

Written evidence submitted by Cambridge Assessment

Education Committee Inquiry

The impact of COVID-19 on education and children's services

Timeline and analysis – GCSEs and A Levels in Summer 2020 **2nd Submission from Cambridge Assessment – September 2020**

Background: Cambridge Assessment

1. Cambridge Assessment is a not-for-profit international exams and education services group that designs and delivers assessments to over 8 million learners in over 170 countries. Established by the University of Cambridge in 1858, we have an unrivalled depth of experience in national education systems, international education and English language learning. We are committed to ensuring all learners access the benefits of their education through a fair and accurate assessment of their skills, knowledge and understanding. A philosophy of fairness and integrity runs through everything we do.
2. The analysis in this document has been prepared by our Assessment Research and Development Division – a leading research unit on education and assessment, supporting policy formation and system review through wide-ranging domestic and international research.

Summary

3. Cambridge Assessment provided this Committee with an initial submission to its inquiry into the impact of COVID-19 on education and children's services in late May. This 2nd submission provides important technical detail in relation to awarding this summer, along with a summary of the actions and advice we provided to DfE and Ofqual over the period.
4. We have seen confidence in GCSE and GCE awarding eroded by events this summer and it needs to be urgently rebuilt. We believe an important contribution to achieving that is for us to place on public record the work we have done to understand what happened with awarding and our associated actions, so they are known and understood. This submission sets out our understanding of why some schools, colleges and students found their A level results to be at odds with reasonable expectations and historical precedent. It also summarises what future research we intend to conduct, and provides some brief thoughts on implications for summer 2021.

Awarding objectives

5. The Secretary of State set out in his letter of direction to Ofqual in March that in relation to GCSEs and GCEs:

'...it is Government policy that these students should be issued with calculated results based on their exam centres' judgements of their ability in the relevant subjects, supplemented by a range of other evidence...In order to mitigate the risk to standards as far as possible, the approach should be standardised across centres. Ofqual should also mandate the method of calculating final grades based on the evidence provided for each student. Ofqual should ensure, as far as is possible, that qualification standards are maintained and the distribution of grades follows a similar profile to that in previous years.'

6. The Secretary of State also emphasised the need for an appeals system and an opportunity for students to sit exams at the earliest reasonable opportunity. Cambridge Assessment considered the provision of calculated grades along with the twin safety nets of an effective appeals system and an autumn exam series to be a well-conceived and extensive response in the circumstances, going beyond what had been adopted in Scotland and other countries internationally.

Model development

7. The model devised by Ofqual for awarding GCSE and GCE grades without examinations was set out by the regulator in its *interim report*, published on A level results day. Its development was informed through an extensive series of meetings between Ofqual and other assessment experts, including cross-exam board technical meetings, the Ofqual external advisory group and various technical sub-groups. Cambridge Assessment colleagues contributed their expertise through existing positions on boards or panels, or by invitation.
8. Twelve different approaches were considered by Ofqual, which it evaluated and then refined. Cambridge Assessment welcomed the opportunity to offer its ideas as part of the development process. We put forward suggestions to ease computational transparency and public explanation, and some of these were adopted. Ultimately, Ofqual developed a model based on a wide range of input and we were not asked to review or scrutinise its final form.

Model summary

9. GCSE and GCE grades¹ were calculated by combining information provided by schools with data held by the exam boards. In simple terms, exam boards used the historical performance of each school/college and the prior attainment of the students in each subject in that school to generate a pool of potential grades, which were then allocated to students according to their centre estimated rank orders. Ofqual then made an adjustment (national standards correction) to the results to ensure standards were maintained compared to previous years.

¹ In contrast to GCSEs and GCEs, no single approach was possible for vocational and technical qualifications. Most candidates had some form of completed assessment that could be utilised in awarding, but this varied hugely in form, order and completeness from centre to centre, from award to award. The challenge with these qualifications was to move from this varied, incomplete evidence to an assumed final award position, with a target of a similar pass rate now for similar candidates in the past. Exam boards were largely left by Ofqual to determine their responses independently and we do not expand on these approaches in this note.

