



# **Comparison between teachers' estimated grades and actual results attained for National 5, Higher and Advanced Higher in Scotland**

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# 1 Report Summary

This report updates, for 2023, the analysis contained in the publication 'Relationships between teacher estimates and results in Scotland' published in November 2022'.

Between 2017 and 2019, when looking at National 5, Higher and Advanced Higher courses combined, for grades A to C, estimates were around one percentage point higher than results, but there was a gap at grade A (estimates were typically between six and seven percentage points lower than results). In 2022 and 2023, attainment rates were higher than estimated: A to C attainment was between two and four percentage points higher than estimated. Grade A attainment in 2023 was around six percentage points higher than estimated, an increase compared to 2022 (which saw a five percentage point difference between estimated and awarded A grades).

In total, 49.8% of entries were awarded the same grade as estimated in 2023, while 31.9% were awarded a higher grade and 18.3% were awarded a lower grade. When estimated grades did not match awarded grades, they most commonly differed by one grade.

In 2023, there was a wider gap between the number of National 5 candidates estimated and awarded A grades (7.3 percentage points) than in 2022 (6.7 percentage points), but narrower than in 2019 (7.5 percentage points). There was a wider gap in 2023 between the number of National 5 candidates estimated and awarded A to C grades (4.4 percentage points) than in 2022 (4.1 percentage points) and 2019 (0.0 percentage points).

In 2023, there was a wider gap between the number of Higher candidates estimated and awarded A grades (4.8 percentage points) than in 2022 (3.2 percentage points), and marginally wider than in 2019 (4.7 percentage points). There was a wider gap in 2023 between the number of Higher candidates estimated and awarded A to C grades (2.7 percentage points) than in 2022 (1.7 percentage points) and 2019 (1.7 percentage points).

In 2023, there was a wider gap between the number of Advanced Higher candidates estimated and awarded A grades (1.9 percentage points) than in 2022 (1.4 percentage points), but narrower than in 2019 (4.8 percentage points). There was a narrower gap in 2023 between the number of Advanced Higher candidates estimated and awarded A to C grades (1.2 percentage points) than in 2022 (2.1 percentage points), this was also narrower than in 2019 (4.4 percentage points).

## 2 Background

SQA collects estimates of attainment from centres every year as a part of the procedure for awarding National Courses. Centres provide estimates of attainment against the national standard as bands on a 9-point scale that is associated with notional percentage ranges. The relationship between bands and grades is shown in Table 1. Estimates contribute towards the decisions about grade boundaries for a course at a cohort level rather than an individual level. In particular, estimates can give an indication of the demand of the course assessment as a result of the perceived standard of the cohort compared to previous years. SQA also collects estimates as one line of evidence in support of an 'Exceptional Circumstances Consideration' request ([Guidance on Producing Estimates, 2023](#)).

*Table 1: Relationship between bands and grades.*

<b>Band</b>	<b>Estimated performance</b>	<b>Notional range (%)</b>	<b>Grade</b>
1	Band A (upper)	85 to 100	A
2	Band A (lower)	70 to 84	A
3	Band B (upper)	65 to 69	B
4	Band B (lower)	60 to 64	B
5	Band C (upper)	55 to 59	C
6	Band C (lower)	50 to 54	C
7	Band D	40 to 49	D
8	No Award	30 to 39	No Award
9	No Award	0 to 29	No Award

During the global COVID-19 pandemic, SQA, in common with education systems around the world, had to use different approaches to assessment and certification.

In 2020, teachers and lecturers submitted estimates to SQA. The estimates were based on performance throughout the course and how they thought learners might perform in the final examination, meaning that there were elements of both demonstrated and inferred attainment (Table 2).

Table 2: Summary of estimate guidance for 2017 to 2023.

Year	Demonstrated Attainment	Inferred Attainment	Submission Deadline	Submitted to SQA
2017 to 2019	Yes	No	April	Band estimate
2020	Yes	No	April 2020	Band estimate
2020 (updated)	Yes	Yes	May 2020	Refined band estimate and rank order
2021	Yes	No	June 2021	Band estimate as a provisional result
2022	Yes	No	April 2022	Band estimate
2023	Yes	No	April 2023	Band estimate

The 2021 alternative certification model was based on demonstrated attainment. Teachers and lecturers collected evidence of learning and skills before using their professional judgement to determine provisional results for their learners. Scotland returned to formal national exams for National Qualifications in 2022. A package of measures (including course modifications and revision support, as well as wider support from across the education system at a national, regional, local and centre level) was in place. In 2022 and 2023, the role of estimates and guidance for generating them was closer to the years preceding the pandemic, but use of estimates as provisional results remained as a contingency.

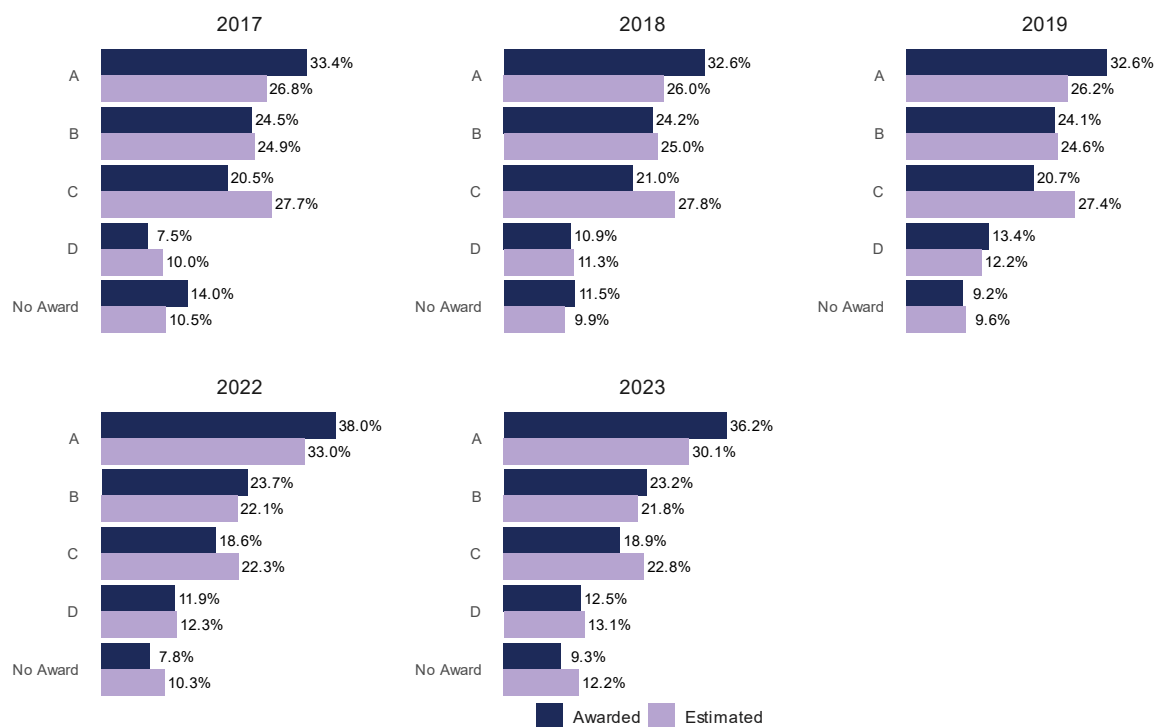
This report examines the relationships between estimated and awarded grades in exam years. The analysis includes 2023, 2022 and the three years prior to the pandemic (2017 to 2019) but does not include 2020 and 2021 when exams did not take place. The focus is on the correspondence between estimates and results for the attainment of grade A and grades A to C. Patterns of attainment across years are not examined here but are reported and discussed in the [statistical summary of attainment](#) published on the SQA website.

The overall correspondence between estimates and results — combining National 5, Higher, and Advanced Higher — is presented in section 3. Each qualification level is then presented individually in sections 4, 5 and 6.

# 3 Overall (National 5, Higher and Advanced Higher combined)

## 3.1 Distribution of estimated and awarded grades

Figure 1: Comparison of overall grade distributions for estimated and awarded grades, 2017 to 2023.



### 3.1.1 A rates

The proportion of all candidates who achieved A grades decreased to 36.2% in 2023 from 38.0% in 2022 (1.8 percentage point difference) but increased from 32.6% in 2019 (3.6 percentage point difference). The proportion of all candidates with an estimated A grade decreased to 30.1% in 2023 from 33.0% in 2022 (2.9 percentage point difference) but increased from 26.2% in 2019 (3.9 percentage point difference).

In 2023, there was a wider gap between the number of candidates achieving A grades and the number of candidates estimated to achieve A grades (6.1 percentage points) than in 2022 (5.0 percentage points), but narrower than in 2019 (6.3 percentage points).

In all years included in this analysis, the proportion of candidates achieving A grades was higher than the proportion of candidates estimated to achieve A grades.

*Table 3: Difference between estimated and awarded grade A attainment for National 5, Higher and Advanced Higher entries combined, 2017 to 2023.*

<b>Year</b>	<b>Estimated A Rate</b>	<b>Awarded A Rate</b>	<b>Percentage Point Difference</b>
2017	26.8%	33.4%	6.6
2018	26.0%	32.6%	6.5
2019	26.2%	32.6%	6.3
2022	33.0%	38.0%	5.0
2023	30.1%	36.2%	6.1

### **3.1.2 A to C rates**

The proportion of all candidates who achieved A to C grades decreased to 78.2% in 2023 from 80.2% in 2022 (2.0 percentage point difference) but increased from 77.4% in 2019 (0.8 percentage point difference). The proportion of all candidates estimated to achieve A to C grades decreased to 74.7% in 2023 from 77.4% in 2022 (2.7 percentage point difference) and decreased from 78.3% in 2019 (3.6 percentage point difference).

In 2023, there was a wider gap between the number of candidates achieving A to C grades and the number of candidates estimated to achieve A to C grades (3.5 percentage points) than in 2022 (2.9 percentage points) and 2019 (0.8 percentage points).

From 2017 to 2019, the proportion of candidates who were estimated to achieve A to C grades was higher than the proportion of candidates who achieved A to C grades. In 2022 and 2023, the proportion of candidates achieving A to C grades was higher than the proportion of candidates estimated to achieve A to C grades.

Figure 2: Difference in estimated and awarded A to C rate by year for all National 5, Higher and Advanced Higher entries, 2017 to 2023.

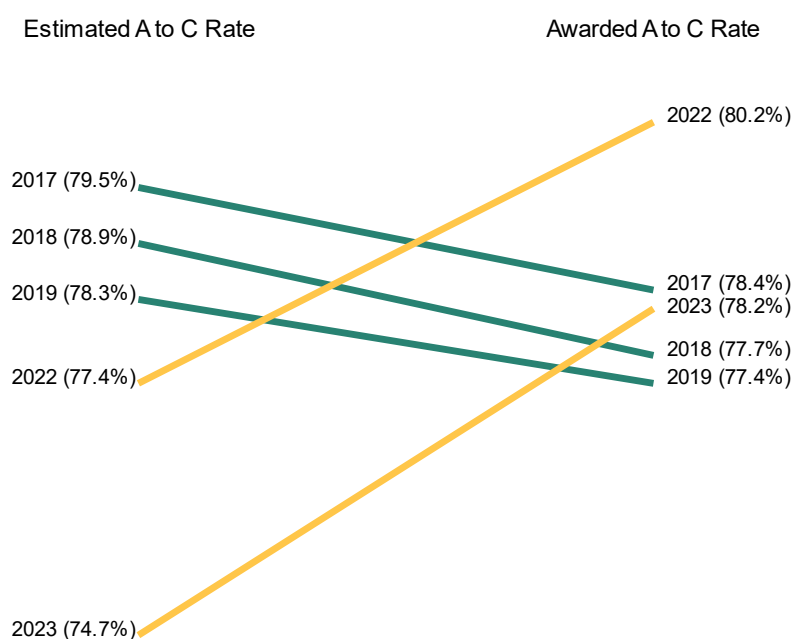


Table 4: Difference between estimated and awarded A to C attainment for National 5, Higher and Advanced Higher entries combined, 2017 to 2023.

