

Curriculum and Performance Measures

Dave Bell

Senior Vice Principal

Manchester Enterprise Academy

April 28th, 2016

This session will look at the implications of the new school performance measures, with a specific focus on Progress 8.

It will consider the impact for curriculum planning for students of all abilities.

Performance Measures

New Performance Measures



“designed to encourage schools to offer a broad and balanced curriculum at key stage 4, and reward schools for the teaching of all their pupils, measuring performance across 8 qualifications. Every increase in every grade a pupil achieves will attract additional points in the performance tables.”

New Performance Measures for all from 2016

Progress 8

Attainment 8

**English & Maths
combined reaching
threshold**

**English
Baccalaureate**

% of pupils who went on to sustained education, employment or training during the year after they finished their key stage 4 qualifications.

The % of students achieving grade C or higher in:

- English or English Literature
- Maths
- History or Geography – no RE
- Two Sciences – rules apply
- Language

Ebacc Languages



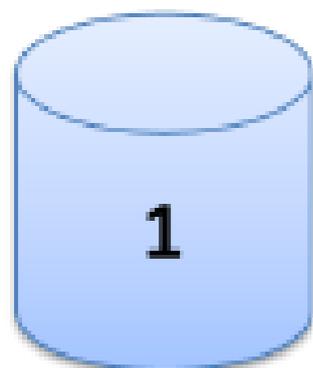
Arabic	Irish
Bengali	Italian
Biblical Hebrew	Japanese
Chinese	Latin
Chinese (Mandarin)	Latin Language and Roman Civilisation
Classical Greek	Modern Hebrew
Cymraeg Ail Iaith	Panjabi
Cymraeg Iaith Gyntaf	Persian
Dutch	Polish
French	Portuguese
Gaeilge	Russian
German	Spanish
Greek	Turkish
Gujarati	Urdu

Attainment and Progress 8

3 Buckets!

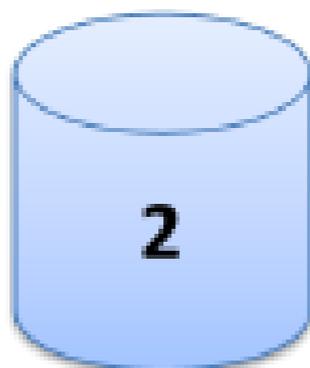


Progress 8 measure



English

Double-weighted*



Maths

Double-weighted



3



4



5

EBacc qualifications

(sciences, computer science, geography, history and languages)



6



7



8

'Open group'

Remaining EBacc qualifications and other approved qualifications

(GCSEs and other approved academic, arts or vocational qualifications)

*Higher score of English Language or English Literature double-weighted if a student has taken both qualifications

Weightings



English	20%
Maths	20%
Ebacc 1	10%
Ebacc 2	10%
Ebacc 3	10%
Other 1	10%
Other 2	10%
Other 3	10%
Total	100%

Bucket 1

English and Maths



English and Maths are double-weighted.

The English grade is the highest from Language or Literature.

The lower English grade can go into Bucket 3.

Bucket 2 Ebacc

Any three from:

- Science – not Further Additional Science.
- Humanities – Geography and History, not RE or Humanities.
- Languages
- Computer Science.

Bucket 3

Other Qualifications



Any further three as long as they are on the approved list.

Includes a number of vocational qualifications.

Level 3 Qualifications

These count in the appropriate bucket.

Attainment 8

- Best 8 grades from the three buckets.
- Across all students, average this score out to a grade (+/-).
- Arguably the easiest to understand?
Implications?

