



**Cambridge  
Assessment**

# Candidates awarded A\* and A grades at GCSE in 2015

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## Introduction

The purpose of this report is to summarise pupil performance at GCSE level, particularly amongst those achieving the highest grades (A\* or A). This is of particular interest currently, given the changes to the grading of GCSEs that are about to take place.

There are various ways of summarising attainment at GCSE level. This report presents analyses of the distribution of mean GCSE, the proportion of pupils achieving a certain number of top grades (e.g., at least 8 A\* grades) and the proportion achieving A\* grades only. Analysis was undertaken for all candidates and then broken down by gender, school type attended and level of deprivation.

The data were taken from the National Pupil Database (NPD), which is held by the Department for Education and consists of results for all students in all subjects in schools and colleges in England, as well as pupil and school background characteristics such as age, gender and level of deprivation. For the analysis in this report the Key Stage 4 (KS4) extract of the NPD was used, consisting of all students who were at the end of KS4 in 2015 (i.e., in Year 11).

International GCSEs were counted as GCSEs in the analysis as they are a common alternative qualification that is judged to be equivalent. However, the NPD only includes the results of international GCSEs which have been accredited for use in state schools. There are also several non-accredited international GCSEs which are taken by some students attending independent schools and which are not in the NPD. As such they cannot be counted in the analysis in this report. This means that the analysis of independent school students should be viewed with some caution. For example, Table 15 presents the numbers of GCSEs taken by candidates attending different school types. The data in this table is likely to be an underestimate of how many were taken by independent school candidates. It should be noted that international GCSEs will no longer be eligible for inclusion in league tables from 2017 (Maths and English) and 2018 (all other subjects).

Only candidates taking at least 5 GCSEs were included in the analysis as it is unusual for students to take fewer than this. This left a total of 550,315 pupils.

## Results

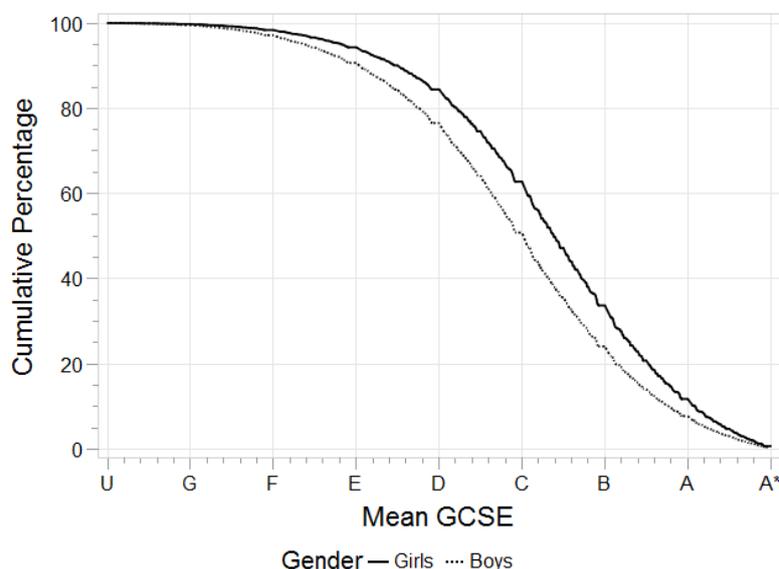
A mean GCSE measure was calculated for all candidates included in the analysis. This was done by converting grades to a numeric measure (e.g., 8 for an A\*, 7 for an A, down to 1 for a G and 0 for a U grade) and taking the mean for each candidate.

Table 1 presents the mean and standard deviation of the mean GCSE variable, by gender. This shows that girls had a higher mean GCSE (5.30) than boys (4.91).

*Table 1: Summary measures for mean GCSE, by gender*

Gender	Candidates	Mean	Standard Deviation
Girls	274,768	5.30	1.38
Boys	275,547	4.91	1.44
All	550,315	5.11	1.42

Figure 1 presents the cumulative distribution of the mean GCSE variable for students of different gender. It shows the cumulative percentage of students achieving each mean GCSE or higher. Thus, 62.8% of girls achieved a GCSE mean grade of C or better. In terms of the best performers, 11.8% of girls and 7.8% of boys achieved a mean GCSE grade of 'A' or better and 0.7% of girls and 0.5% of boys achieved a mean GCSE grade of 'A\*'.