Model inputs

10. Guidance was provided to schools and colleges by Ofqual and the exam boards on how they should develop their Centre Assessment Grades and rank orders. Prior research on predicted grades could not exactly predict the behaviour of teachers in 2020 – the processes were different to the normal practice of A level predictions. However, all prior experience and evidence pointed to the potential for wide variation in the accuracy of Centre Assessment Grades driven by a disparity in the approaches adopted by schools and colleges to their development; it was understandable that some schools may have sought to give the benefit of the doubt to some students. This necessitated some form of national standardisation.
11. Centre Assessment Grades were only ever expected to be one input into awarding this summer. They were always an important part of the process, but only one part, and the hope was they would remain confidential. Ultimately, that was not a sustainable position (see point 13 below).

Model outcomes

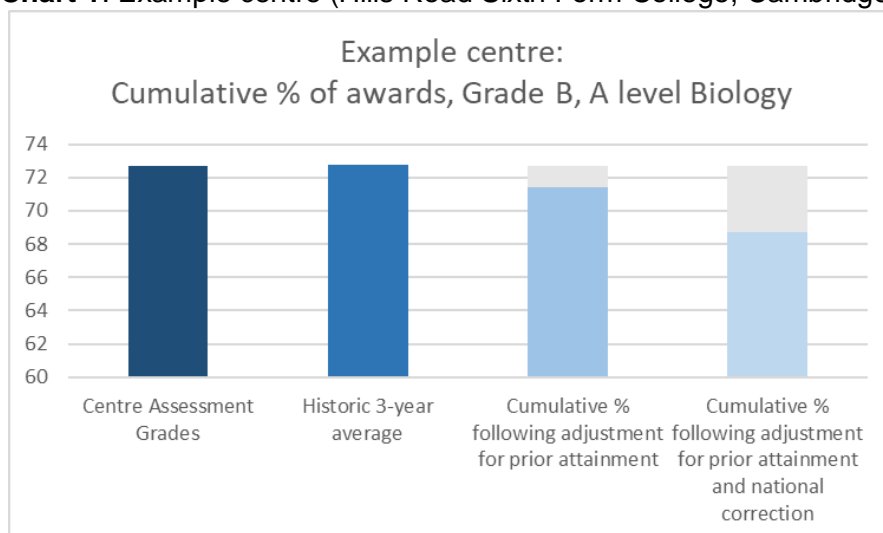
12. It was generally understood that while a model could deliver overall outcomes very similar to overall outcomes in the past, there could be a high degree of variation between what individual students might receive and what they would have received had they sat their exams. It is impossible to ever know what this variation would be overall or for individual students.
13. In contrast, once the Information Commissioner confirmed that it would not be possible for Centre Assessment Grades to remain confidential, it was apparent that comparisons would be drawn between the grades submitted by teachers and the grades awarded. We recognised this potential early on and emphasised to Ofqual the importance of communicating clearly about the model². For our part, we actively sought to assist Ofqual in building public understanding through a range of our own communications (to OCR schools and colleges and the general public – see timeline below). For example, we established the term ‘Standardised Centre Assessment’. Ultimately, public debate has understandably focussed on the differences between Centre Assessment Grades and the grades awarded, but this is a misleading distraction and misinforms the public about some key elements of awarding this summer.
14. Notwithstanding this focus, the model had the potential to provide a high proportion of ‘right’ grades – grades that could be explained within the context of the standardisation process. Cambridge Assessment emphasised this point in published articles through the summer (see timeline below), while also stressing that no model could match the accuracy of a full exam series for assessing student ability. We strongly promoted messaging that emphasised the progression of students as the top priority this summer and supported such messaging from other organisations.