Attainment 8 – Individual Score



Group	Subject	Result	Points
<i>English</i>	<i>Eng. Lang</i>	<i>C</i>	<i>10</i>
<i>Maths</i>	<i>Maths</i>	<i>C</i>	<i>10</i>
<i>Ebacc 1</i>	<i>French</i>	<i>C</i>	<i>5</i>
<i>Ebacc 2</i>	<i>Core Science</i>	<i>B</i>	<i>6</i>
<i>Ebacc 3</i>	<i>-</i>	<i>-</i>	<i>0</i>
<i>Open 1</i>	<i>Eng. Lit.</i>	<i>C</i>	<i>5</i>
<i>Open 2</i>	<i>PE</i>	<i>B</i>	<i>6</i>
<i>Open 3</i>	<i>BTEC Music</i>	<i>Pass (C)</i>	<i>5</i>
<i>Attainment 8 points total :</i>			<i>47</i>

Average points = (Attainment 8 points / 10) = 4.7

Attainment 8 – School Score



Student	Points
<i>Evaldas</i>	<i>47</i>
<i>Beccy</i>	<i>35</i>
<i>Casper</i>	<i>21</i>
<i>Dominic</i>	<i>50</i>
<i>Elsa</i>	<i>33</i>
<i>Umar</i>	<i>65</i>
<i>Benni</i>	<i>60</i>
<i>Harry</i>	<i>38</i>
<i>Attainment 8 points total:</i>	<i>349</i>
<i>Divided by number of students:</i>	<i>8</i>
<i>School Attainment 8 score:</i>	<i>43.625</i>

Attainment 8 – School Score

Attainment 8	Grade
≥ 78.3	A*
≥ 75 and < 78.3	A* ⁻
≥ 71.7 and < 75	A ⁺
≥ 68.3 and < 71.7	A
≥ 65 and < 68.3	A ⁻
≥ 61.7 and < 65	B ⁺
≥ 58.3 and < 61.7	B
≥ 55 and < 58.3	B ⁻
≥ 51.7 and < 55	C ⁺
≥ 48.3 and < 51.7	C
≥ 45 and < 48.3	C ⁻
≥ 41.7 and < 45	D ⁺
≥ 38.3 and < 41.7	D
≥ 35 and < 38.3	D ⁻
≥ 31.7 and < 35	E ⁺
≥ 28.3 and < 31.7	E
≥ 25 and < 28.3	E ⁻
≥ 21.7 and < 25	F ⁺
≥ 18.3 and < 21.7	F
≥ 15 and < 18.3	F ⁻
≥ 11.7 and < 15	G ⁺
≥ 8.3 and < 11.7	G
≥ 5 and < 8.3	G ⁻
≥ 0 and < 5	U

School Data

Cohort information for pupils at the end of key stage 4

Number of pupils at the end of key stage 4	94
Number of pupils included in the measures	92
Percentage of pupils included in the Progress 8 measure	98%

Progress 8

Progress 8 score	0.22
Progress 8 lower confidence interval	0.01
Progress 8 upper confidence interval	0.44

Attainment 8

Attainment 8 score	4004.0
Average Attainment 8 score per pupil	42.6
Average Attainment 8 grade per subject	D+

Disadvantaged pupils

Number of disadvantaged pupils in the Progress 8 measure	69
Average Attainment 8 score per disadvantaged pupil	40.35
Progress 8 measure for disadvantaged pupils	0.20
Progress 8 lower confidence interval for disadvantaged pupils	-0.05
Progress 8 upper confidence interval for disadvantaged pupils	0.45

Progress 8

- Most crucial, fairest measure?
- May include different subjects to Attainment 8.
- Less likely to be understood and reported as more complex than Attainment 8?

Progress 8

To get Progress 8 score,
**compare Attainment 8 score with
expected Attainment 8 score.**

The expected Attainment 8 score is
worked out from a student's KS2 SATs.

Expected Attainment 8

Table B.1 Provisional 2013 Attainment 8 estimates for each KS2 fine level

KS2 average fine level (English & Maths)	2013 Attainment 8 estimate	KS2 average fine level (English & Maths)	2013 Attainment 8 estimate	KS2 average fine level (English & Maths)	2013 Attainment 8 estimate
1.5 ^a	13	3.7	29	4.9	54
2.0 ^b	15	3.8	31	5.0	56
2.5 ^c	17	3.9	32	5.1	59
2.8 ^d	19	4.0	34	5.2	61
2.9	20	4.1	36	5.3	64
3.0	21	4.2	38	5.4	66
3.1	22	4.3	40	5.5	69
3.2	23	4.4	42	5.6	72
3.3	24	4.5	44	5.7	74
3.4	25	4.6	47	5.8 ^e	76
3.5	26	4.7	49		
3.6	28	4.8	51		