**Figure 1: Cumulative distribution of mean GCSE, by gender**

There are several different types of school where students study for GCSEs. For this report these were classified into five groups (Academy, Comprehensive, Grammar, Independent and Secondary Modern). It should be noted that candidates taking GCSEs in other school types (such as further education or sixth form colleges) were excluded, as the numbers of candidates taking GCSEs at these types of schools whilst in KS4 were very small.

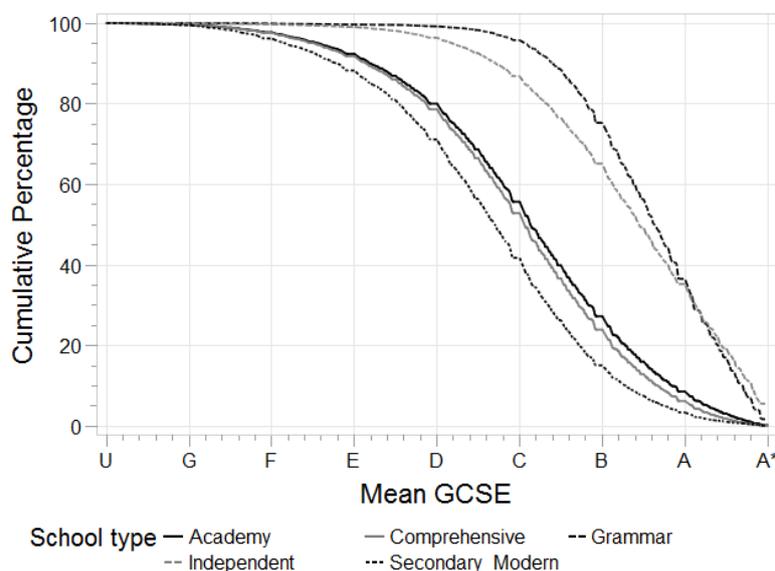
Table 2 presents the mean and standard deviation of the mean GCSE variable, by school type. Candidates in grammar schools had the highest mean GCSE (6.55), followed by those in independent schools (6.31). Secondary modern school candidates had the lowest mean (4.60). Thus the difference between grammar school candidates and those attending secondary modern schools was almost two grades.

**Table 2: Summary measures for mean GCSE, by school type**

School type	Candidates	Mean	Standard Deviation
Academy	246,430	5.06	1.40
Comprehensive	238,797	4.95	1.36
Grammar	9,615	6.55	0.90
Independent	37,767	6.31	1.20
Secondary Modern	12,191	4.60	1.35

Figure 2 presents the cumulative distribution of the mean GCSE variable for students attending the different school types. This shows that grammar school candidates had the highest cumulative percentages at almost all levels of mean GCSE. However, at the very top level (above a mean of grade A) there were higher proportions of independent school

candidates. There were 5.6% of independent school candidates who achieved a mean GCSE grade of 'A\*', compared with 1.7% of grammar school candidates. Cumulative percentages were very similar for academy and comprehensive school candidates, with secondary modern candidates having the lowest percentages at each level of mean GCSE.