Year	Estimated A to C Rate	Awarded A to C Rate	Percentage Point Difference
2017	79.5%	78.4%	-1.0
2018	78.9%	77.7%	-1.2
2019	78.3%	77.4%	-0.8
2022	77.4%	80.2%	2.9
2023	74.7%	78.2%	3.5

## 3.2 Correspondence between estimated and awarded grades across the grade range

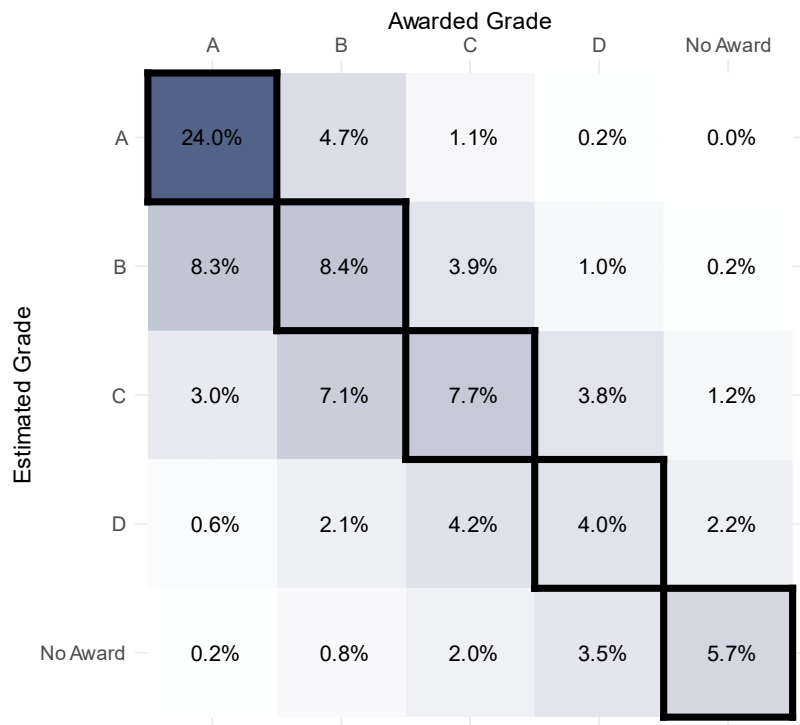
### 3.2.1 2023

In the following plots, the proportion of congruent estimates (where estimates matched each awarded grade) are represented in the values along the diagonal (outlined in black).

Across all levels, in most cases the greatest proportion of candidates achieved their estimated grades (24.0% for A grades, 8.4% for B grades, 7.7% for C grades, 5.7% for No Award). For those candidates estimated to achieve a D grade, a marginally greater proportion achieved a C grade (4.2%) than achieved their estimated D grade (4.0%).



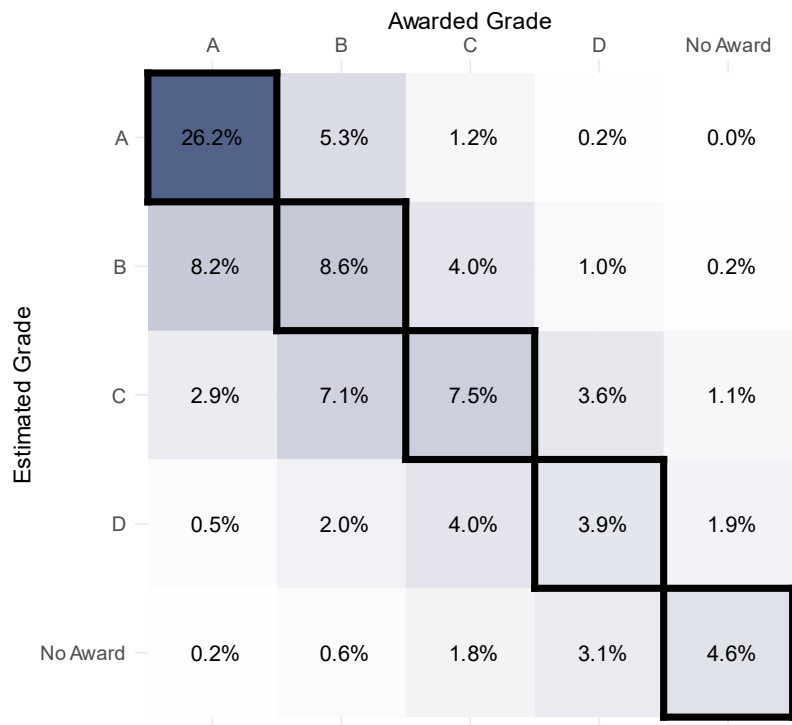
Figure 3: Heatmap showing overall correspondence between estimated and awarded grades, 2023.



### 3.2.2 2022

Across all levels, in most cases the greatest proportion of candidates achieved their estimated grades (26.2% for A grades, 8.6% for B grades, 7.5% for C grades, 4.6% for No Award). For candidates estimated to achieve a D grade, a marginally greater proportion achieved a C grade (4.0%) than achieved their estimated D grade (3.9%).

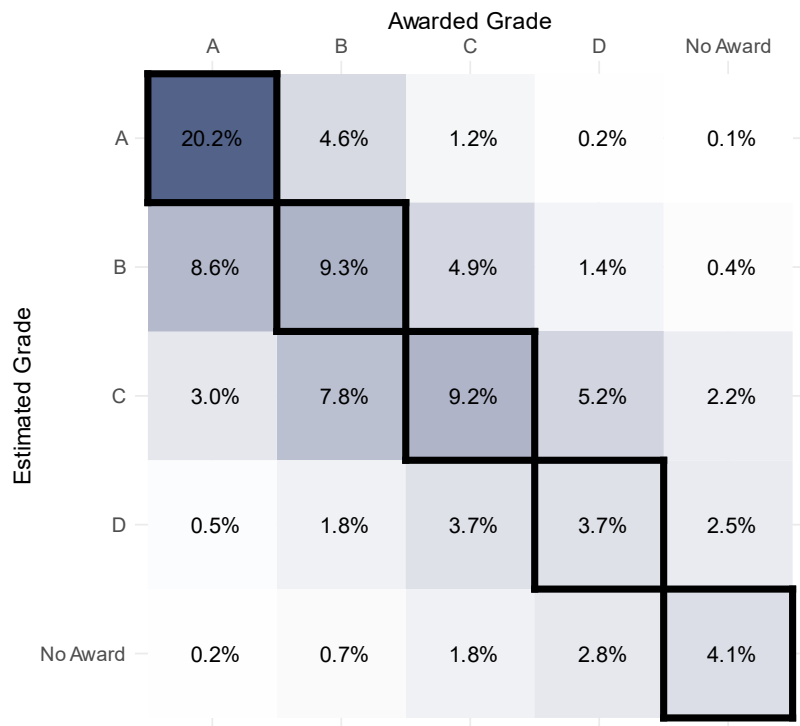
Figure 4: Heatmap showing overall correspondence between estimated and awarded grades, 2022.



### 3.2.3 2019

Across all levels, the greatest proportion of candidates achieved their estimated grades (20.2% for A grades, 9.3% for B grades, 9.2% for C grades, and 4.1% for No Award). The exception to this were those candidates estimated to achieve a D grade who went on to achieve a grade C and grade D where both accounted for 3.7%.

Figure 5: Heatmap showing overall correspondence between estimated and awarded grades, 2019.



### 3.3 Congruence of estimated and awarded grades

In 2023, 31.9% of candidates were estimated to achieve a lower grade than they achieved. This was a greater proportion of candidates than the 30.5% in 2022 (1.4 percentage point difference) and the 30.9% in 2019 (1.0 percentage point difference).

49.8% of candidates achieved a grade that matched their estimated grade in 2023. This is lower than the 50.8% in 2022 (1.0 percentage point difference) but higher than the 46.5% in 2019 (3.3 percentage point difference).

The proportion of candidates that achieved a lower grade than they were estimated to achieve in 2023 was 18.3%. This was lower than both the 18.7% in 2022 (0.4 percentage point difference) and the 22.6% in 2019 (4.3 percentage point difference).

Figure 6: Bar charts showing a comparison of the proportion of grade estimates across all levels that were congruent with the result, lower than the result, and higher than the result, 2017 to 2023.

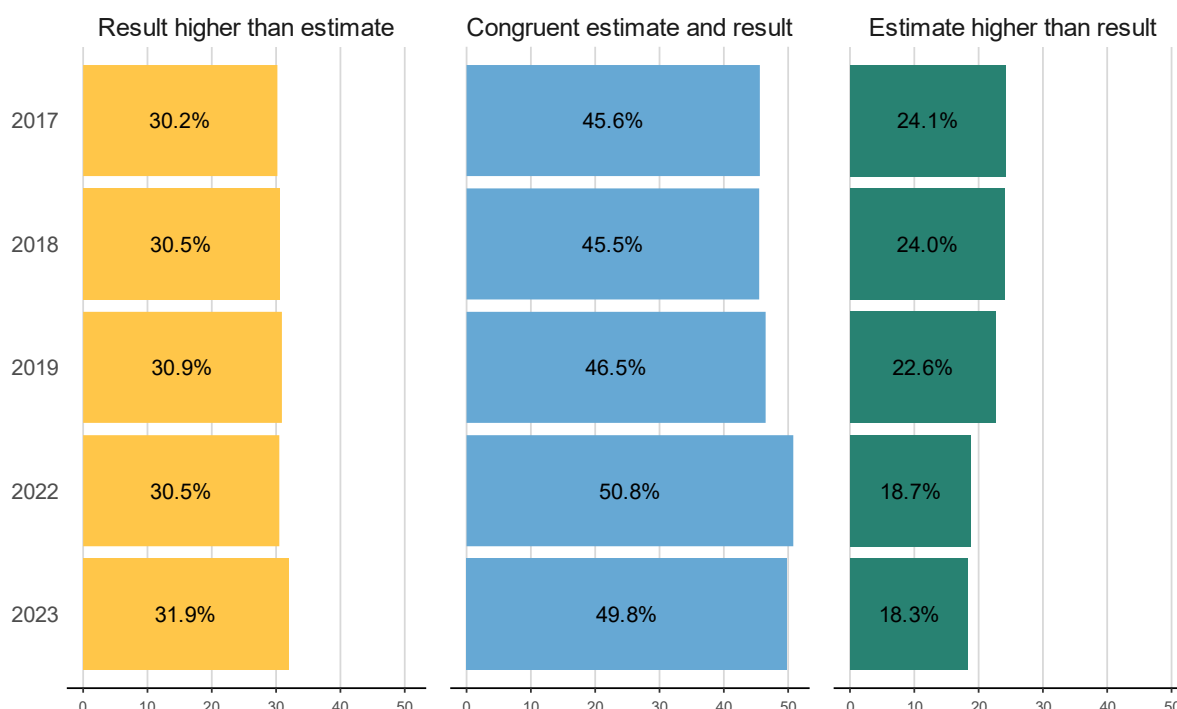


Table 5: Proportion of grade estimates across all levels that were lower than the result, congruent with the result, and higher than the result, 2017 to 2023.