Expected Attainment 8

Table B.1 2014 Attainment 8 estimates for each KS2 fine level

KS2 average fine level (English & Maths)	2014 Attainment 8 estimate	KS2 average fine level (English & Maths)	2014 Attainment 8 estimate	KS2 average fine level (English & Maths)	2014 Attainment 8 estimate
1.5 ^a	14.94	3.7	31.75	4.9	55.11
2.0 ^b	18.06	3.8	33.02	5.0	57.33
2.5 ^c	19.13	3.9	34.71	5.1	59.72
2.8 ^d	20.88	4.0	36.55	5.2	62.02
2.9	21.78	4.1	38.48	5.3	64.46
3.0	23.12	4.2	40.42	5.4	66.97
3.1	23.38	4.3	42.26	5.5	69.72
3.2	24.98	4.4	44.41	5.6	72.49
3.3	26.04	4.5	46.37	5.7	74.71
3.4	26.98	4.6	48.52	5.8 ^e	76.32
3.5	28.39	4.7	50.67		
3.6	29.95	4.8	52.84		

Expected Attainment 8

Table B.1 2015 Attainment 8 estimates for each KS2 fine level

KS2 average fine level (English & Maths)	2015 Attainment 8 estimate	KS2 average fine level (English & Maths)	2015 Attainment 8 estimate	KS2 average fine level (English & Maths)	2015 Attainment 8 estimate
1.5 ^a	13.20	3.7	32.11	4.9	55.03
2.0 ^b	17.79	3.8	33.63	5.0	56.16
2.5 ^c	19.39	3.9	35.27	5.1	59.32
2.8 ^d	20.38	4.0	36.48	5.2	61.51
2.9	21.88	4.1	38.80	5.3	63.92
3.0	23.37	4.2	40.62	5.4	66.31
3.1	23.91	4.3	42.55	5.5	65.67
3.2	24.42	4.4	44.49	5.6	71.61
3.3	26.15	4.5	45.87	5.7	74.18
3.4	27.71	4.6	48.50	5.8 ^e	76.28
3.5	28.58	4.7	50.71		
3.6	30.24	4.8	52.76		

Progress 8

Group	Subject	Result	Points
<i>English</i>	<i>Eng. Lang</i>	<i>C</i>	<i>10</i>
<i>Maths</i>	<i>Maths</i>	<i>C</i>	<i>10</i>
<i>Ebacc 1</i>	<i>French</i>	<i>C</i>	<i>5</i>
<i>Ebacc 2</i>	<i>Geography</i>	<i>C</i>	<i>5</i>
<i>Ebacc 3</i>	<i>-</i>	<i>-</i>	<i>0</i>
<i>Open 1</i>	<i>Eng. Lit.</i>	<i>C</i>	<i>5</i>
<i>Open 2</i>	<i>PE</i>	<i>C</i>	<i>5</i>
<i>Open 3</i>	<i>BTEC science</i>	<i>Pass (C)</i>	<i>5</i>
<i>Attainment 8 points total :</i>			<i>45</i>

2013 Average points (4.5) – Expected points (3.4) = **+1.1**

2014 Average points (4.5) – Expected points (3.7) = **+0.8**

2015 Average points (4.5) – Expected points (3.6) = **+0.9**

Progress 8

The expected **Progress 8** score will change every year. This is because **each pupil's results** are compared to other pupils with the same **prior attainment within the same cohort**.

In other words, **you will not know your definitive Progress 8 score until students have left** and national data is produced.

By 2019, schools were going to know the final Expected Attainment 8 score for three years in advance. This has quietly been dropped because it is too hard to calculate...

Floor Standard

- Below the floor standard if Progress 8 score is below -0.5, and the upper band of the 95% confidence interval is below zero.
- Schools in which pupils make one grade more progress than the national average will be exempt from routine inspections by Ofsted in the next academic year.

New Performance Measures for all from 2016



Progress 8

Attainment 8

**English & Maths
combined reaching
threshold**

**English
Baccalaureate**

% of pupils who went on to sustained education, employment or training during the year after they finished their key stage 4 qualifications.

