

Methodology for determining Centre Assessed Grades:

On 18 March 2020, the Secretary of State for Education announced that the summer 2020 exam series would be cancelled in order to help fight the spread of the Coronavirus (COVID-19) and that students due to sit the exams would be awarded the grade they would have been most likely to achieve had exams gone ahead. On 23 March, in a written statement to Parliament, the Secretary of State explained the Government's intention that results would be issued to this year's cohort based on a range of evidence and data, including performance in mock exams and non-exam assessment.

This document outlines the process followed by Woking High School in awarding students a rank and centre assessed grade in each of the subjects that they studied for their GCSEs.

The following principles are central to the manner in which this process was conducted:

- The term 'centre assessed grades' must be used to describe grades provided by the centre (school) to the exam boards as the grade is the responsibility of the centre, rather than the individual teacher;
- All judgements made must be objective and fair;
- The process must be transparent and all individual decisions documented;
- Judgements must be made based on evidence that already exists, prior to the school's closure;
- All subject areas must use the same process to determine the centred assessed grades;
- Grades and outcomes in 2020 will be broadly in line with previous cohorts at the school, including the full range of grades from 9 to U (as prescribed by Ofqual);
- The centre assessed grade and rank must not be shared with students and parents during the process of awarding, to do so will constitute malpractice;
- Centre assessed grades will not be used in the appraisal or evaluation of a teacher.

Ofqual

Ofqual's guidance states:

*"The centre assessment grades submitted to exam boards must reflect **a fair, reasonable and carefully considered judgement of the most likely grade a student would have achieved if they had sat their exams** this summer and completed any non-exam assessment. Heads of Centre should emphasise the need for judgements to be objective and fair."*

The centre assessed grade is the grade that each student is most likely to have achieved if they had sat their exams. This professional judgement is to be derived from evidence that is already held in school and which has been reviewed by teachers and Subject Leaders.

The school must provide a centre assessed grade for each student in each subject and a rank order of students within each grade in each subject. Following submission of the grade and rank, exam boards will conduct a statistical standardisation process.

"Exam boards, using a model developed with Ofqual, will use a statistical model to standardise grades across centres in each subject. This model will combine a range of evidence including:

- *expected grade distributions at national level*
- *results in previous years at individual centre level*

- *the prior attainment profile of students at centre level*

This statistical standardisation process will not change the rank order of students in a subject within your centre. Nor will it assume that the distribution of grades in each subject and/or each centre should be the same. If, when compared to the evidence above, your judgements in a subject are more generous than would be expected, then the final grades for some or all of your students will be adjusted down. On the other hand, if it appears that your judgements in a subject are more severe, then the final grades for some or all of your students will be adjusted up. We will do this to align the judgements across centres, so that, as far as possible, your students are not unfairly advantaged or disadvantaged this summer.

This means that the centre assessment grades you submit and the final grade that students receive could be different. It also means that adjustments to centre assessment grades might be different in different subjects.”

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/887018/Summer_2020_Awarding_GCSEs_A_levels_-_Info_for_Heads_of_Centre_22MAY2020.pdf

It is Ofqual’s intention that national performance in all subjects in 2020 will be in line with national performance seen in 2019. It is anticipated that a school with a similar ability cohort in 2020 to that of 2019, will achieve similar result in 2020 when compared to the school’s performance in 2019.

Centre assessed grading methodology

Stage 1 – Calculate an objective mark in each subject for each student

Whilst Ofqual only required schools and colleges to submit grades and rankings for students, a vital intermediate step we took was to first calculate a mark (an overall score) for each student in each subject and then move to the centre assessed grades and rankings based on that mark. The absolute value of the mark was not related to grade boundaries, but the relative value of the mark gave both an initial ranking and, importantly, a sense of the distribution and clustering of the grades based on each student’s performance. Starting the process by sorting a list of students without objective information would have been prone to unconscious bias.

Each student was awarded an **overall score** out of 240 in each subject based on their performance in a number of **datasets** (see explanation below - Calculating the initial rank order mark).

Types of evidence used as datasets

Departments used a number of **datasets**, which included Non-Examined Assessments (NEAs), mock exam marks and other evidence of student performance over the course of study where marks had been awarded, including class-based assessments and work.

When selecting a dataset, all of the following conditions had to be satisfied in order for the dataset to be included in the calculation of a student’s overall score:

- Sat by all, or at least the vast the majority, of students;
- Raw score mark available (as opposed to a grade);
- Standardised and/or moderated;
- Access arrangement candidates had access arrangements applied;
- Completed under supervised conditions.