Year	Result higher than estimate	Congruent estimate and result	Estimate higher than result
2017	30.2%	45.6%	24.1%
2018	30.5%	45.5%	24.0%
2019	30.9%	46.5%	22.6%
2022	30.5%	50.8%	18.7%
2023	31.9%	49.8%	18.3%

### 3.3.1 Evaluation of non-congruent estimated and awarded grades

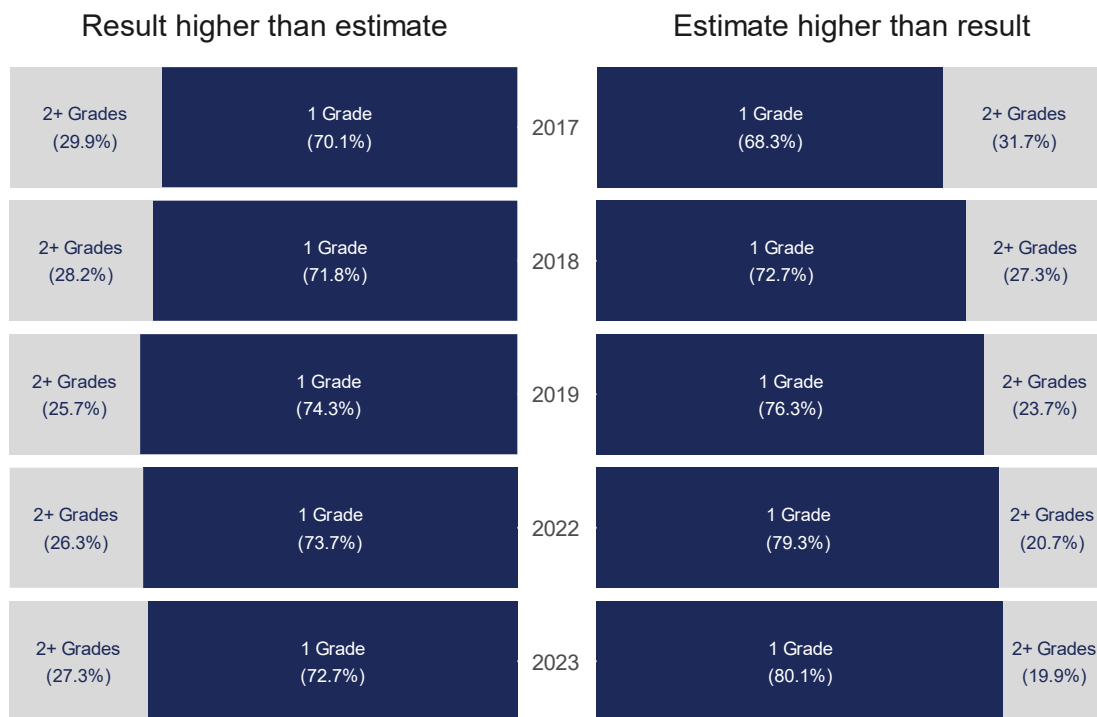
For all non-congruent estimates (where the estimated grade does not match the awarded grade) in each year included in this analysis the majority of estimates only differed by one grade.

In the instances where the awarded grade was higher than the estimated grade in 2023, 72.7% only differed by one grade. This was a lower proportion than the 73.7% in 2022 (1.0 percentage point difference) and 74.3% in 2019 (1.6 percentage point difference), but higher

than the 71.8% in 2018 (0.9 percentage point difference) and 70.1% in 2017 (2.6 percentage point difference).

In 2023, 80.1% of candidates whose estimated grade was higher than their awarded grade differed by one grade. This was a higher proportion than the 79.3% in 2022 (0.8 percentage point difference), 76.3% in 2019 (3.8 percentage point difference), 72.7% in 2018 (7.4 percentage point difference) and the 68.3% in 2017 (11.8 percentage point difference).

Figure 7: Distribution of non-congruent estimates by grade discrepancy.



### 3.4 Pre- and post-pandemic analysis

The proportion of estimated grades that were lower than awarded grades was greater in the two post-pandemic years (2022 and 2023) than the three years prior to 2020 (0.6 percentage point difference).

The percentage of all congruent grades (where candidates' grades were the same as their estimated grade) was lower in the three years prior to 2020 (4.4 percentage point difference).

The proportion where the estimated grade was higher than the candidates' awarded grade was greater in the three years prior to 2020 (5.1 percentage point difference).

Table 6: Proportion of estimated grades across all levels that were lower than the result, congruent with the result, and higher than the result, before and after the pandemic.

Period	Result higher than estimate	Congruent estimate and result	Estimate higher than result
2017 to 2019 (pre-pandemic)	30.6%	45.9%	23.6%
2022 to 2023 (post-pandemic)	31.2%	50.3%	18.5%

## 3.5 Qualification breakdown

### 3.5.1 2023

Across all levels in 2023, qualifications with multiple components tended to have a greater proportion of estimated grades that were lower than results (35.1% for qualifications with three components, and 31.4% for qualifications with two components) than qualifications with one component (28.3%). But qualifications with four components had the lowest proportion of estimated grades that were lower than results (24.6%). This difference was largest between qualifications with three and four components (10.5 percentage point difference).

Across all levels in 2023, qualifications with four components had the highest proportion of congruent grade estimates (59.1%). Qualifications with two components had a higher proportion of congruent estimates (50.2%) than qualifications with one (47.8%) or three components (47.6%). This difference was largest between qualifications with three and four components (11.5 percentage point difference).

Across all levels in 2023, qualifications with fewer components had a greater proportion of estimated grades that were higher than results. The greatest proportion of estimated grades that were higher than results was for qualifications with one component (23.9%). This was greater than for qualifications with two components (18.4%), three components (17.3%), and four components (16.3%). This difference was largest between qualifications with one and four components (7.6 percentage point difference).

*Table 7: Proportion of estimated grades across all levels that were congruent with the result, lower than the result, and higher than the result, by the number of components in the qualification in 2023.*

<b>Number of Components</b>	<b>Result higher than estimate</b>	<b>Congruent estimate and result</b>	<b>Estimate higher than result</b>
1	28.3%	47.8%	23.9%
2	31.4%	50.2%	18.4%
3	35.1%	47.6%	17.3%
4	24.6%	59.1%	16.3%

### **3.5.2 2022**

Across all levels in 2022, qualifications with three components had the highest proportion of estimated grades that were lower than results (33.2%). This was a greater proportion than for qualifications with four (27.1%), two (30.3%) and one (26.9%) components. This difference was largest between qualifications with three and one components (6.3 percentage point difference).

Across all levels in 2022, qualifications with four components had the highest proportion of congruent estimates (58.1%), compared to qualifications with three (49.4%), two (51.0%) or one (49.6%) components. This difference was largest between qualifications with four and three components (8.7 percentage point difference).

Across all levels in 2022, qualifications with one component had a greater proportion of estimated grades that were higher than results (23.5%) than for qualifications with two (18.8%), three (17.4%), and four (14.8%) components. This difference was largest between qualifications with one and four components (8.7 percentage point difference).

*Table 8: Proportion of estimated grades across all levels that were congruent with the result, lower than the result, and higher than the result, by the number of components in the qualification in 2022.*

<b>Number of Components</b>	<b>Result higher than estimate</b>	<b>Congruent estimate and result</b>	<b>Estimate higher than result</b>
1	26.9%	49.6%	23.5%
2	30.3%	51.0%	18.8%
3	33.2%	49.4%	17.4%
4	27.1%	58.1%	14.8%

### 3.5.3 2019

Across all levels in 2019, qualifications with fewer components tended to have a greater proportion of estimated grades that were lower than results (31.4% for qualifications with one component, 30.5% for qualifications with two components, and 31.9% for qualifications with three components) than for qualifications with four (29.6%) or five (27.2%) components. This difference was largest between qualifications with three and five components (4.7 percentage point difference).

Across all levels in 2019, qualifications with more components had a greater proportion of congruent estimates. Qualifications with five components had a higher proportion of congruent estimates (58.0%) than qualifications with four (51.0%), three (46.2%), two (45.3%), or one (45.4%) components. This difference was largest between qualifications with five and two components (12.7 percentage point difference).

Across all levels in 2019, qualifications with multiple components tended to have a smaller proportion of estimated grades that were higher than results (14.8% for qualifications with five components, 19.4% for qualifications with four components, and 21.9% for qualifications with three components) than qualifications with one (23.2%) or two components (24.3%). This difference was largest between qualifications with two and five components (9.5 percentage point difference).

*Table 9: Proportion of estimated grades across all levels that were congruent with the result, lower than the result, and higher than the result, by the number of components in the qualification in 2019.*

<b>Number of Components</b>	<b>Result higher than estimate</b>	<b>Congruent estimate and result</b>	<b>Estimate higher than result</b>
1	31.4%	45.4%	23.2%
2	30.5%	45.3%	24.3%
3	31.9%	46.2%	21.9%
4	29.6%	51.0%	19.4%
5	27.2%	58.0%	14.8%

## 3.6 Relationship between estimated and awarded grades by subject

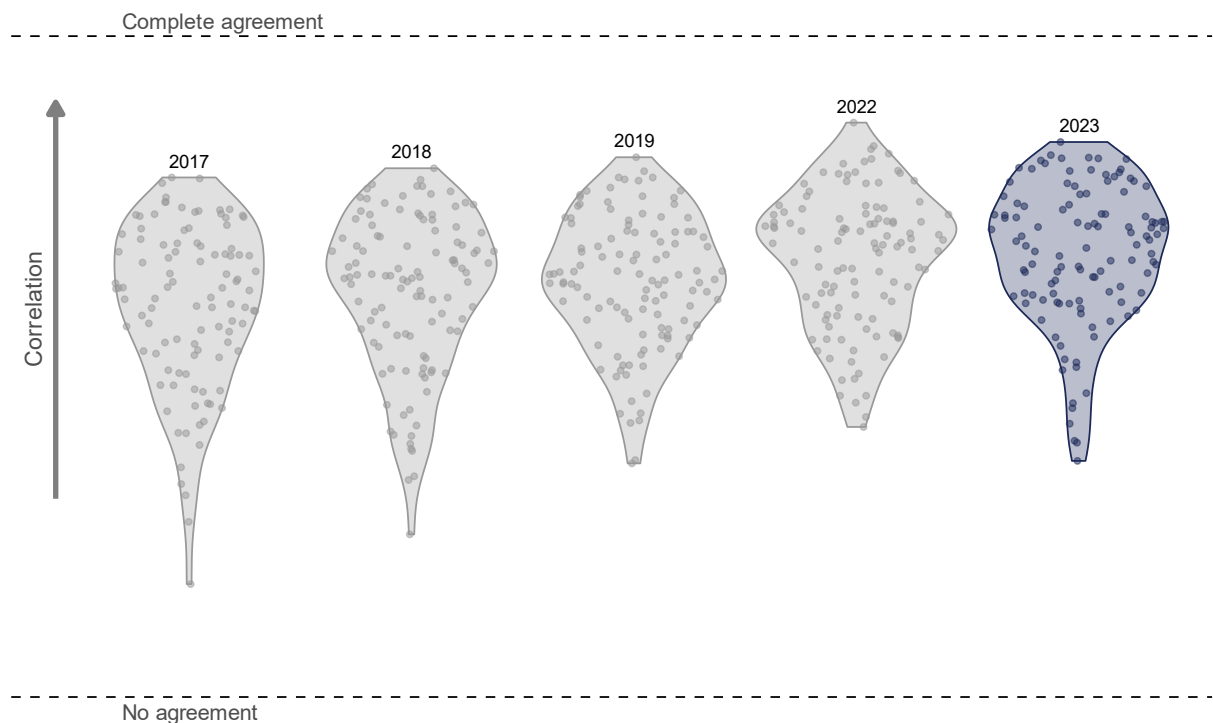
At subject level, a range of factors are expected to impact the correspondence between estimates and results. It is possible to collapse the correspondence between all the individual estimates and results for an individual qualification to a single metric, the correlation. The correlation value is a value between 0 and 1, and is based on the strength of the relationship between the two values. If all estimated grades matched awarded grades the correlation between estimates and results would equal 1. On the other hand, if estimates were randomly assigned, they would not match results in most cases and the correlation would be 0.



The figure below shows the correlation between estimates and results for all National 5, Higher and Advanced Higher qualifications (with an entry size of at least 100) combined. The correlation for each qualification is represented by a point and the shaded violin-shape around the points shows the density of the points for each correlation value: where the violin thickens, more qualifications share similar correlation values.

The distribution of correlation values has a slightly longer tail in 2023 than in 2022 indicating a greater spread in the alignment between estimated and awarded grades. The widest point in the violin sits at a higher point in both 2022 and 2023 than in the three years pre-2020, suggesting that for the majority of qualifications there was greater alignment between estimates and results in 2023 than was seen prior to the pandemic.