English and Maths combined reaching threshold



‘Threshold’ means:

- Grade C and above for 2016
- Grade 5 and above for 2017 onwards

Curriculum

Why are GCSEs and A levels changing?

The new qualifications will:

1. provide a stronger foundation for further study and employment, keeping pace with the demands of universities and employers.
2. support students in developing the knowledge, skills and values they need for life in modern Britain.
3. match the standards of the best education systems in the world.



What new GCSEs will look like



The main features of the new GCSEs are:

- A **new grading scale of 9 to 1** will be used, with 9 being the top grade. This will allow greater differentiation between students and will help distinguish the new GCSEs from previous versions.
- Assessment will be **mainly by exam**, with other types of assessment used only where they are needed to test essential skills.
- There will be new, **more demanding** content, which has been developed by government and the exam boards.
- Courses will be designed for two years of study – they will no longer be divided into different modules and **students will take all their exams in one period** at the end of their course.
- Exams can only be split into ‘foundation tier’ and ‘higher tier’ if **one exam paper** does not give all students the opportunity to show their knowledge and abilities.
- **Resit** opportunities will **only** be available each **November** in English language and maths.

Why? The DFE small print



- A **single final exam** because “by removing the interruptions for modular exams during the course, teachers and students will be encouraged to **increase their focus on high quality teaching and successful learning, with more depth and breadth.**”
- **No tiered entry** where possible as “**tiers can limit students’ ambition**, because students can find themselves in the lower tier despite having the ability to achieve a higher standard.”
- “**Assessment** will be entirely by **exam** for most subjects. Where other forms of assessment are retained, it will be only where necessary for the assessment of key subject skills such as in art or PE.”
- **Removal of coursework / controlled assessment** because it “**does not** always **differentiate** well enough between students of different abilities; **does not** always **test the skills it aims to assess**; can **divert time from teaching and learning**; and can **narrow the focus** of what is taught during the course.”

Taught from 2015, first awarded in 2017.

Subject	Tiered	Non-exam assessment	Comments
<i>English language</i>	No	None	Separate reported grade for spoken language. A statement from the school or college is required to confirm that spoken language opportunities have been provided.
<i>English literature</i>	No	None	
<i>Maths</i>	Yes	None	

Taught from 2016, first awarded in 2018.



Subject	Tiered	Non-exam assessment	Comments
Art and design	No	100%	
Biology	Yes	None	At least 8 mandatory practical activities, confirmed by school statement. 15% of exam marks test understanding of practical work. 10% of exam marks test maths skills.
Chemistry	Yes	None	At least 8 mandatory practical activities, confirmed by school statement. 15% of exam marks test understanding of practical work. 20% of exam marks test maths skills.
Citizenship studies	No	None	School statement confirming opportunities for citizenship action. 15% of exam marks for 'citizenship action questions'.
Classical Greek	No	None	
Combined science	Yes	None	New subject. Double award: grades from 9-9 to 1-1. At least 16 mandatory practical activities, confirmed by school statement. 15% of exam marks test understanding of practical work. 20% of exam marks test maths skills.
Computer science	No	20%	New subject.
Dance	No	60%	
Drama	No	60%	
Food preparation and nutrition	No	50%	New subject

Taught from 2016, first awarded in 2018.



Subject	Tiered	Non-exam assessment	Comments
French	Yes	25%	
Geography	No	None	School statement confirming opportunities for fieldwork. Minimum 15% of exam marks for 'fieldwork questions'.
German	Yes	25%	
History	No	None	
Latin	No	None	
Music	No	60%	
Physical education	No	40%	
Physics	Yes	None	At least 8 mandatory practical activities, confirmed by school statement. 15% of exam marks test understanding of practical work. 30% of exam marks test maths skills.
Religious studies	No	None	
Spanish	Yes	25%	

