

# Module-level grade awarding gaps at LSE in 2019/0

Ellen Austin, Education and Student Experience Analyst, April 2021

## Context

This paper explores the findings of analysis of grade awarding gaps at LSE, at the module level for Home UK undergraduates, following the rapid and significant changes to assessments made because of the COVID-19 pandemic. It builds on previous analysis, available [here](#), which reviewed module-level grade awarding gaps at LSE from 2014/5 to 2018/9. The paper explores whether certain groups of students were disproportionately affected by the assessment changes.

The Office for Students requires higher education institutions to take action on final degree grade awarding gaps for Home UK undergraduates, and LSE (like many institutions) must meet specific targets to reduce observed gaps among LSE students. Our targets are based upon single-dimension views of the data and, on this basis, it appears that LSE's grade awarding gaps have reduced greatly in 2019/0.

This analysis seeks to dig deeper into the patterns of difference by looking at a more granular module-level (where we might expect to see a more immediate effect of changes in teaching and learning on student marks), and by using a statistical model which controls for other student characteristics – in effect, holding all other variables at a constant value and allowing us to isolate the impact of the characteristic of interest. In other words, this provides a more nuanced understanding of the way in which multiple characteristics can affect student outcomes.

As with all statistical analysis, our model can only include variables that we can measure and have data on. Some variables can stand only as a proxy for things that are less easy to measure – for example, bursary status acts as a proxy for all the challenges that might be associated with financial disadvantage. Other variables are simply unavailable to us – either because we do not currently collect the data (e.g. a student's caring responsibilities) or because they cannot be measured meaningfully (e.g. a student's motivation).

Furthermore, this analysis can only show patterns in outcomes based on observable variables – it cannot explain why those patterns exist, and what (if anything) can be done to address them. Work completed, underway or proposed elsewhere within the School, particularly work seeking student perspectives on their experience, will provide more insight.

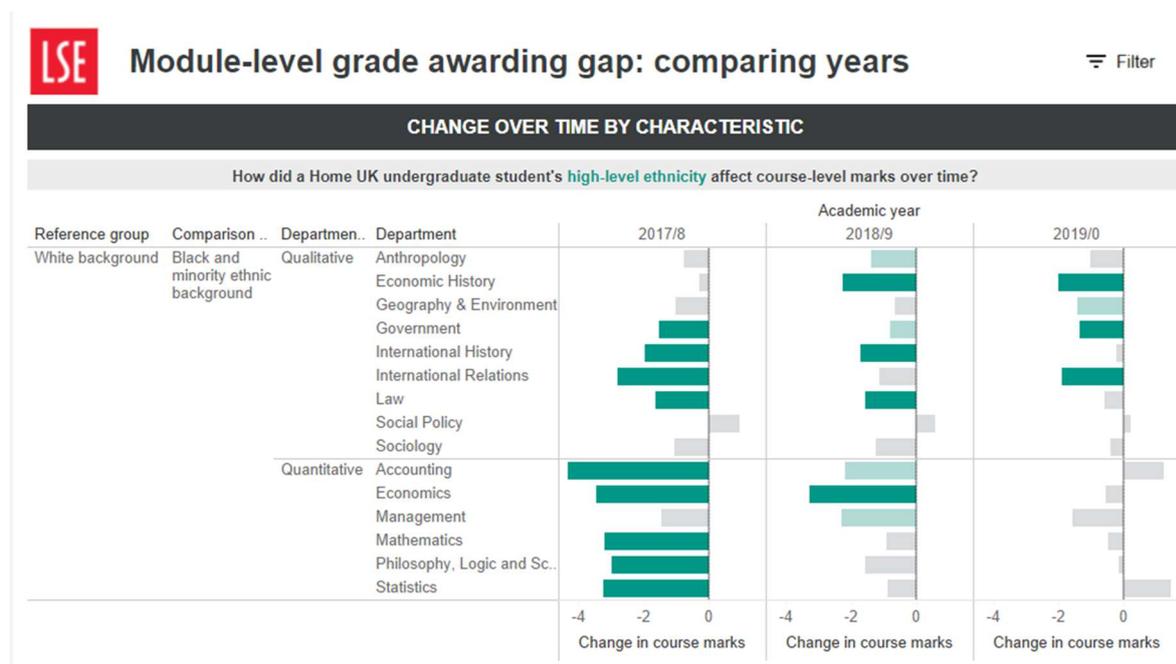
Nonetheless, the analysis gives a useful insight into the relative impact of different student characteristics on module-level outcomes. This iteration of the analysis also looks at the change in impact of a particular characteristic over time. This allows us to see whether the impact of holding a certain characteristic changed significantly between years.