**Figure 2: Cumulative distribution of mean GCSE, by school type**

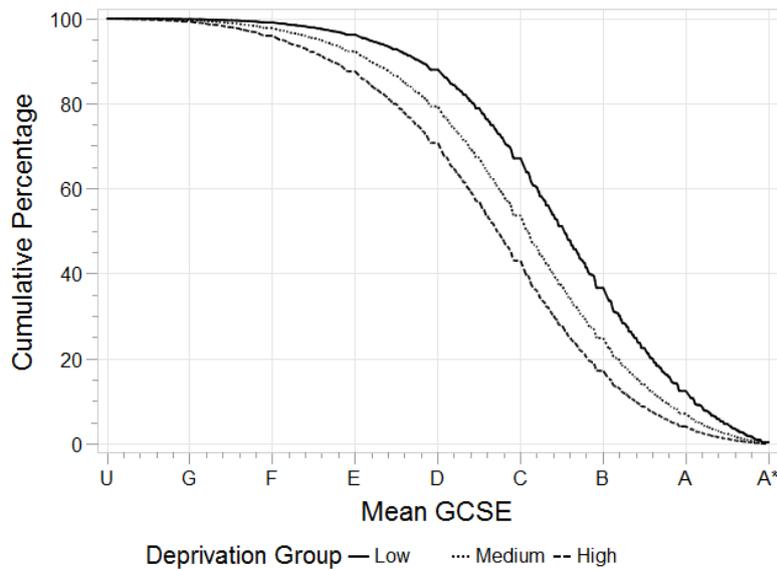
The level of deprivation that a student experiences is recorded in the NPD by the Income Deprivation Affecting Children Index (IDACI) variable. This is a measure of the proportion of children in a very small geographical area (Lower Layer Super Output Area or LSOA) who live in families that are income deprived. It varies between 0 and 1, with 0 representing minimum deprivation and 1 maximum deprivation.

It should be noted that there was a substantial amount of missing data for this measure (almost 7% of students had no record). Candidates who did have a measure of deprivation were divided up into three equally sized groups (low, medium and high). Table 3 presents the mean and standard deviation of the mean GCSE variable, by deprivation group. This shows that, on average, candidates in the low deprivation group had a mean GCSE almost one grade higher than those in the high deprivation group.

Figure 3 presents the cumulative distribution of the mean GCSE variable for candidates in each deprivation group. These both show that performance was best on average in the low deprivation group, followed by the medium and then the high deprivation groups. In the low deprivation group 0.4% achieved a mean GCSE of 'A\*', compared with 0.2% in the medium deprivation and 0.1% in the high deprivation groups.

**Table 3: Summary measures for mean GCSE, by deprivation group**

Deprivation group	Candidates	Mean	Standard Deviation
Low	171,046	5.45	1.29
Medium	171,063	4.99	1.37
High	171,056	4.62	1.41



**Figure 3: Cumulative distribution of mean GCSE, by deprivation group**

Table 4 presents the number of candidates achieving particular numbers of A\* grades or better. Thus, more than 25,000 candidates (4.89% of all taking 5 or more GCSEs) achieved at least 5 A\* grades, whilst only 2,653 (0.48%) achieved ten or more A\* grades.

**Table 4: Number and proportion of candidates achieving A\* grades**

Number of A* grades	No. of candidates	Percentage of candidates
10+	2,653	0.48
9+	5,196	0.94
8+	8,561	1.56
7+	13,146	2.39
6+	19,141	3.48
5+	26,914	4.89
All	550,315	

Table 5 presents the same data for the number of A\* or A grades achieved.

**Table 5: Number and proportion of candidates achieving A\*/A grades**

Number of A*/A grades	No. of candidates	Percentage of candidates
10+	22,501	4.09
9+	35,890	6.52
8+	49,838	9.06
7+	65,071	11.82
6+	82,118	14.92
5+	102,039	18.54
All	550,315	

Tables 6 and 7 present the same data, broken down by gender. This shows that around double the number of girls achieved at least 10 or at least 9 A\* grades. Many more girls than

boys achieved each number of A\* grades or better. The pattern was similar for the number of A\*/A grades, although not quite so much in favour of girls.