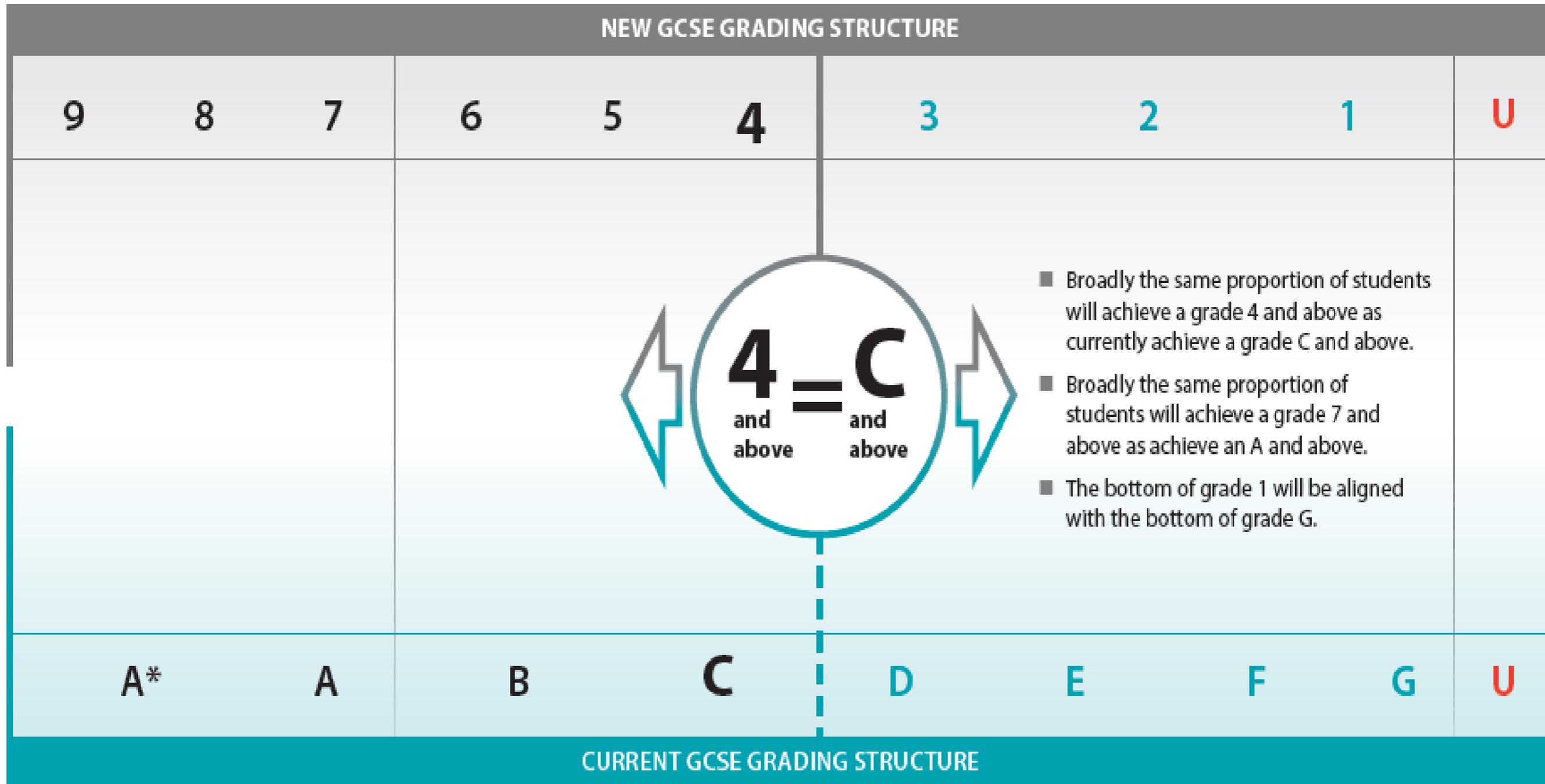
Taught from 2017, first awarded in 2019.