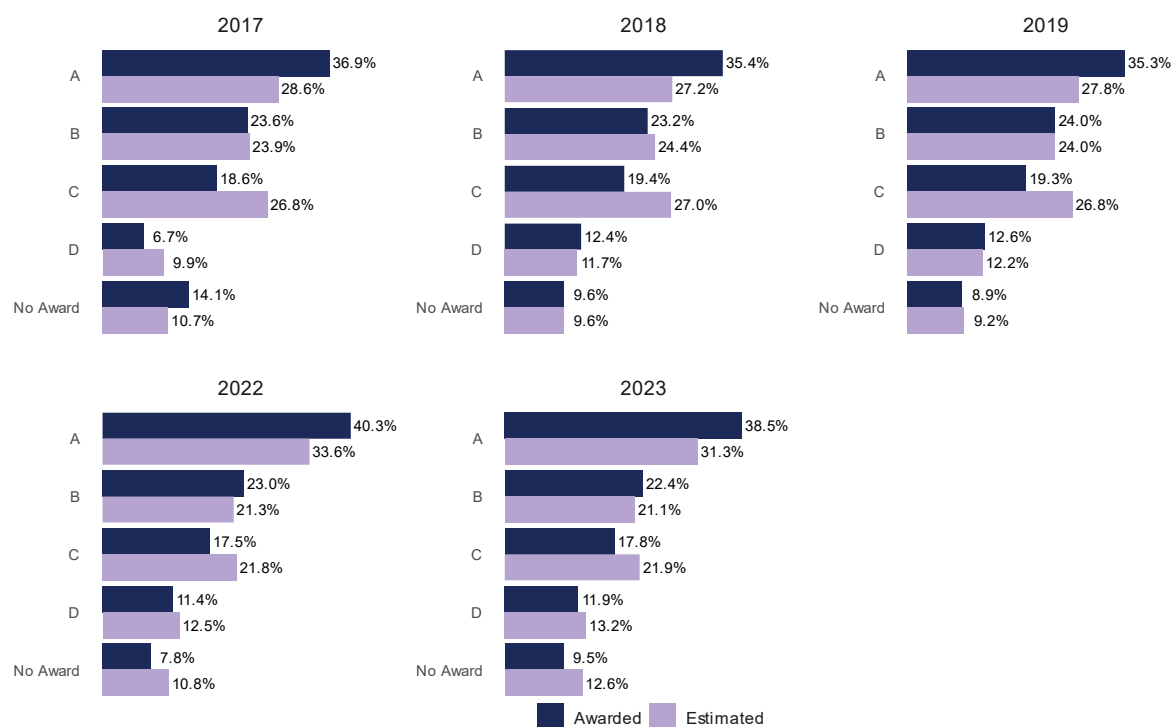
*Figure 8: Variation in the correspondence between estimates and results (the correlation), 2017 to 2023.*



# 4 National 5

## 4.1 Distribution of estimates and results

Figure 9: Comparison of National 5 grade distributions for estimated and awarded grades, 2017 to 2023.



### 4.1.1 A rates

The proportion of National 5 candidates who achieved A grades decreased to 38.5% in 2023 from 40.3% in 2022 (1.8 percentage point difference), but increased from 35.3% in 2019 (3.2 percentage point difference). The proportion of National 5 candidates with an estimated A grade decreased to 31.3% in 2023 from 33.6% in 2022 (2.3 percentage point difference), but increased from 27.8% in 2019 (3.5 percentage point difference).

In 2023, there was a wider gap between the number of National 5 candidates achieving A grades and the number of National 5 candidates estimated to achieve A grades (7.3 percentage points) than in 2022 (6.7 percentage points), but narrower than in 2019 (7.5 percentage points).

In all years across the period, the proportion of National 5 candidates achieving A grades was higher than the proportion of candidates estimated to achieve A grades.

*Table 10: Difference between estimated and awarded grade A attainment for National 5 entries, 2017 to 2023.*

<b>Year</b>	<b>Estimated A Rate</b>	<b>Awarded A Rate</b>	<b>Percentage Point Difference</b>
2017	28.6%	36.9%	8.3
2018	27.2%	35.4%	8.2
2019	27.8%	35.3%	7.5
2022	33.6%	40.3%	6.7
2023	31.3%	38.5%	7.3

### **4.1.2 A to C rates**

The proportion of National 5 candidates who achieved A to C grades decreased to 78.7% in 2023 from 80.8% in 2022 (2.1 percentage point difference), but increased from 78.6% in 2019 (0.1 percentage point difference). The proportion of National 5 candidates estimated to achieve A to C grades decreased to 74.2% in 2023 from 76.7% in 2022 (2.5 percentage point difference), and decreased from 78.6% in 2019 (4.4 percentage point difference).

In 2023, there was a wider gap between the number of National 5 candidates achieving A to C grades and the number of candidates estimated to achieve A to C grades (4.4 percentage points) than in 2022 (4.1 percentage points) and 2019 (0.0 percentage points).

From 2017 to 2019, the proportion of National 5 candidates who were estimated to achieve A to C grades was either higher or the same as the proportion of candidates who achieved A to C grades. In 2022 and 2023, the proportion of National 5 candidates achieving A to C grades was higher than the proportion of National 5 candidates estimated to achieve A to C grades.

Figure 10: Difference in estimated and awarded A to C rate by year for National 5 entries, 2017 to 2023.

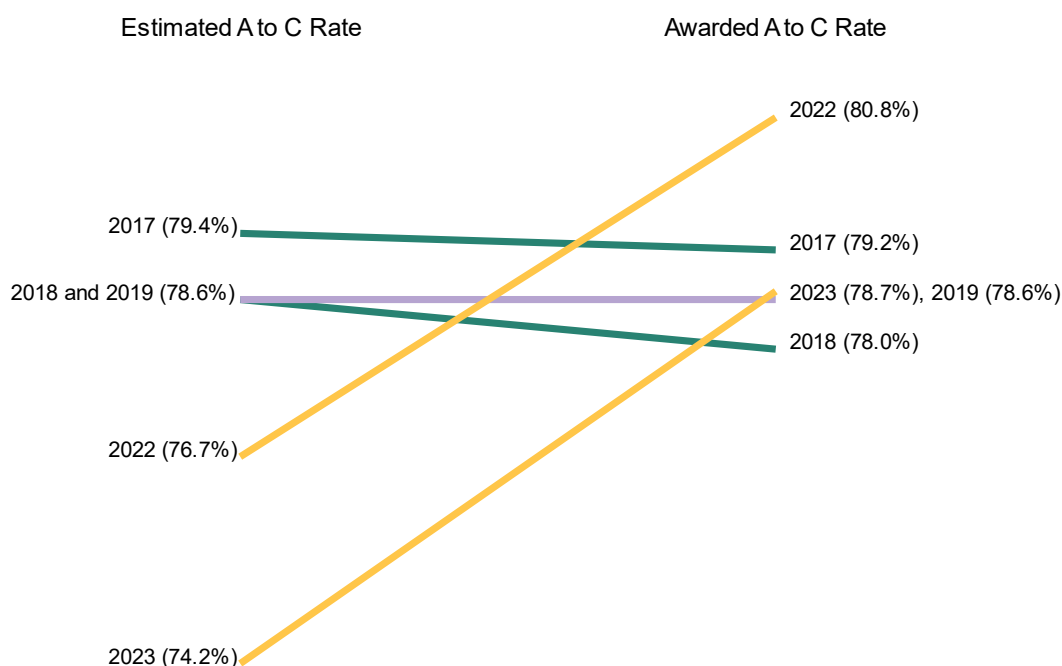


Table 11: Difference between estimated and awarded A to C attainment for National 5 entries, 2017 to 2023.

Year	Estimated A to C Rate	Awarded A to C Rate	Percentage Point Difference
2017	79.4%	79.2%	-0.2
2018	78.6%	78.0%	-0.6
2019	78.6%	78.6%	0.0
2022	76.7%	80.8%	4.1
2023	74.2%	78.7%	4.4

## 4.2 Congruence of estimated and awarded grades

In 2023, 32.4% of National 5 candidates were estimated to achieve a lower grade than they achieved. This was a greater proportion of candidates than the 31.7% in 2022 (0.7 percentage point difference) and the 31.3% in 2019 (1.1 percentage point difference).

51.5% of National 5 candidates achieved a grade that matched their estimated grade in 2023. This is lower than the 52.4% in 2022 (0.9 percentage point difference) and higher than the 48.4% in 2019 (3.1 percentage point difference).

The proportion of National 5 candidates that achieved a lower grade than they were estimated to achieve in 2023 was 16.0%. This was marginally higher than the 15.9% in 2022 (0.1 percentage point difference), but lower than the 20.3% in 2019 (4.3 percentage point difference).

Figure 11: Bar charts showing a comparison of the proportion of National 5 grade estimates that were congruent with the result, lower than the result, and higher than the result, 2017 to 2023.

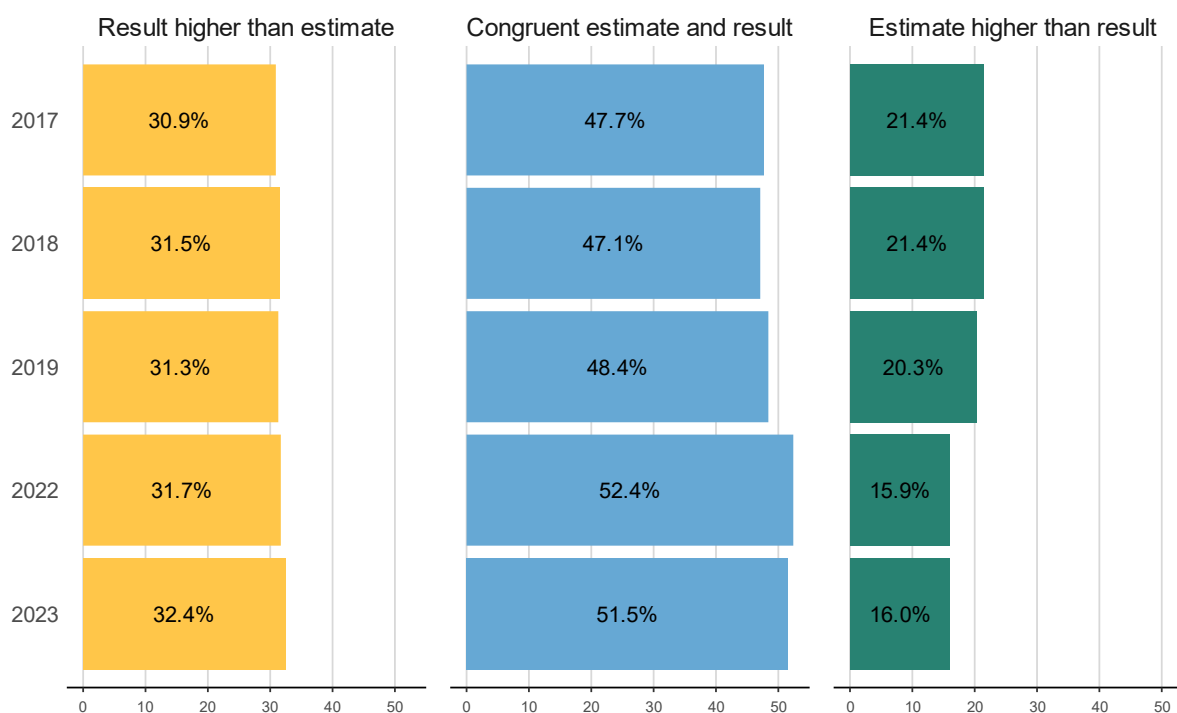


Table 12: Proportion of grade estimates at National 5 that were lower than the result, congruent with the result, and higher than the result, 2017 to 2023.