² Extract from OCR consultation submission to Ofqual, 28 April:

‘We strongly support an approach that emphasises the importance of statistical standardisation of professional judgements. This is the fairest approach for the majority of students, including for those in previous and subsequent years. There is, of course, no perfect solution given the exceptional circumstance of a summer without exams. It is important that we are absolutely transparent about how the model is applied.’

15. Like many others, including this Committee and Ofqual, we were keen to establish that the model had delivered results as intended and explain any issues of potential concern. We considered this to be an important role for us in a summer when the regulator had also become the de facto body responsible for awards³.
16. As the full set of OCR A level results became available internally, Cambridge Assessment began to interrogate the data to understand how the model had behaved, seeking any evidence of issues that might be emerging. On two of these – individual outlier students (high performing pupils in large, typically poor performing centres) and the profile of results for large centres – we had concerns and felt our analysis had reached an evidential threshold requiring us to inform the Department for Education.
17. On individual ‘outlier’ students, we found that they existed, were disadvantaged by the model, and that criteria could be used to identify them. We provided our analysis to the Department for Education on 30 July and recommended a series of actions, including informing university admissions officers and encouraging sensitivity in their decision-making. We welcomed the Department’s swift intervention on this matter.
18. Following the publication of A level results, we responded to public and private calls from schools and colleges to the possibility of low accuracy in the calculated grades. We could not initially make sense of some outturns, for example, where results had come in below a centre’s three-year average by a considerable margin.
19. We examined possible explanations and after forensic analysis of the data concluded that the observed effect was likely to be down to the way in which Ofqual had attempted to maintain standards with previous years (through its national standards correction). In simple terms, this input to the model had the effect of raising grade thresholds significantly in many subjects (but not all). The effect of this adjustment on some of the schools and colleges we examined seemed to be large in comparison with the differences in their CAGs from their historic performance or the adjustments made for their cohorts’ prior attainment [See example centre in Chart 1].

Chart 1: Example centre (Hills Road Sixth Form College, Cambridge)



³ For GCSE and GCE, exam boards only effectively needed to be involved in the administration of the Ofqual model for one reason: they held the student registrations and were in the best position to efficiently collect and validate the Centre Assessment Grades and rank orders from schools and colleges.

20. Our analysis, which we discussed with Ofqual as we did it, suggested that all centres, of whatever size, were affected by the application of the national standards correction. In large centres, the effect was particularly obvious given the large numbers of students close to the grade thresholds before the correction was applied. The consistency of the effect suggested that the model was behaving as predicted. But the size of the effect on results suggested that this input to the model was the cause of the unexpectedly depressed results of some centres.
21. The impact of the national standards correction was not immediately obvious to many schools and colleges because exam boards had not been required to provide them with details of it when distributing results, only the historic averages and prior attainment data employed – in effect, Chart 1 without the far right hand information. This made it very challenging for some schools and colleges to understand their results and damaged public confidence.
22. Ofqual had announced the degree of grade inflation this year on 21 July, at its summer symposium – 2% for A level, 1% for GCSE. We had anticipated that Ofqual might seek to fine-tune its national standards correction – and therefore these percentages – following the submission of results from exam boards and any checks it might undertake (for example, the results of individual schools and colleges). As it turned out, no adjustments were made.
23. We informed the Department for Education of our finding on 14 August, suggesting a remedy for A level results could be through targeted appeals. We suggested that the same issue could affect GCSE results, due to be released the following week. We suggested to the Department that GCSE results should be delayed and rerun, and we made Ofqual aware of the detail of our analysis and of our policy recommendations. Ultimately, Ofqual took another course of action.
24. Our conclusion is that the extent of concern among centres could have been avoided if extensive checking of individual school and college results had been conducted prior to A level results being awarded. From this, we might have expected either an explanation to be provided by Ofqual about apparent weakness of this year's national cohort compared to previous years (implicit in the size of the national standards correction), or action taken to fine tune the national standards correction and results amended before issue. We also believe there was an opportunity to review GCSE results and issue grades in which schools and students could have had confidence.
25. Below we set out a summary timeline of our communications with Ofqual and Ministers this summer, alongside other notable events.

