataig, Mathematics, Mathematics of Mechanics, Statistics</p> <p>Business = Accounting, Administration and IT, Business Management, Economics</p> <p>Languages = Chinese Languages, English for Speakers of Other Languages, French, Gaelic (Learners), Gàidhlig, German, Italian, Latin, Spanish, Urdu</p> <p>Physical Education = Physical Education</p> <p>Home Economics = Fashion and Textile Technology, Health and Food Technology, Practical Cake Craft, Practical Cookery</p> <p>Care = Care, Childcare and Development</p>

Table 13: Senior appointee and Qualification Development survey composite variables and key questions

Composite variable	Key questions
Communications satisfaction (Cronbach's alpha = 0.73±0.09)	<ul style="list-style-type: none"> ◆ Information about the approach to assessment was published early enough. ◆ Information about the approach to awarding/grade boundaries was published early enough in the academic year. ◆ SQA's approach to awarding and setting grade boundaries is generally understood by those outside the organisation.

Composite variable	Key questions
Understanding assessment standards (Cronbach's alpha = 0.77±0.07)	<ul style="list-style-type: none"> ◆ The national standard is articulated clearly in the course specification and other documentation (course reports and marking instructions). ◆ Understanding Standards generally provides educators with the resources they need to understand the national standard. ◆ The national standard was consistently understood and interpreted by educators in 2023-24. ◆ Educators understand SQA assessment requirements. ◆ Educators consistently apply SQA assessment requirements in relation to permitted resources and reasonable assistance.
Teaching and learning (Cronbach's alpha = 0.81±0.06)	<ul style="list-style-type: none"> ◆ The pandemic continues to have a significant impact on learning and teaching in centres for all learners. ◆ The pandemic continues to have a significant impact on learning and teaching in centres for some learners. ◆ In your subject area there was evidence of recovery from the pandemic in 2023-24 compared to 2022-23. ◆ Due to the pandemic, aspects of skills development in your subject area continued to be affected in 2023-24.
National 4 Qualifications (Cronbach's alpha = 0.85±0.04)	<ul style="list-style-type: none"> ◆ National 4s are well understood by the general public. ◆ National 4s are trusted qualifications. ◆ National 4 standards are maintained year on year. ◆ National 4s are good preparation for further study. ◆ National 4s are good preparation for work. ◆ National 4s develop a broad range of skills for learners.
National 5 Qualifications (Cronbach's alpha = 0.82±0.05)	<ul style="list-style-type: none"> ◆ National 5s are well understood by the general public. ◆ National 5s are trusted qualifications. ◆ National 5 standards are maintained year on year. ◆ National 5s are good preparation for further study. ◆ National 5s are good preparation for work. ◆ National 5s develop a broad range of skills for learners.
Higher Qualifications (Cronbach's alpha = 0.85±0.04)	<ul style="list-style-type: none"> ◆ Highers are well understood by the general public. ◆ Highers are trusted qualifications. ◆ Higher standards are maintained year on year. ◆ Highers are good preparation for further study. ◆ Highers are good preparation for work. ◆ Highers develop a broad range of skills for learners.
Advanced Higher Qualifications (Cronbach's alpha = 0.80±0.06)	<ul style="list-style-type: none"> ◆ Advanced Highers are well understood by the general public. ◆ Advanced Highers are trusted qualifications. ◆ Advanced Higher standards are maintained year on year. ◆ Advanced Highers are good preparation for further study. ◆ Advanced Highers are good preparation for work. ◆ Advanced Highers develop a broad range of skills for learners.

In the comparative analysis, we looked for differences across the SQA appointee role, the length of time in that role, and the subject responsibility.

