

Equalities analysis: further insights from 2022

The Department for Education (DfE) has published statistics on [attainment of students at Key Stage 4](#) and also for [16- to 18-year-olds in summer 2022](#) compared with previous years. These statistics include breakdowns of results by student characteristics such as gender, ethnicity, and socio-economic status.

Ofqual has also been working on [equalities analyses](#), to consider trends in a wider context. We have analysed how the results for different groups of students have changed over time, when controlling for other variables. This analysis focuses on GCSEs, A level, and vocational and technical qualifications taken alongside them in schools and colleges.

This work follows on from analysis of [GCSE and A level](#) and [vocational and technical qualifications](#) in 2020 and [GCSE and A level](#) and [vocational and technical qualifications](#) in 2021, and uses the same methodology to consider the impact of the different methods of assessment in those years on existing attainment gaps.

With the return of exams in summer 2022, the team repeated the analysis with 2022 results, to see whether, and if so how, these attainment gaps might have changed.

The analysis includes students taking GCSEs, A levels and some vocational and technical qualifications. It includes the following student characteristics:

- prior attainment
- ethnicity
- gender
- special educational needs and disabilities (SEND) status
- free school meal eligibility
- socio-economic status (using the Income Deprivation Affecting Children Index (IDACI))
- region, and the type of school or college (GCSE and A level only)

Crucially, our analysis uses multivariate regression modelling, so we can measure the impact of each of the above characteristics once all others have been held constant. For example, we can compare the results of 2 different ethnic groups, without differences in their overall prior attainment or socio-economic make-up affecting the findings. This analysis differs from the DfE statistics, and so gives more insight into the changes in attainment gaps over time.

Main findings

Of the many different comparisons between groups of students, the majority showed no notable change in attainment gaps in 2022, compared with both

pandemic and pre-pandemic years. The full report explains what we mean by 'notable changes' but essentially they are changes that we believe go beyond normal year-on-year variation.

Attainment gaps are still there, but in most cases they have not changed since the last time summer exams took place. And in some cases, they have narrowed.

The analysis highlights changes in these attainment gaps. In some cases, the patterns of attainment are different from previous years. In others, the pattern when exams took place is notably different from pandemic years.

The patterns are different for A level, GCSE, and vocational and technical qualifications.

Note that these are changes after controlling for all other variables.

A level

At A level, the analysis highlights some key changes in relation to gender, ethnicity and school and/or college type.

Gender

In 2022, at grade A and above, male students had higher outcomes than female students, similar to pre-pandemic years. The difference in 2022, however, is smaller than in 2018 and 2019, so the gap between male and female students has shrunk. This reverses what we saw during the pandemic, and especially in 2021, when female students overall achieved better results than male students.

Ethnicity

The gap between Black African and White students narrowed in 2022 particularly at grade A and above. Since 2018, Black African students have had consistently lower results. The largest difference was in 2021, and the smallest difference was seen in 2022.

School and college type

The analysis compared each school and/or college type with academies, the largest type of school and/or college.

The most notable change is for students in further education colleges. These students have had lower outcomes relative to those in academies for the past 5 years. In 2022, the gap, in terms of average grade, widened to about half a grade.

Students in sixth forms and tertiary colleges also achieved lower results, in terms of average grade, than those in academies. This is in line with pandemic years, but a change from pre-pandemic exam years, when those students had slightly better overall outcomes than students in academies.

The analysis also shows a difference for students in state selective schools. Before the pandemic, these students had higher overall results than students in academies, once prior attainment and other characteristics are accounted for. In 2020 and 2021, this trend reversed, and their overall results were lower than for students in academies. In 2022, the trend reversed again and students in state selective schools outperformed students in academies by about a fifth of a grade on average. This was in line with results when exams last took place, although the differences this year on all measures were larger than in 2019.

GCSE

At GCSE, the analysis highlights the following changes compared to previous years.

Ethnicity

White Gypsy and Roma students have had lower outcomes relative to White British students since 2018. In 2022 the gap, in terms of average grade, has narrowed to 1 grade.

School and college type

Students in independent schools have had higher outcomes compared to students in academies since 2018. In 2022, however, the difference in average grade was the smallest of the past 5 years, though still nearly a grade and a half.

Students in selective schools have had higher outcomes than those in academies over the past 5 years. The gap narrowed in 2020 and 2021 but in 2022 the gap returned to pre-pandemic levels.

GCSE students in further education colleges and other centres (which include training providers and hospital schools) have had lower outcomes relative to students in academies since 2018. In 2022 the gap widened and is now a little over 1 grade on average.

Socio-economic background

Here the picture is mixed.

Over the past 5 years, students eligible for free school meals have had lower outcomes compared to those not eligible. In 2022 the gap was similar to 2021 at almost half a grade on average, a little wider than in pre-pandemic exam years.

However, analysis using the IDACI index shows students from the most socio-economically deprived areas slightly closed the gap with those from better-off backgrounds.

The differences could be because the 2 measures of socio-economic background are different. In addition, eligibility criteria for free school meals have changed over time, making it difficult to make like-for-like comparisons over

time.

Vocational and technical qualifications (VTQs)

VTQs have different structures and different grade scales, so the analysis focused on the probability of achieving the 'top grade', that is, the highest grade that can be achieved in each qualification.

Findings vary across the different groups of qualifications considered, but overall, we found fewer notable changes than for GCSEs and A levels.

For level 2 Technical Certificates, usually taken post-16, the notable changes were in relation to ethnicity and prior attainment. In 2022 White and Black Caribbean students were less likely overall to achieve top grades than White British students. But the gap in 2022 narrowed compared to previous years. Students with very high prior attainment were more likely than their average ability peers to achieve top grades in 2022. But again, the difference reduced compared to 2019.

For Level 3 Applied Generals, the only notable change observed related to prior attainment. Students with very high prior attainment were even more likely to achieve top grades in 2022 than in pre-pandemic years, compared to students with medium prior attainment.

For level 3 Tech Levels, the notable changes were in relation to ethnicity only. White and Asian students and those from 'any other ethnic group' were more likely to achieve top grades compared to White British students in 2022. This reversed the differences seen in 2019 when those students were less likely to achieve top grades.

For level 2 Technical Awards, there were no notable changes.

Conclusion – mixed findings

It is difficult to draw firm conclusions from these mixed findings. Some gaps have narrowed, some have reversed, and some have widened. But most have not changed in a material way.

Attainment gaps existed before the pandemic, and they are not fixed. Even in a normal year, we see small changes from one year to the next. This analysis highlights the more notable changes, which warrant reflection.

We cannot disentangle the many factors that may have led to these changes. And assessment arrangements were different in 2020 and 2021, making comparisons more difficult. It is possible that many of these changes highlighted in this analysis reflect the uneven impact of the pandemic on different groups of students.

Exams and other formal assessments are not the cause of attainment gaps, nor can they be the solution. Indeed, an important feature of exams and formal assessments is that the rules are the same for all students.