## Key findings

### Ethnicity-based gaps have narrowed, especially in quantitative departments

The previous analysis identified significant and persistent grade awarding gaps for students from a Black and Minority Ethnic (BAME) background<sup>1</sup>. While this gap remains during 2019/0, it has become smaller in almost all departments, and is now significant in only 3 departments (compared to 9 in 2017/8). Figure 1 shows the average difference in marks between students who came from a white background and those who came from a BAME background by department and year. Only the dark green bars are statistically significant at the standard  $p < 0.05$  level. Note that gaps had already begun to narrow in 2018/9, suggesting that the changes in 2019/0 may be part of a pre-existing pattern.

**Figure 1: Effect of ethnicity on Home UK undergraduate student results**



Furthermore, the negative impact of being from a BAME background in 2019/0, relative to being white, has narrowed significantly in several departments, especially quantitative ones. In other words, even where a gap persists it has become significantly smaller in 2019/0 compared to previous years.

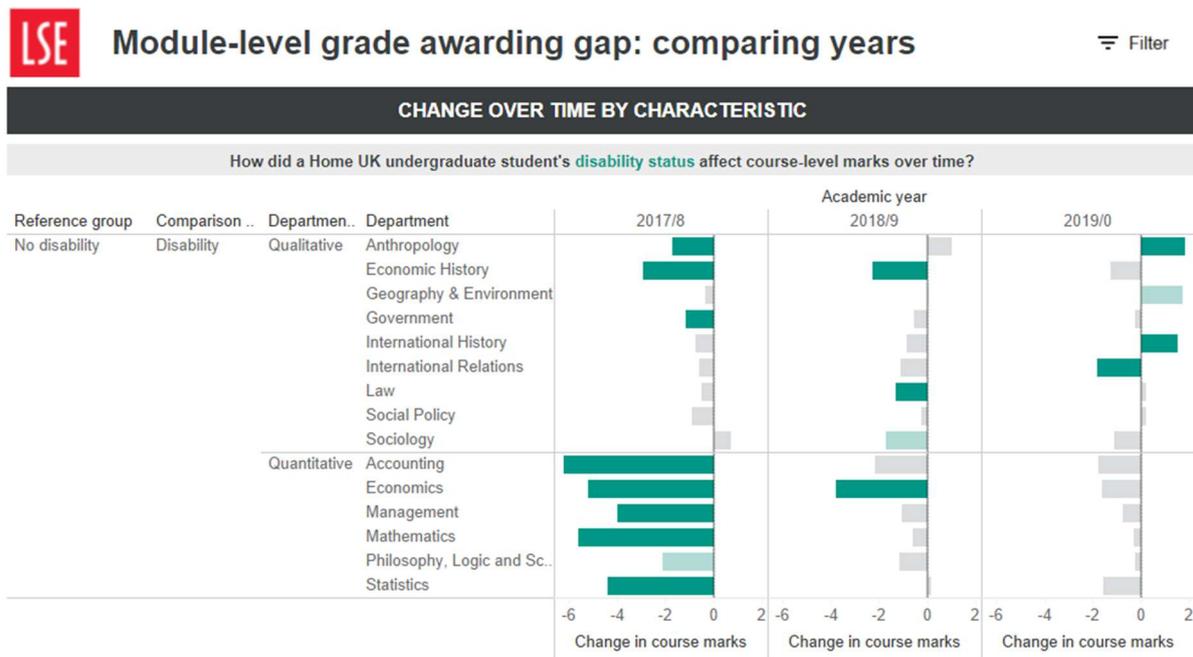
### Disability-based gaps have also narrowed, especially in qualitative departments

Grade awarding gaps also exist between students with a disability and students without a disability. These have been less widespread and persistent than those based on ethnicity, but there is an observable difference in 2019/0 compared to previous years.

<sup>1</sup> We recognise that this terminology is not how many staff and students at LSE would identify themselves; we use it here as it is the sector standard for student data. We also recognise the limitations of treating all students from non-white backgrounds as a homogenous group, and plan to disaggregate these groups in future work.

Figure 2 shows that in 2019/0 disability-based effects narrowed in many departments and in some (notably Anthropology and Government) moved from a negative effect to a positive one. Analysis of the change in effect size over time also shows that the impact of a declared disability in 2019/0 was significantly lower in several departments compared to previous years, especially in qualitative departments. So even where a gap exists – and most of the gaps in 2019/0 are non-significant – it is significantly smaller than the gap was in previous years.