Subject	Tiered	Non-exam assessment
<i>Ancient history</i>	Not tiered	None
<i>Astronomy</i>	Not tiered	None
<i>Business</i>	Not tiered	None
<i>Classical civilisation</i>	Not tiered	None
<i>Design and technology</i>	Not tiered	50%
<i>Economics</i>	Not tiered	None
<i>Electronics</i>	Not tiered	20%
<i>Engineering</i>	Not tiered	40%
<i>Film studies</i>	Not tiered	30%
<i>Geology</i>	Not tiered	None
<i>Media studies</i>	Not tiered	30%
<i>Psychology</i>	Not tiered	None
<i>Sociology</i>	Not tiered	None
<i>Statistics</i>	Tiered	None

Grade Changes



Grading the New GCSEs in 2017



Setting grades: A* - G GCSEs

Grade	How set
A*	Same number of marks above A as B is below
A	Judgment supported by statistics
B	Interpolated
C	Judgment supported by statistics

Setting grades: A* - G GCSEs

Score	Grade	How set
75	A*	Same number of marks above A as B is below
68	A	Judgment supported by statistics
61	B	Interpolated
54	C	Judgment supported by statistics

Setting grades: 9 - 1GCSEs



Grade	How set
9	20% of those achieving grade 7 and above
8	Interpolated
7	Statistically driven – same as would have achieved grade A
6	Interpolated
5	Interpolated
4	Statistically driven – same as would have achieved grade C

Setting grades: 9 - 1GCSEs



	Grade	How set
?	9	20% of those achieving grade 7 and above
?	8	Interpolated
66	7	Statistically driven
60	6	Interpolated
54	5	Interpolated
48	4	Statistically driven

Awarding grade 9 – the ‘tailored’ approach



Over all subjects, 20% of students awarded at least a grade 7 are awarded a grade 9 but the exact percentage varies by subject.

It is higher in those subjects with a higher proportion of students awarded at least a grade 7 and lower in those subjects with a lower proportion of students awarded at least a grade 7.

Performance



Who?	Seconds taken
Athlete 1	48
Athlete 2	49
Athlete 3	51.2
Athlete 4	51.5
Athlete 5	51.7
Athlete 6	52
Athlete 7	54
Athlete 8	55

Criterion Referencing



Who?	Seconds taken
Athlete 1	48
Athlete 2	49
Athlete 3	51.2
Athlete 4	51.5
Athlete 5	51.7
Athlete 6	52
Athlete 7	54
Athlete 8	55

'Pass' criteria is below 52 seconds

Comparable Outcomes

Who?	Seconds taken
Athlete 1	48
Athlete 2	49
Athlete 3	51.2
Athlete 4	51.5
Athlete 5	51.7
Athlete 6	52
Athlete 7	54
Athlete 8	55

'Pass' criteria is to finish in the top 50%

Criterion Referencing

Race 1		Race 2	
Who?	Seconds taken	Who?	Seconds taken
Athlete 1	48	Athlete A	47
Athlete 2	49	Athlete B	49
Athlete 3	51.2	Athlete C	50
Athlete 4	51.5	Athlete D	50.4
Athlete 5	51.7	Athlete E	50.9
Athlete 6	52	Athlete F	51.2
Athlete 7	54	Athlete G	51.8
Athlete 8	55	Athlete H	54

'Pass' criteria is below 52 seconds

Comparable Outcomes

Race 1		Race 2	
Who?	Seconds taken	Who?	Seconds taken
Athlete 1	48	Athlete A	47
Athlete 2	49	Athlete B	49
Athlete 3	51.2	Athlete C	50
Athlete 4	51.5	Athlete D	50.4
Athlete 5	51.7	Athlete E	50.9
Athlete 6	52	Athlete F	51.2
Athlete 7	54	Athlete G	51.8
Athlete 8	55	Athlete H	54

‘Pass’ criteria is to finish in the top 50%

English and Maths combined reaching threshold



‘Threshold’ means:

- Grade C and above for 2016
- Grade 5 and above for 2017 onwards

Impact on MEA - 2015



Subject	Grade C / 4 and above	Grade C+ / 5 and above
Maths	60%	39%
English	60%	37%

The impact of moving to grades 9-1 and the new grade 5

- Grade 5 will be awarded to the top third of those who currently get grade C and the bottom third of those currently getting grade B.
- In crude terms, this is what numbers could look like for England in 2017, assuming the same number of candidates:

Subject	2015 grade C and above (%)	2017 grade 5 and above (%)	Number no longer achieving a 'good pass'
English language	65	46	85,000
English literature	75	59	65,000
Mathematics	64	44	137,000