Weighting of each piece of evidence (dataset)

Each **dataset** to be used by the subject was given a **weighting**. Subject Leaders chose weightings based on the qualification’s breakdown (e.g. 50% exam, 25% NEA1, 25% NEA2) or adjusted each weighting relative to the validity and recency of the dataset.

Subject Leaders used their knowledge of the datasets selected to determine which weightings would result in the most accurate and therefore the fairest and most likely rank order had students actually completed their examinations this summer. Subject Leaders discussed the selection of datasets and their relative weightings with their Line Manager. The Head of Centre and SLT reviewed all the datasets selected and the weightings allocated prior to the commencement of Stage 2.

Calculating the overall score and initial rank order

- i. Subject leaders collated all **datasets**, ordered each dataset score descending and assigned a **rank** number (1, 2, 3, 4, 5..., 1 being highest) for each student in each dataset. This resulted in all students being awarded a rank in each dataset.
- ii. The rank was then converted into a **score** out of 240. A student who is rank 1 in a dataset is awarded a score of 239 for that dataset (240 – rank = score).
- iii. An **overall score** for each student is calculated based on each student's **individual dataset scores** and the relative **weighting** of each dataset.
- iv. A **overall rank** is assigned based on all students' overall scores in the subject.

Example

Student	Year 10 Exam		Year 10 Classroom assessment		Year 11 Exam - December		Year 11 Exam - March		Overall Score	Overall Rank
	Weighting (%) =	10	Weighting (%) =	20	Weighting (%) =	30	Weighting (%) =	40		
	Dataset Rank	Score	Dataset Rank	Score	Dataset Rank	Score	Dataset Rank	Score		
Student 8	9	231	1	239	2	238	2	238	237.5	1
Student 5	8	232	6	234	1	239	7	233	234.9	2
Student 15	17	223	2	238	8	232	3	237	234.3	3
Student 3	3	237	6	234	6	234	7	233	233.9	4
Student 9	1	239	6	234	15	225	2	238	233.4	5
Student 13	10	230	3	237	9	231	7	233	232.9	6
Student 6	2	238	19	221	13	227	1	239	231.7	7
Student 12	4	236	9	231	10	230	10	230	230.8	8
Student 14	10	230	13	227	9	231	8	232	230.5	9
Student 2	9	231	20	220	4	236	9	231	230.3	10
Student 10	6	234	8	232	9	231	13	227	229.9	11
Student 11	4	236	19	221	10	230	8	232	229.6	12
Student 1	1	239	20	220	16	224	4	236	229.5	13
Student 7	5	235	20	220	4	236	12	228	229.5	14
Student 4	9	231	22	218	3	237	11	229	229.4	15

An example subject is shown in the table above. The rankings for each dataset are shown, along with the weighting of each dataset. Student 8 is the 9th highest performing student in the Year 10 exam, 1st in the Year 10 classroom assessment and 2nd in both Year 11 exams.

A student's score for each dataset is calculated by subtracting the student's rank from 240. The overall score for each student is then calculated by multiplying each dataset score by its weighting and then adding them together. For Student 8, this would be $(231 \times 0.10) + (239 \times 0.20) + (238 \times 0.30) + (238 \times 0.40)$, which gives an overall score of 237.5. This overall score can then be ordered to provide an overall rank. In this example, Student 8 achieves the highest overall score and is awarded an overall rank of 1.

Subject Leaders and Line Managers revisited the choice of datasets and weightings applied throughout Stage 1 to ensure that they provided the most accurate and therefore fairest and most likely rank order, had students actually completed their examinations this summer.

Stage 2 - Allocation of centre assessed grades

Once the rank had been calculated based on ordering the overall score, centre assessed grades were awarded. Stage 2 contained three steps:

i. Subject Leaders and Line Managers applied two grading models to the ranked cohort. Grading Model 1 was based on the prior performance of the department, applying a grade distribution which closely matched that achieved by the subject's cohort in 2019. Grading Model 2 used an adjusted grade distribution which took into account the profile of each subject's current Year 11 cohort. This model was derived from the ability profile of students, based on their prior attainment at KS2, and national subject progression data at KS4 provided by DfE.

The reasoning behind this approach was to provide a starting point for assigning the centre assessed grades, which are not based solely on forecasts. Forecasts can be affected by unconscious bias, different methodologies of thought and misinterpretation of underlying data.

Subject Leaders and Line Managers also analysed grade distribution data at a subject level for Woking High School over the last 3 years.