Year	Result higher than estimate	Congruent estimate and result	Estimate higher than result
2017	30.9%	47.7%	21.4%
2018	31.5%	47.1%	21.4%
2019	31.3%	48.4%	20.3%
2022	31.7%	52.4%	15.9%
2023	32.4%	51.5%	16.0%

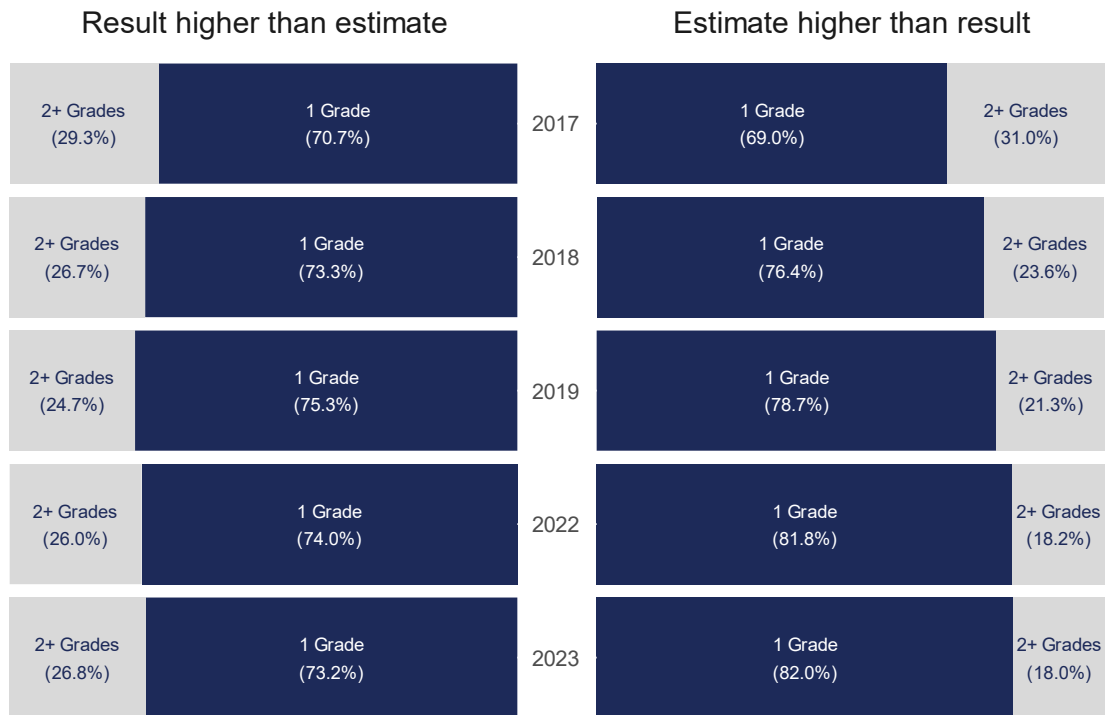
#### 4.2.1 Evaluation of non-congruent estimated and awarded grades

For all non-congruent National 5 estimates (where the estimated grade does not match the awarded grade) in each year across the period the majority of estimates only differed by one grade.

In the instances where the awarded grade was higher than the estimated grade in 2023, 73.2% only differed by one grade. This was a lower proportion than the 74.0% in 2022 (0.8 percentage point difference), 75.3% in 2019 (2.0 percentage point difference), and 73.3% in 2018 (0.1 percentage point difference). It was however a higher proportion than the 70.7% in 2017 (2.5 percentage point difference).

In 2023, 82.0% of candidates whose estimated grade was higher than their awarded grade differed by one grade. This was a higher proportion than the 81.8% in 2022 (0.2 percentage point difference), the 78.7% in 2019 (3.3 percentage point difference), the 76.4% in 2018 (5.6 percentage point difference) and the 69.0% in 2017 (13.0 percentage point difference).

Figure 12: Distribution of non-congruent estimates by grade discrepancy at National 5.



### 4.3 Pre- and post-pandemic analysis

The proportion of estimated grades that were lower than awarded grades was greater in the two post-pandemic years (2022 and 2023) than the three years prior to 2020 (0.8 percentage point difference).

The percentage of all congruent grades at National 5 (where candidates' grade was the same as the estimated grade) was lower in the three years prior to 2020 (4.3 percentage point difference).

The proportion where the estimated grade was higher than the candidates' awarded grade was greater in the three years prior to 2020 (5.0 percentage point difference).

Table 13: Proportion of estimated grades at National 5 that were lower than the result, congruent with the result, and higher than the result, before and after the pandemic.

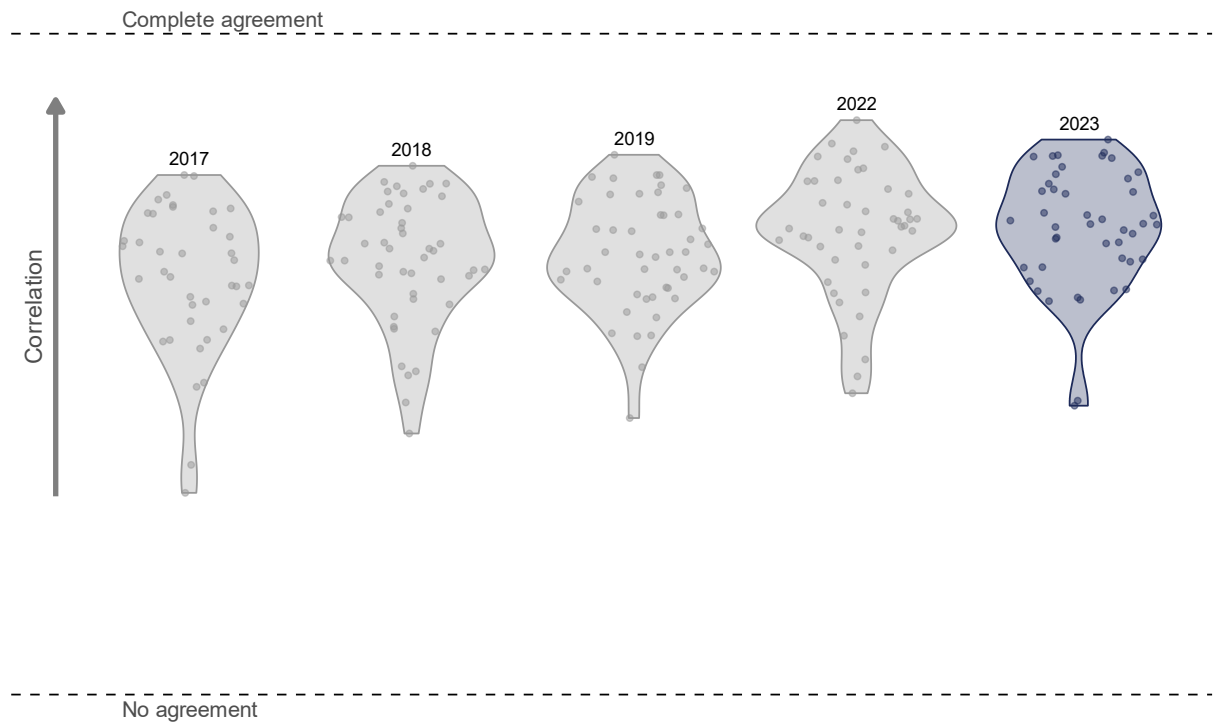
Period	Result higher than estimate	Congruent estimate and result	Estimate higher than result
2017 to 2019 (pre-pandemic)	31.3%	47.7%	21.0%
2022 to 2023 (post-pandemic)	32.1%	52.0%	16.0%

## 4.4 Relationship between estimated and awarded grades by subject

The figure below shows the correlation between estimates and results for all National 5 qualifications (with an entry size of at least 100).

The distribution of correlation values has a slightly longer tail in 2023 indicating a greater spread in the alignment between estimated and awarded grades across different qualifications, compared to 2022. The widest point in the violin sits at a higher point in 2023 than in the years 2017 to 2019, and at a similar point compared to 2022 suggesting that, for the majority of qualifications, there was a similar alignment between estimates and results in 2023 and 2022, and a greater alignment than in 2017, 2018 and 2019.

Figure 13: Variation in the correspondence between National 5 estimates and results (the correlation), 2017 to 2023.

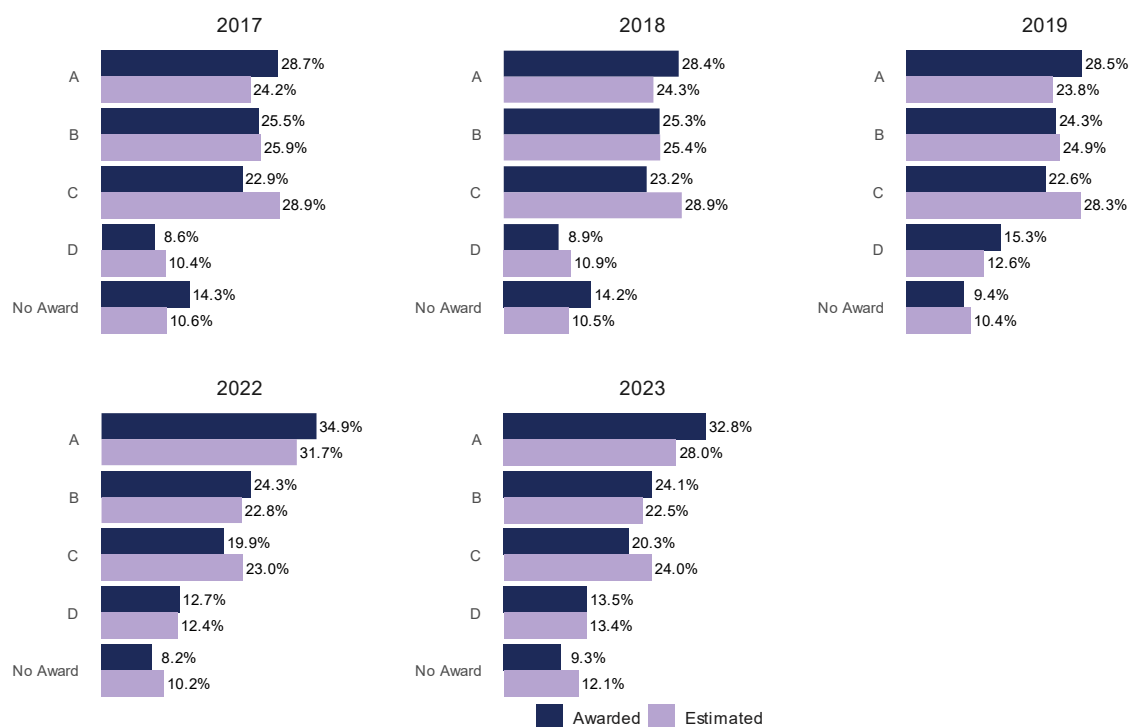




# 5 Higher

## 5.1 Distribution of estimated and awarded grades

Figure 14: Comparison of Higher grade distributions for estimated and awarded grades, 2017 to 2023.



### 5.1.1 A rates

The proportion of Higher candidates who achieved A grades decreased to 32.8% in 2023 from 34.9% in 2022 (2.1 percentage point difference), but increased from 28.5% in 2019 (4.3 percentage point difference). The proportion of Higher candidates with an estimated A grade decreased to 28.0% in 2023 from 31.7% in 2022 (3.7 percentage point difference), but increased from 23.8% in 2019 (4.2 percentage point difference).

In 2023, there was a wider gap between the number of Higher candidates achieving A grades and the number of Higher candidates estimated to achieve A grades (4.8 percentage points) than in 2022 (3.2 percentage points), and marginally wider than in 2019 (4.7 percentage points).

In all years across the period, the proportion of Higher candidates achieving A grades was higher than the proportion of candidates estimated to achieve A grades.

Table 14: Difference between estimated and awarded grade A attainment for Higher entries, 2017 to 2023.

Year	Estimated A Rate	Awarded A Rate	Percentage Point Difference
2017	24.2%	28.7%	4.5
2018	24.3%	28.4%	4.1
2019	23.8%	28.5%	4.7
2022	31.7%	34.9%	3.2
2023	28.0%	32.8%	4.8

### 5.1.2 A to C rates

The proportion of Higher candidates who achieved A to C grades decreased to 77.1% in 2023 from 79.1% in 2022 (2.0 percentage point difference), but increased from 75.3% in 2019 (1.8 percentage point difference). The proportion of Higher candidates estimated to achieve A to C grades decreased to 74.5% in 2023 from 77.5% in 2022 (3.0 percentage point difference), and decreased from 77.0% in 2019 (2.5 percentage point difference).