Endnotes

¹ SQA (2022). *SQA's evaluation of the 2021 Alternative Certification Model (ACM)*. Available from: <https://www.sqa.org.uk/sqa/101127.html> [accessed 18 March 2025]

² SQA (2023). *SQA's evaluation of the 2022 Approach to Assessment of Graded National Courses*. Available from: <https://www.sqa.org.uk/sqa/105647.html> [accessed 18 March 2025]

³ SQA (2024). *SQA's evaluation of the 2023 Approach to Assessment of Graded National Courses*. Available from: <https://www.sqa.org.uk/sqa/109867.html> [accessed 18 March 2025]

⁴ Scottish Government (2023). *Teacher census supplementary statistics 2023*. Available from: <https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.gov.scot%2Fbinaries%2Fcontent%2Fdocuments%2Fgovscot%2Fpublications%2Fstatistics%2F2019%2F07%2Fteacher-census-supplementary-data%2Fdocuments%2Fteacher-census-supplementary-statistics-2023--december%2Fteacher-census-supplementary-statistics-2023--december%2Fgovscot%253Adocument%2FTeacher%252Bcensus%252Bsupplementary%252Bstatistics%252B2023%252B-%252BMarch.xlsx&wdOrigin=BROWSELINK> [accessed 18 March 2025]

⁵ Scottish Government (2023). *Teacher census supplementary statistics 2023*. Available from: <https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.gov.scot%2Fbinaries%2Fcontent%2Fdocuments%2Fgovscot%2Fpublications%2Fstatistics%2F2019%2F07%2Fteacher-census-supplementary-data%2Fdocuments%2Fteacher-census-supplementary-statistics-2023--december%2Fteacher-census-supplementary-statistics-2023--december%2Fgovscot%253Adocument%2FTeacher%252Bcensus%252Bsupplementary%252Bstatistics%252B2023%252B-%252BMarch.xlsx&wdOrigin=BROWSELINK> [accessed 18 March 2025]

⁶ Scottish Government (2024). *Pupil Census Supplementary Statistics*. Available from: <https://www.gov.scot/publications/pupil-census-supplementary-statistics/> [accessed 18 March 2025]

⁷ Scottish Government (2023). *Pupil Census Supplementary Statistics*. Available from: <https://www.gov.scot/publications/pupil-census-supplementary-statistics/> [accessed 18 March 2025]

⁸ Our survey question was designed to be open and non-intrusive. Scottish Government guidance suggests that sexual orientation questions should only be asked of those aged 16 or over. See <https://www.gov.scot/publications/data-collection-publication-guidance-sexual-orientation/pages/3/> [accessed 18 March 2025]

⁹ Office for National Statistics (2023). *Sexual Orientation, UK: 2021 and 2022*. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/sexuality/bulletins/sexualidentityuk/2021and2022> [accessed 18 March 2025]

¹⁰ Scottish Government (2023). *Pupil Census Supplementary Statistics*. Available from: <https://www.gov.scot/publications/pupil-census-supplementary-statistics/> [accessed 18 March 2025]

¹¹ According to Who Cares? Scotland, the Scottish Government's looked after children statistics do not take into consideration circumstances such as informal kinship care. Moreover, some learners may have historic care experience even if they are not currently in care. See <https://www.whocaresscotland.org/> [accessed 18 March 2025]

¹² Scottish Government (2023). *Children's Social Work Statistics Scotland: 2021 to 2022*. Available from: <https://www.gov.scot/publications/childrens-social-work-statistics-scotland-2021-22/documents/> [accessed 18 March 2025]

¹³ Scottish Government (2020). *Scottish Index of Multiple Deprivation 2020v2 postcode lookup file*. Available from: <https://www.gov.scot/publications/scottish-index-of-multiple-deprivation-2020v2-postcode-look-up/> [accessed 18 March 2025]

¹⁴ Scottish Government (2023). *Pupil Census Supplementary Statistics*. Available from: <https://www.gov.scot/publications/pupil-census-supplementary-statistics/> [accessed 18 March 2025]

¹⁵ Scottish Government (2019). *Scottish Surveys Core Questions 2018*. Available from: <https://www.gov.scot/collections/scottish-surveys-core-questions/> [accessed 18 March 2025]