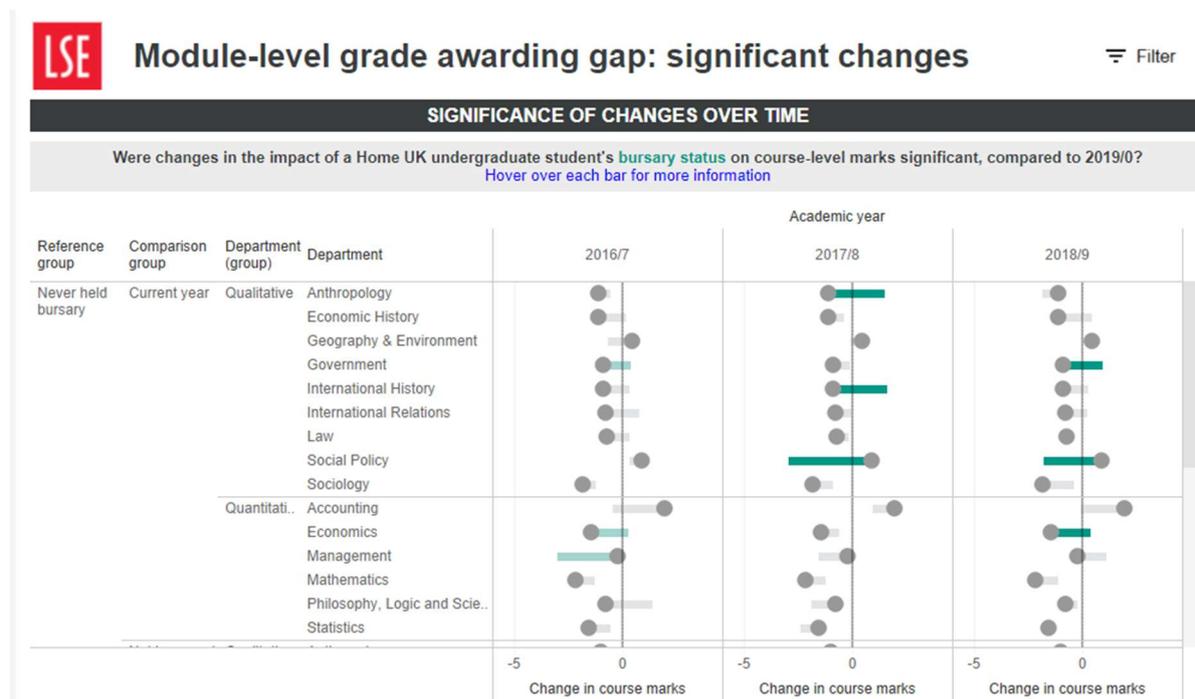
**Figure 2: Effect of declared disability on Home UK undergraduate student results**



Financial disadvantage may have had a bigger impact on student outcomes in 2019/0. Student bursary status, used as a proxy for financial disadvantage, has not been a particularly strong or consistent predictor of outcomes in the same way as, for example, ethnicity or prior academic awards (A-level performance). However, in 2019/0 the impact of holding a bursary in that academic year was consistently negative and sometimes significant – a change from previous years where the impact was sometimes positive.

Figure 3 shows the changing impact of in-year bursary eligibility on module results for 2019/0 compared to previous academic years. The important thing to note about this chart is the position of the grey dot in relation to the bar. The grey dot shows the average difference in marks between non-bursary-holders and bursary-holders in 2019/0, while the bar shows the size and direction of the change in that gap since the reference year ('Academic year'). In most cases, the grey dot is at the left hand side of the bar, indicating that the gap has widened between the reference year and 2019/0, and in several cases this change is statistically significant. This appears to be a particular issue in qualitative departments. Overall, this indicates that students experiencing financial disadvantage also experienced a widening gap in outcomes during 2019/0.

Figure 3: Change in impact of bursary status on Home UK undergraduate marks over time



### Next steps

Taken alongside other work to review 'grade inflation' at LSE, this analysis suggests that the assessment methods and surrounding protocols implemented during summer term 2019/0 gave students a different opportunity to demonstrate their learning, compared to previous years. While some groups of students may have been better served by the changes made due to COVID-19, others have experienced widening gaps.

This analysis has informed the development of assessment protocols for the summer term 2020/1 assessment period. It will also form the basis of an extension of the model overall which we hope to develop before the start of Michaelmas Term 2021/2, based on newly-available student data, which will allow us to look at sub-groups within the aggregated categories as well as new measures such as whether the student is living at home. Depending on data availability, we may also be able to extend the analysis to overseas undergraduates who enter LSE with qualifications other than A-levels.

Further analysis on module-level 'grade inflation' and historic assessment patterns, planned for the next six months, may provide additional insight into how the changes in assessment patterns may have interacted with student characteristics to affect module-level outcomes. And qualitative research into student experience of teaching and assessment over the past year, undertaken by Eden, will help explain some of the shifts we have observed in the quantitative data, as well as highlighting the importance of variables that cannot be included in a quantitative model.

Full findings from this analysis can be seen via [Tableau](#). Note that to access Tableau dashboards away from campus you will need to connect via Pulse or via the VPN. Please contact [planning.division@lse.ac.uk](mailto:planning.division@lse.ac.uk) if you encounter any problems accessing the dashboards.