In 2023, there was a wider gap between the number of Higher candidates achieving A to C grades and the number of candidates estimated to achieve A to C grades (2.7 percentage points) than in 2022 (1.7 percentage points) and 2019 (1.7 percentage points).

From 2017 to 2019, the proportion of Higher candidates who were estimated to achieve A to C grades was higher than the proportion of candidates who achieved A to C grades. In 2022 and 2023, the proportion of Higher candidates achieving A to C grades was higher than the proportion of Higher candidates estimated to achieve A to C grades.

Figure 15: Difference in estimated and awarded A to C rate by year for Higher entries, 2017 to 2023.

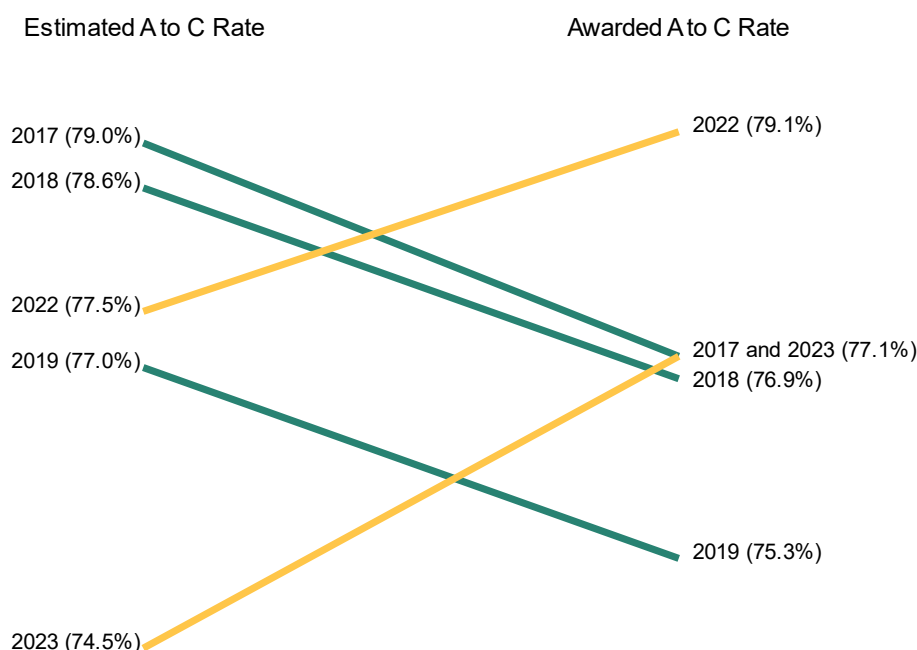


Table 15: Difference between estimated and awarded A to C attainment for Higher entries, 2017 to 2023.

Year	Estimated A to C Rate	Awarded A to C Rate	Percentage Point Difference
2017	79.0%	77.1%	-1.9
2018	78.6%	76.9%	-1.7
2019	77.0%	75.3%	-1.7
2022	77.5%	79.1%	1.7
2023	74.5%	77.1%	2.7

## 5.2 Congruence of estimates and results

In 2023, 31.7% of Higher candidates were estimated to achieve a lower grade than they achieved. This was a greater proportion of candidates than the 29.5% in 2022 (2.2 percentage point difference) and the 30.7% in 2019 (1.0 percentage point difference).

47.4% of Higher candidates achieved a grade that matched their estimated grade in 2023. This is lower than the 48.8% in 2022 (1.4 percentage point difference) and higher than 44.0% in 2019 (3.4 percentage point difference).

The proportion of Higher candidates that achieved a lower grade than they were estimated to achieve in 2023 was 20.9%. This was lower than the 21.8% in 2022 (0.9 percentage point difference) and the 25.3% in 2019 (4.4 percentage point difference).

Figure 16: Bar charts showing a comparison of the proportion of Higher grade estimates that were congruent with the result, lower than the result, and higher than the result, 2017 to 2023.

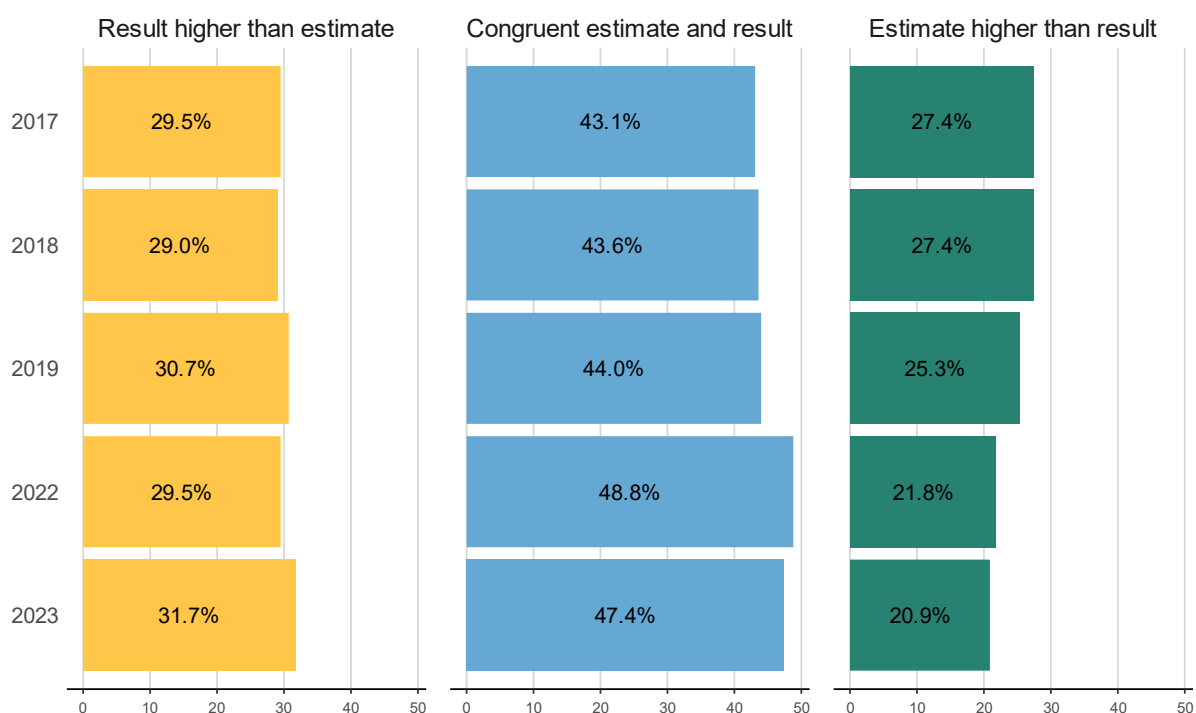


Table 16: Proportion of grade estimates at Higher that were lower than the result, congruent with the result, and higher than the result, 2017 to 2023.

Year	Result higher than estimate	Congruent estimate and result	Estimate higher than result
2017	29.5%	43.1%	27.4%
2018	29.0%	43.6%	27.4%
2019	30.7%	44.0%	25.3%
2022	29.5%	48.8%	21.8%
2023	31.7%	47.4%	20.9%

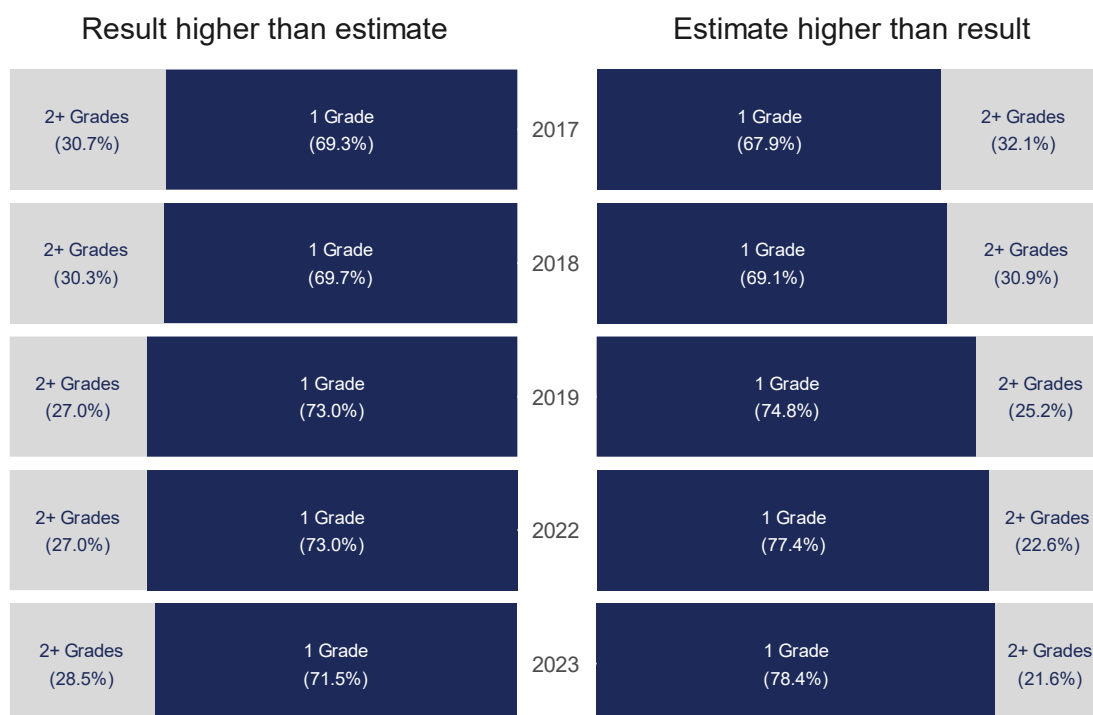
### 5.2.1 Evaluation of non-congruent estimated and awarded grades

For all non-congruent Higher estimates (where the estimated grade does not match the awarded grade) in each year across the period, the majority of estimates only differed by one grade.

In the instances where the awarded grade was higher than the estimated grade in 2023, 71.5% only differed by one grade. This was a lower proportion than the 73.0% in 2022 (1.5 percentage point difference) and 73.0% in 2019 (1.5 percentage point difference). It was however a higher proportion than the 69.7% in 2018 (1.8 percentage point difference) and 69.3% in 2017 (2.2 percentage point difference).

In 2023, 78.4% of candidates whose estimated grade was higher than their awarded grade differed by one grade. This was a higher proportion than the 77.4% in 2022 (1.0 percentage point difference), the 74.8% in 2019 (3.6 percentage point difference), the 69.1% in 2018 (9.3 percentage point difference) and the 67.9% in 2017 (10.5 percentage point difference).

Figure 17: Distribution of non-congruent estimates by grade discrepancy at Higher.



### 5.3 Pre- and post-pandemic analysis

The proportion of estimated grades that were lower than awarded grades was greater in the two post-pandemic years (2022 and 2023) than the three years prior to 2020 (0.9 percentage point difference).

The percentage of all congruent grades at Higher (where candidates' grade was the same as the estimated grade) was lower in the three years prior to 2020 (4.6 percentage point difference).

The proportion of estimated grades that were higher than the candidates' awarded grade was greater in the three years prior to 2020 (5.4 percentage point difference).

Table 17: Proportion of estimated grades at Higher that were lower than the result, congruent with the result, and higher than the result, before and after the pandemic.