GCSE Grade	Most likely number grade
G-	1-
F-	1=
F=	1+
F+	1+
E-	2-
E=	2=
E+	2=
D-	2+
D=	3-
D+	3=
C-	4-
C=	4=
C+	5-
B-	5=
B=	5+
B+	6=
A-	7-
A=	7=
A+	8-
A*-	8=

New points system

GCSE (BTEC) Grade	Points			2017 points (9-1 GCSEs)
	2015	2016	2017	
-	-	-	-	9
A* (Dist*)	58	8	8.5	8
A (Dist)	52	7	7	7
B (Merit)	46	6	5.5	6
C (Pass)	40	5	4	5
D	34	4	3	4
E	28	3	2	3
(L1 Pass)	25	2.5	1.75	-
F	22	2	1.5	2
G	16	1	1	1
U	0	0	0	0

Not equal value

GCSE Grade	Points			2017 diff to previous grade
	2015	2016	2017	
-	-	-	-	
A*	58	8	8.5	1.5
A	52	7	7	1.5
B	46	6	5.5	1.5
C	40	5	4	1
D	34	4	3	1
E	28	3	2	0.5
F	22	2	1.5	0.5
G	16	1	1	1
U	0	0	0	-

New Performance Measures



“designed to encourage schools to offer a broad and balanced curriculum at key stage 4, and reward schools for the teaching of all their pupils, measuring performance across 8 qualifications. ***Every increase in every grade a pupil achieves will attract additional points in the performance tables.***”

New points system



‘The KS4 regime will not be stable enough to make good Attainment 8 forecasts’

Accredited GCSEs

	AQA	OCR	Pearson (Edexcel)	WJEC Eduqas
Art and design	✓	✓	✓	✓
Biology	✓	Spec A: ✓ Spec B: ✓	✓	✓
Chemistry	✓	Spec A: ✓ Spec B: ✓	✓	✓
Citizenship	✓	✓	✓	-
Classical Greek	-	✓	-	-
Combined science	Spec 'Synergy': ✓ Spec 'Trilogy': ✓	Spec A: ✓ Spec B: ✓	✓	✓
Computer science	✓	✓	✓	✓
Dance	✓	-	-	-
Drama	✓	4th submission received 15 April 2016	✓	✓
Food preparation and nutrition	✓	✓	-	✓
French	✓	3rd submission due 06 May 2016	✓	awaiting 5th submission

Accredited GCSEs

	AQA	OCR	Pearson (Edexcel)	WJEC Eduqas
Geography	✓	Spec A: ✓ Spec B: ✓	Spec A: ✓ Spec B: ✓	Spec A: ✓ Spec B: ✓
German	✓	3rd submission due 06 May 2016	✓	awaiting 5th submission
History	✓	Spec A: ✓ Spec B: ✓	✓	✓
Latin	-	✓	-	✓
Music	✓	✓	✓	✓
Physical education	✓	✓	✓	✓
Physics	✓	Spec A: ✓ Spec B: ✓	✓	✓

Accredited GCSEs

	AQA	OCR	Pearson (Edexcel)	WJEC Eduqas
<i>Religious studies</i>	Spec A: ✓ Spec B: ✓ Spec 'SC': ✓	Spec: ✓ Spec 'SC': ✓	Spec A: 3rd submission received 8 April 2016 Spec B: 3rd submission received 8 April 2016 Spec 'SC A': awaiting 3rd submission, Spec 'SC B': awaiting 3rd submission	Spec: 4th submission due 26 April 2016 Spec 'SC': 4th submission due 26 April 2016
<i>Spanish</i>	✓	3rd submission due 06 May 2016	✓	awaiting 5th submission

First Entry and Discounting

- **Discounting** ensures that, where a pupil has taken two or more qualifications with a significant overlap in content, the performance tables only give credit once for teaching a single course of study.
- Discounting codes have become **more stringent**.
- A student's **first entry** in a subject family is the one **reported in headline measures**.

In summary

- Exams are getting harder.
- Some schools will benefit from the new measures, others will suffer.
- We don't know how employers and the public will interpret the new measures, if at all.
- Beware discounting codes and first entry rules.
- Be nice to your school leaders!