Timeline of important communications and events this summer

18 March	Secretary of State announces cancellation of GCSE and GCE exams in England
20 March	Department for Education confirms calculated grades will be awarded
31 March	Secretary of State sends letter of direction to Ofqual regarding awarding
3 April	Ofqual announces use of teacher grades, rank orders and statistical standardisation in awarding
15 April	Ofqual responds to Secretary of State direction and launches consultation on its proposed model for standardisation and other aspects of the exceptional arrangements
23 April	Cambridge Assessment article in TES: <u><i>'Whatever this is, let's not call it teacher assessment'</i></u>

28 April	OCR response submitted to Ofqual's consultation on exceptional arrangements for exam grading and assessment in 2020
22 May	Ofqual publishes its decisions in relation to standardisation and other aspects of the exceptional arrangements
22 May	Cambridge Assessment article in SchoolsWeek: <u>'Why we can be confident about this summer's grades'</u>
30 June	Ofqual publishes initial details about appeal arrangements and confirms autumn exam arrangements
6 July	Cambridge Assessment letter in Daily Mail: <u>'HOW should parents react on GCSE and A-level results days?'</u>
11 July	Education Select Committee raises concerns about the grading system
16 July	Cambridge Assessment blog: <u>'What will this year's GCSE and A Level results tell us about the cohorts of 2020?'</u>
21 July	Ofqual holds summer symposium, confirming the degree of grade inflation this summer
23 July	Cambridge Assessment establishes a team to research and analyse A level results
30 July	Cambridge Assessment informs Secretary of State's office about the existence of outlier students and the possibility of low accuracy in calculated grades.
4 August	SQA releases National 4, National 5, Higher and Advanced Higher results]
5 August	Jill Duffy article in The Student Room: <u>'What you need to know about GCSE and A level grades in 2020'</u>
6 August	Ofqual confirms arrangements for GCSE and GCE appeals
9 August	Opinion piece by Ofqual's Chair published in the Sunday Telegraph
11 August	John Swinney announces that Scottish students will receive their teacher estimated grades
12 August	Secretary of State announces that evidence from valid mock exams can be considered as part of an appeal
12 August	Cambridge Assessment begins detailed scrutiny of apparently anomalous centre results, where outturns were below a centre's three-year historic average Cambridge Assessment informs Secretary of State's office of potential anomalies in the model.
13 August	A level results published
14 August	Cambridge Assessment informs Secretary of State's office and Ofqual's Chair that the likely cause of the anomalous centre grades appears to be the way in which Ofqual had implemented its national standards correction to maintain standards. The same issues were likely to arise with GCSE results.
15 August	Ofqual publishes then retracts information about the use of mock exam results in appeals
16 August	Cambridge Assessment recommends to the Minister for Schools that GCSE results be delayed and rerun. Cambridge Assessment informs Ofqual's Chair of its recommendation.
17 August	Ofqual's Chair announces switch to centre assessment grades for A levels and GCSEs

Future considerations

26. It is simple to assume that following this summer the use of Centre Assessment Grades in future exam series could be expected to generate significant grade inflation. As such, as plans for 2021 awarding are finalised, due consideration should be given to methods of awarding that, as far as possible, reflect the assessment of work conducted by students.

Ofqual has consulted on its plans and we look forward to supporting their delivery over coming months.

27. We will continue to investigate how the statistical standardisation model worked, to understand what implications there might be for how standards are maintained both in normal times, and especially in the exam series of autumn 2020 and June 2021. A regular part of our research programme is devoted to following the destinations and pathways of students taking our exams, and that will be even more relevant for the 'Covid generation'.

September 2020