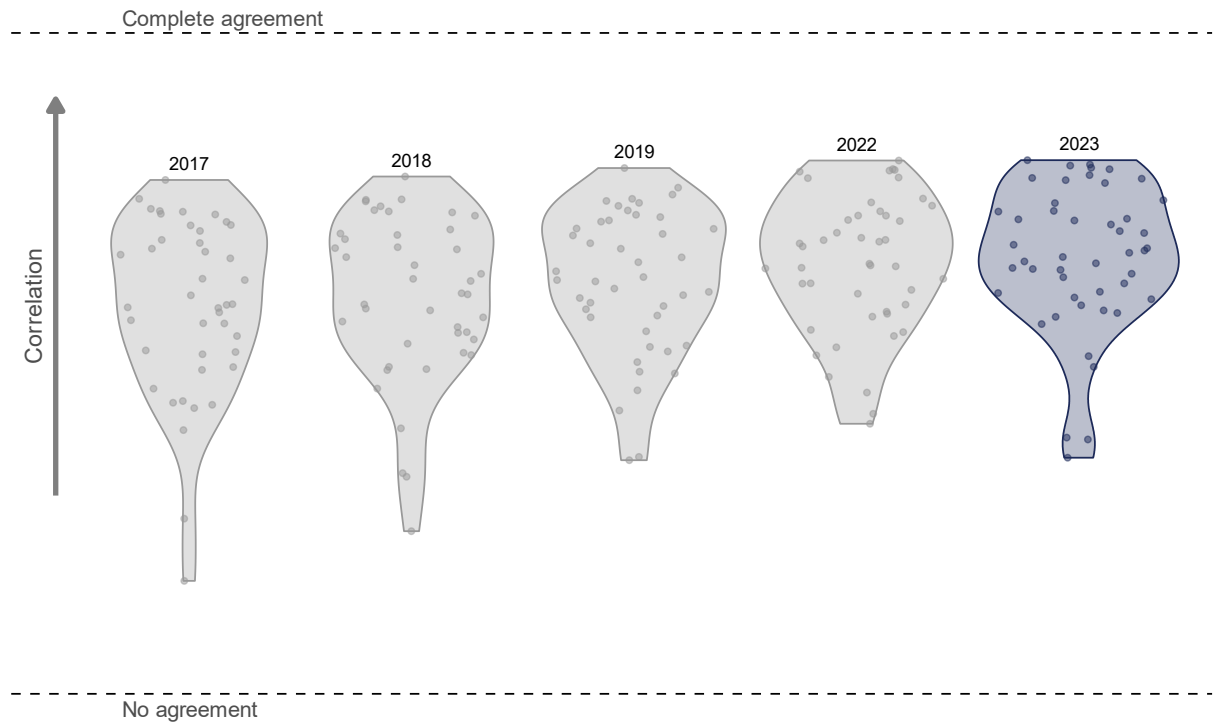
Period	Result higher than estimate	Congruent estimate and result	Estimate higher than result
2017 to 2019 (pre-pandemic)	29.7%	43.5%	26.7%
2022 to 2023 (post-pandemic)	30.6%	48.1%	21.3%

## 5.4 Relationship between estimated and awarded grades by subject

The figure below shows the correlation between estimates and results for all Higher qualifications (with an entry size of at least 100).

The distribution of correlation values has a slightly longer tail in 2023 than in 2022, indicating a greater spread in the alignment between estimated and awarded grades across different qualifications. But the tail is shorter than observed across the period 2017 to 2019. The widest point in the violin sits at a slightly lower position when compared to 2022, suggesting that there was a slight decrease in the alignment between estimates and results in 2023 compared to 2022.

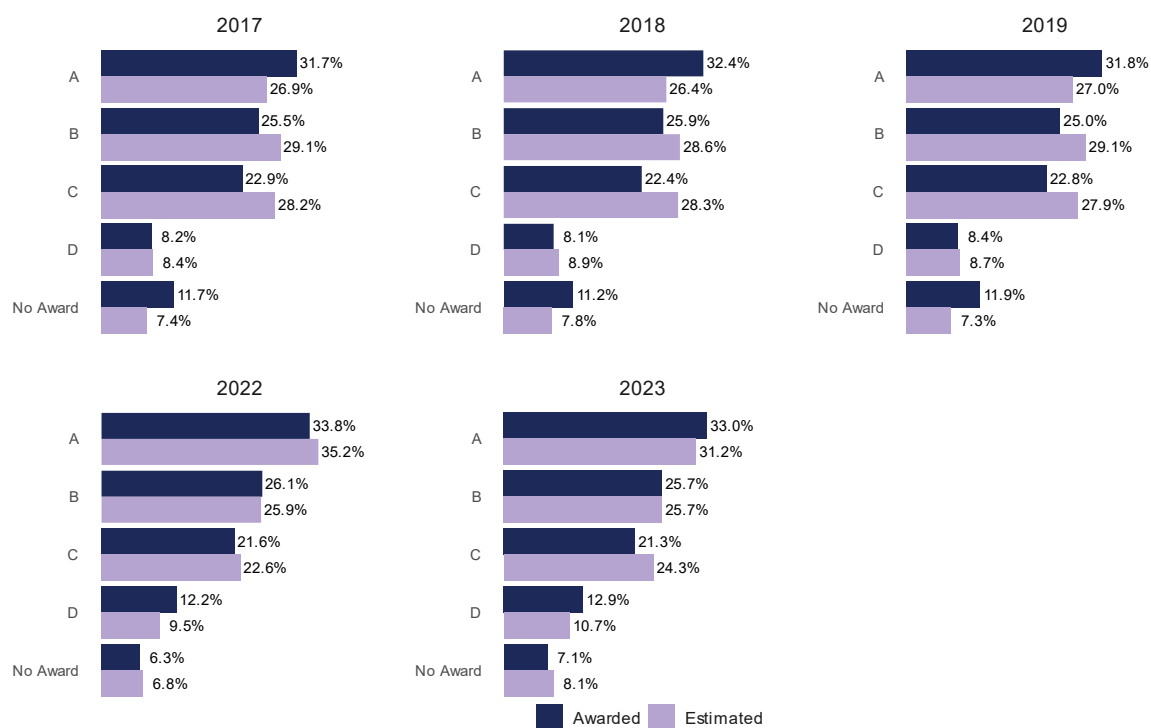
Figure 18: Variation in the correspondence between Higher estimates and results (the correlation), 2017 to 2023.



# 6 Advanced Higher

## 6.1 Distribution of estimated and awarded grades

Figure 19: Comparison of Advanced Higher grade distributions for estimated and awarded grades, 2017 to 2023.



### 6.1.1 A rates

The proportion of Advanced Higher candidates who achieved A grades decreased to 33.0% in 2023 from 33.8% in 2022 (0.8 percentage point difference), but increased from 31.8% in 2019 (1.2 percentage point difference). The proportion of Advanced Higher candidates with an estimated A grade decreased to 31.2% in 2023 from 35.2% in 2022 (4.0 percentage point difference), but increased from 27.0% in 2019 (4.2 percentage point difference).

In 2023, there was a wider gap between the number of Advanced Higher candidates achieving A grades and the number of Advanced Higher candidates estimated to achieve A grades (1.9 percentage points) than in 2022 (1.4 percentage points), but narrower than in 2019 (4.8 percentage points).

In 2022, a greater proportion of Advanced Higher candidates were estimated to achieve A grades than achieved an A. In all other years across the period, the proportion of Advanced Higher candidates achieving A grades was higher than the proportion of candidates estimated to achieve A grades.



*Table 18: Difference between estimated and awarded grade A attainment for Advanced Higher entries, 2017 to 2023.*

<b>Year</b>	<b>Estimated A Rate</b>	<b>Awarded A Rate</b>	<b>Percentage Point Difference</b>
2017	26.9%	31.7%	4.8
2018	26.4%	32.4%	6.0
2019	27.0%	31.8%	4.8
2022	35.2%	33.8%	-1.4
2023	31.2%	33.0%	1.9

### **6.1.2 A to C rates**

The proportion of Advanced Higher candidates who achieved A to C grades decreased to 80.0% in 2023 from 81.5% in 2022 (1.5 percentage point difference), but increased from 79.6% in 2019 (0.4 percentage point difference). The proportion of Advanced Higher candidates estimated to achieve A to C grades decreased to 81.2% in 2023 from 83.7% in 2022 (2.5 percentage point difference), and decreased from 84.0% in 2019 (2.8 percentage point difference).

In 2023, there was a narrower gap between the number of Advanced Higher candidates achieving A to C grades and the number of candidates estimated to achieve A to C grades (1.2 percentage points) than in 2022 (2.1 percentage points), this was also narrower than in 2019 (4.4 percentage points).

In each year across the period, the proportion of Advanced Higher candidates who were estimated to achieve A to C grades was higher than the proportion of candidates who achieved A to C grades.

Figure 20: Difference in estimated and awarded A to C rate by year for Advanced Higher entries, 2017 to 2023.

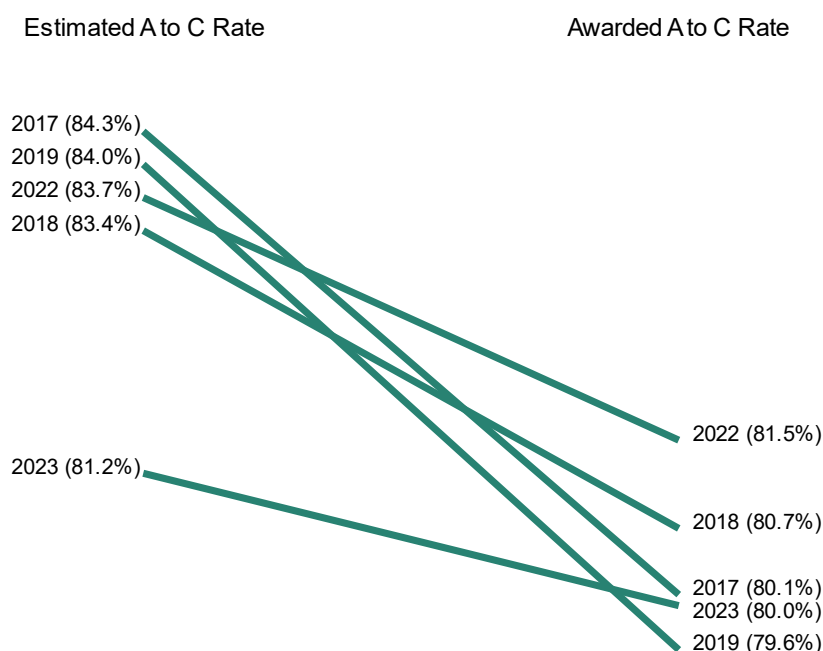


Table 19: Difference between estimated and awarded A to C attainment for Advanced Higher entries, 2017 to 2023.

Year	Estimated A to C Rate	Awarded A to C Rate	Percentage Point Difference
2017	84.3%	80.1%	-4.1
2018	83.4%	80.7%	-2.6
2019	84.0%	79.6%	-4.4
2022	83.7%	81.5%	-2.1
2023	81.2%	80.0%	-1.2

## 6.2 Congruence of estimates and results

In 2023, 27.7% of Advanced Higher candidates were estimated to achieve a lower grade than they achieved. This was a greater proportion of candidates than the 24.7% in 2022 (3.0 percentage point difference), but marginally lower than the 27.8% in 2019 (0.1 percentage point difference).

46.7% of Advanced Higher candidates achieved a grade that matched their estimated grade in 2023. This is lower than the 47.5% in 2022 (0.8 percentage point difference) but higher than the 43.5% in 2019 (3.2 percentage point difference).

The proportion of Advanced Higher candidates that achieved a lower grade than they were estimated to achieve in 2023 was 25.6%. This was lower than the 27.8% in 2022 (2.2 percentage point difference) and the 28.7% in 2019 (3.1 percentage point difference).

Figure 21: Bar charts showing a comparison of the proportion of Advanced Higher grade estimates that were congruent with the result, lower than the result, and higher than the result, 2017 to 2023.