Based on Grading Models 1 and 2 and grade distribution data, Subject Leaders and Line Managers calculated Grading Model 3, providing an initial grade for each student.

ii. Teachers were provided with a summary of the data used to calculate the initial rank and Grading Model 3. Teachers then completed a ranking and grading activity using their professional judgement. Where the teacher believed the grade derived from the model was not accurate, a comment had to be provided to support an adjustment of the centre assessed grade.

iii. Subject Leaders and Line Managers reviewed all information provided by the subject teachers in order to **finalise the center assessed grades**. Adjustments were made where evidence to support a change in grading was available, could be applied to all students and satisfied the criteria for use as a dataset. This stage also included consideration of access arrangements and specific cases where adjustments may be needed.

Awarding U grade

The Ofqual guidance indicates that it expects centres to use U grades. U grades are a very normal part of the GCSE grade process and removing them, for example by withdrawing candidates, will distort the national grade distribution. The statistical process used by Ofqual and the exam boards will assume that there are U grades in centre assessments.

Stage 3 – Data analysis of centre assessed grades prior to submission

Before the centre assessed grades were submitted, Subject Leaders, Line Managers and SLT reviewed performance data from previous years at a school and subject level to ensure that the data submitted for 2020 was broadly in line with 2019. 3-year trends for the following data sets were reviewed:

- Prior attainment data of the cohort;
- Previous percentages achieved at each grade boundary for each subject;
- Subject and whole school performance against national averages;
- DfE 2019 subject transition matrices.

In addition to internal analysis, the finalised center assessed grades were submitted to Fischer Family Trust (FFT), who completed a statistical subject moderation. The external moderation factored in FFT estimates and school subject performance in previous years. The FFT School Adjusted Estimates took into account the prior attainment of each pupil at KS2 and the weighted performance of each subject at Woking High School over the last three years.

Stage 4 – Submission of centre assessed grades to exam bodies

The submission of centre assessed grades and rankings was conducted as follows:

- i. Initial entry of centre assessed grades and rankings to the exam board completed by Subject Leader.
- ii. Line Managers checked all entries to confirm the correct centre assessed grade and ranking had been entered for each student.
- iii. Examinations Officer checked all entries to confirm the correct centre assessed grade and ranking had been entered for each student.
- iv. Head of Centre finalised submission of centre assessed grades and rankings by validating process.

Overview of awarding centre-assessed grades

	Process	Who?
Stage 1	SLT and HOD Zoom meetings – overview of process and instruction on completing Stage 1.	SLT and Subject Leaders
	Identify appropriate datasets.	Subject Leaders
	Quality Assurance - Review datasets and check datasets meet all criteria for inclusion.	Subject Leaders and Line Manager
	Assign weightings to each dataset.	Subject Leaders and teachers
	Quality Assurance - Review dataset weightings.	Subject Leaders and Line Manager
	SLT and HOD Zoom meetings – instruction on completing Stage 2 (part 1).	
	Overall score and initial rank produced.	Subject Leaders
	Quality Assurance - Completion of proforma Table 1 and 2, including random data check and sign-off by Line Manager	Subject Leaders and Line Manager
	Quality Assurance - Reviewed of all datasets selected and assigned weightings.	Head of Centre and SLT
Stage 2	SLT and HOD Zoom meetings – instruction on completing Stage 2 (part 2).	SLT and Subject Leaders
	Grading Models 1 and 2 applied to subject cohort. Thresholds compared to forecast threshold outcomes. Grading Model 3 calculated.	Subject Leaders
	Quality Assurance - Grading models reviewed and Grading Model 3 agreed.	Subject Leaders and Line Manager
	Quality Assurance - Completion of proforma Table 3, including random data check and sign-off by Line Manager.	Subject Leaders and Line Manager
	Quality Assurance - Review of all grading models and proposed grade distribution for each department.	Head of Centre and SLT
	Presentation to all KS4 teaching staff.	All KS4 teaching staff
	HOD Zoom meetings with department teachers.	Subject Leaders and KS4 teaching staff
	Teachers review and provide feedback on ranking of students in their classes and Grading Model 3.	All KS4 teaching staff
	Final grading assigned based on Grading Model 3 and teacher feedback.	Subject Leaders and Line Manager
	Quality Assurance - Completion of proforma Table 4, including random data check and sign-off by Line Manager.	Subject Leaders and Line Manager
Stage 3	Final grade set sent to FFT for external analysis and validation.	SLT
	SLT and HOD Zoom meetings – review of external moderation	SLT and Subject Leaders

	Quality Assurance - Completion of proforma Table 5, including full data review.	Subject Leaders and Line Manager
Stage 4	Centre assessed grades submitted to the exam board by HOD.	Subject Leaders
	Quality assurance – Line Manager checks all grades submitted to the exam board for accuracy.	Line Manager
	Quality assurance – Exams officer checks all grades submitted to the exam board for accuracy.	Exams officer
	Quality assurance – Sign-off by Head of Centre	Head of Centre