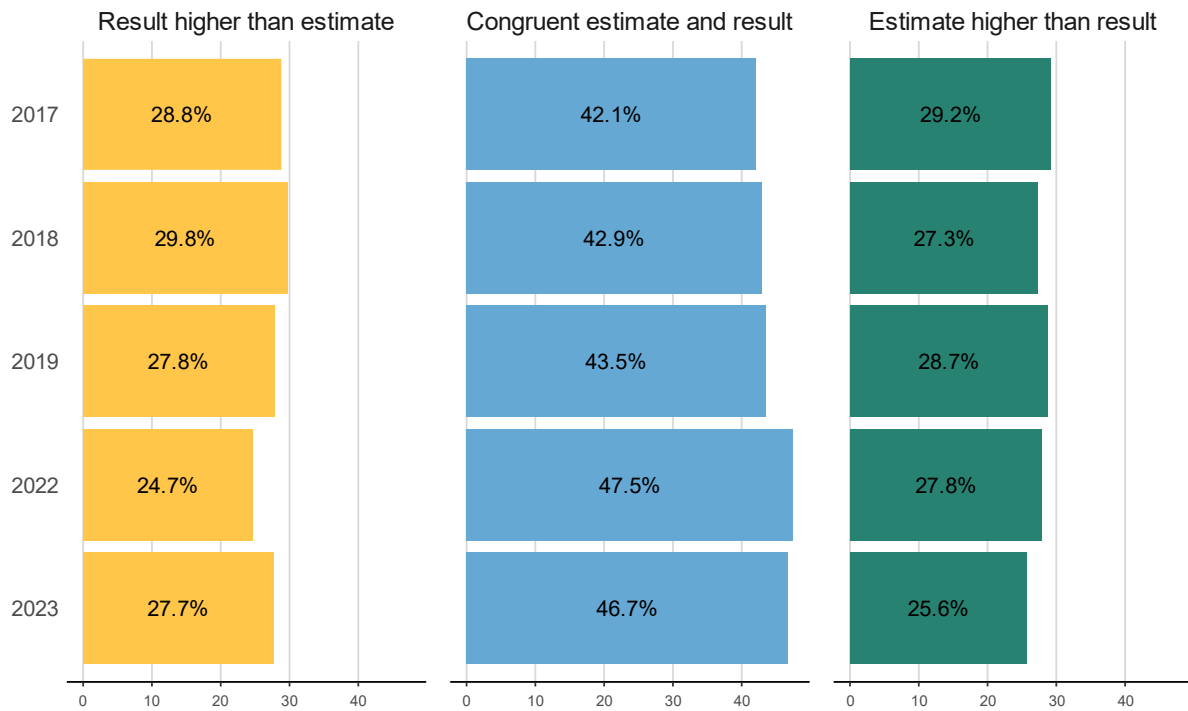


Table 20: Proportion of grade estimates at Advanced Higher that were lower than the result, congruent with the result, and higher than the result, 2017 to 2023.

Year	Result higher than estimate	Congruent estimate and result	Estimate higher than result
2017	28.8%	42.1%	29.2%
2018	29.8%	42.9%	27.3%
2019	27.8%	43.5%	28.7%
2022	24.7%	47.5%	27.8%
2023	27.7%	46.7%	25.6%

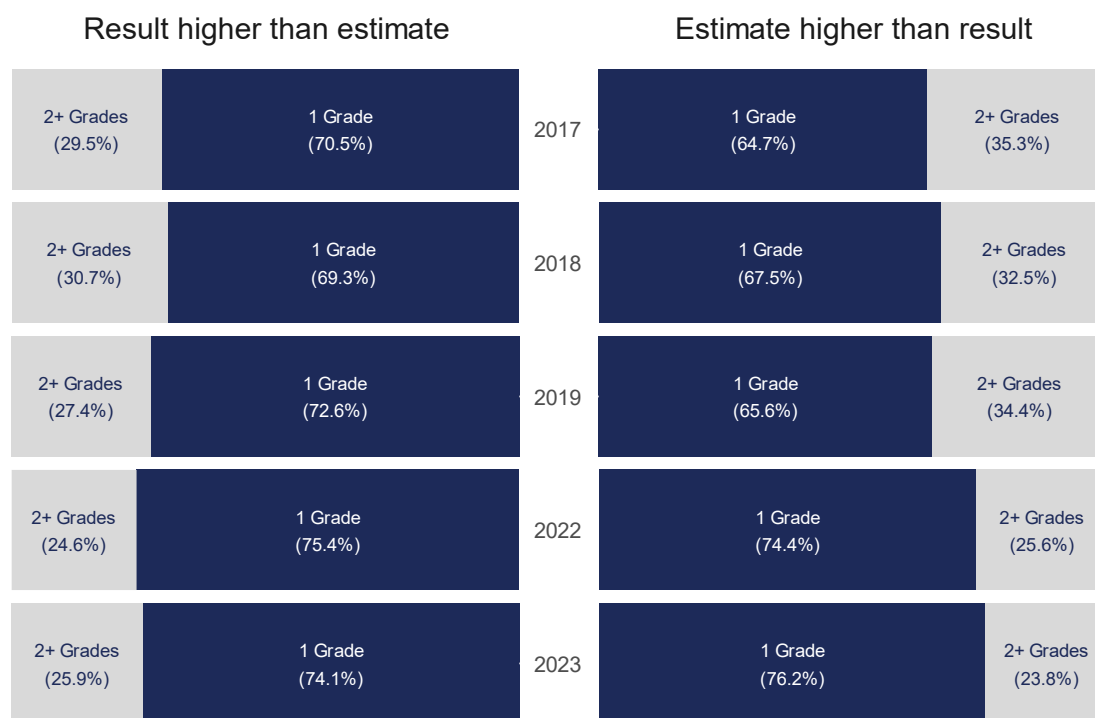
## 6.2.1 Evaluation of non-congruent estimated and awarded grades

For all non-congruent Advanced Higher estimates (where the estimated grade does not match the awarded grade) in each year across the period, the vast majority of estimates only differed by one grade.

In the instances where the awarded grade was higher than the estimated grade in 2023, 74.1% only differed by one grade. This was a lower proportion than the 75.4% in 2022 (1.3 percentage point difference), but higher than 72.6% in 2019 (1.5 percentage point difference), 69.3% in 2018 (4.8 percentage point difference), and 70.5% in 2017 (3.6 percentage point difference).

In 2023, 76.2% of candidates whose estimated grade was higher than their awarded grade differed by one grade. This was a higher proportion than the 74.4% in 2022 (1.8 percentage point difference), the 65.6% in 2019 (10.6 percentage point difference), the 67.5% in 2018 (8.7 percentage point difference) and the 64.7% in 2017 (11.5 percentage point difference).

Figure 22: Distribution of non-congruent estimates by grade discrepancy at Advanced Higher.



## 6.3 Pre- and post-pandemic analysis

The proportion of estimated grades that were lower than awarded grades was greater (2.6 percentage point difference) in the three years prior to 2020 than the two post-pandemic years (2022 and 2023).

The percentage of all congruent grades at Advanced Higher (where candidates' grade was the same as the estimated grade) was lower in the three years prior to 2020 (4.3 percentage point difference).

The proportion where the estimated grade was higher than the candidates' awarded grade was greater in the three years prior to 2020 (1.7 percentage point difference).

*Table 21: Proportion of estimated grades at Advanced Higher that were lower than the result, congruent with the result, and higher than the result, before and after the pandemic.*

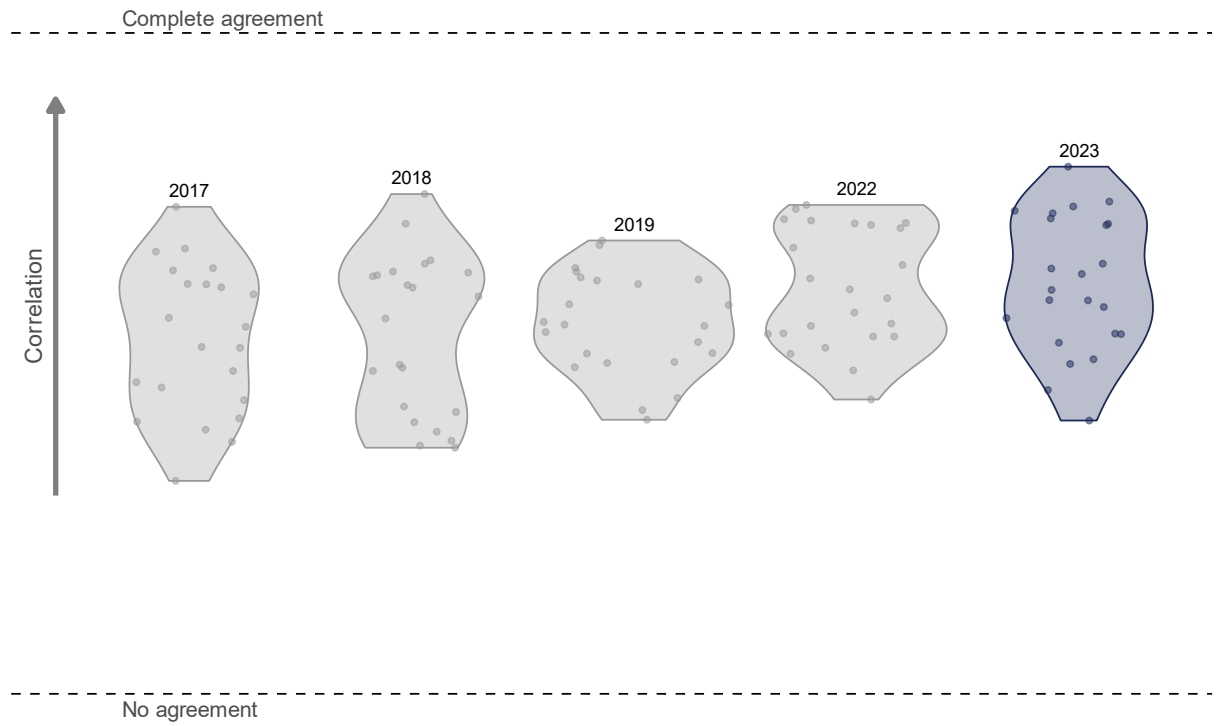
<b>Period</b>	<b>Result higher than estimate</b>	<b>Congruent estimate and result</b>	<b>Estimate higher than result</b>
2017 to 2019 (pre-pandemic)	28.8%	42.8%	28.4%
2022 to 2023 (post-pandemic)	26.2%	47.1%	26.7%

## **6.4 Relationship between estimated and awarded grades by subject**

The figure below shows the correlation between estimates and results for all Advanced Higher qualifications (with an entry size of at least 100).

The violin is longer in 2023 than in 2019 and 2022, indicating a greater spread in the alignment between estimated and awarded grades across different qualifications in 2023 compared to those years. The position of the violin as a whole is higher than those for 2017, 2018, 2019 and 2022, suggesting a higher overall alignment between estimates and results for Advanced Highers in 2023.

Figure 23: Variation in the correspondence between Advanced Higher estimates and results (the correlation), 2017 to 2023.



## 7 Methods

Teachers submit estimates of 'bands' rather than grades (Table 1). Operationally, the actual bands relate to the overall mark via a notional percentage range. For example, a band '1' corresponds to a notional percentage range of 85 to 100. The full breakdown of bands with the notional percentage range is documented in Guidance on Producing Estimates and shown in table 1.

Estimates were considered to be those values ranging from 1 to 9. Although an estimate of '0' is possible, in practice this value is used when centres are unable to, or otherwise do not, enter an estimate. An estimate of '0' was therefore considered as equivalent to a blank estimate in all subsequent analyses, and excluded. These bands were then converted to their equivalent grades for example, a band 1 or 2 is a grade A.

Approximately 99% of entries for 2017 to 2023 had a valid estimate and were included in the analyses. Qualifications for which estimates ought not to be provided or were not provided were removed from the analyses. Practical Metalworking, Practical Woodworking and Practical Electronics were internally marked in 2023 so no estimate was made.

The analysis of overall outcomes (when National 5, Higher and Advanced Higher are combined) is influenced by the number of entries present in the data for each level. This means that National 5 (with the highest entry count) has more influence on the overall statistics than Higher (which has a smaller entry count) or Advanced Higher (which has a smaller entry count again).

All values in the figures within this report are rounded to one decimal place. The percentages may not always sum to 100% due to rounding. Percentages and percentage point differences are calculated using values prior to rounding.

The correlation between estimates and results was computed by subject and level (using Pearson's method). Correlation is a statistical measure of the relationship between two variables, ranging from -1 to 1. In this report, scores varied from 0 (no relationship) to 1 (a very strong positive relationship, meaning when one variable increases, the other also increases). A negative correlation (where one variable increases while the other decreases) would be highly unusual in this context.