**Table 6: Number and proportion of candidates achieving A\* grades (by gender)**

Number of A* grades	No. of girls	Percentage of girls	No. of boys	Percentage of boys
10+	1,722	0.63	931	0.34
9+	3,378	1.23	1,818	0.66
8+	5,505	2.00	3,056	1.11
7+	8,275	3.01	4,871	1.77
6+	11,681	4.25	7,460	2.71
5+	16,048	5.84	10,866	3.94
All	274,768		275,547	

**Table 7: Number and proportion of candidates achieving A\*/A grades (by gender)**

Number of A*/A grades	No. of girls	Percentage of girls	No. of boys	Percentage of boys
10+	14,337	5.22	8,164	2.96
9+	22,646	8.24	13,244	4.81
8+	30,834	11.2	19,004	6.90
7+	39,382	14.3	25,689	9.32
6+	48,783	17.75	33,335	12.10
5+	59,824	21.77	42,215	15.32
All	274,768		275,547	

Tables 8 and 9 present the data broken down by school type. The results show that grammar school candidates had the highest percentages achieving each number of A\* grades (or better), followed by independent school candidates. However, the results for independent school students are likely to be underestimated, as they do not include any non-accredited international GCSEs they may have taken.

**Table 8: Number and percentage of candidates achieving A\* grades (by school type)**

Number of A* grades	Academy		Comprehensive		Grammar		Independent		Sec. Modern	
	Cands	Percent	Cands	Percent	Cands	Percent	Cands	Percent	Cands	Percent
10+	1,408	0.57	628	0.26	333	3.46	219	0.58	43	0.35
9+	2,650	1.08	1,289	0.54	638	6.64	516	1.37	69	0.57
8+	4,158	1.69	2,189	0.92	979	10.18	1,092	2.89	89	0.73
7+	6,088	2.47	3,361	1.41	1,347	14.01	2,153	5.70	120	0.98
6+	8,455	3.43	4,925	2.06	1,791	18.63	3,725	9.86	143	1.17
5+	11,443	4.64	7,016	2.94	2,185	22.72	5,948	15.75	193	1.58
All	246,452		238,796		9,614		37,766		12,192	

**Table 9: Number and proportion of candidates achieving A\*/A grades (by school type)**

Number of A*/A grades	Academy		Comprehensive		Grammar		Independent		Sec. Modern	
	Cands	Percent	Cands	Percent	Cands	Percent	Cands	Percent	Cands	Percent
10+	11,304	4.59	7,103	2.97	2,290	23.82	1,483	3.93	210	1.72
9+	17,474	7.09	11,863	4.97	3,190	33.18	2,884	7.64	309	2.53
8+	23,563	9.56	16,848	7.06	3,939	40.97	4,814	12.75	447	3.67
7+	29,786	12.09	22,072	9.24	4,604	47.88	7,702	20.39	609	5.00
6+	36,413	14.78	27,842	11.66	5,219	54.28	11,476	30.39	798	6.55
5+	43,959	17.84	34,757	14.56	5,848	60.82	15,988	42.33	1,032	8.47
All	246,452		238,796		9,614		37,766		12,192	

Tables 10 and 11 present the data broken down by deprivation group. As expected, the highest percentages were found in the low deprivation group of candidates.

**Table 10: Number and proportion of candidates achieving A\* grades (by deprivation group)**

Number of A* grades	Low		Medium		High	
	Cands	Percent	Cands	Percent	Cands	Percent
10+	1,458	0.85	689	0.40	323	0.19
9+	2,785	1.63	1,307	0.76	638	0.37
8+	4,354	2.55	2,139	1.25	1,040	0.61
7+	6,257	3.66	3,222	1.88	1,602	0.94
6+	8,577	5.01	4,573	2.67	2,367	1.38
5+	11,544	6.75	6,221	3.64	3,320	1.94
All	171,046		171,063		171,056	

**Table 11: Number and proportion of candidates achieving A\*/A grades (by deprivation group)**

Number of A*/A grades	Low		Medium		High	
	Cands	Percent	Cands	Percent	Cands	Percent
10+	11,456	6.70	6,296	3.68	3,430	2.01
9+	17,613	10.30	9,964	5.82	5,628	3.29
8+	23,566	13.78	13,662	7.99	8,027	4.69
7+	29,413	17.20	17,662	10.32	10,556	6.17
6+	35,567	20.79	21,875	12.79	13,493	7.89
5+	42,388	24.78	26,788	15.66	17,208	10.06
All	171,046		171,063		171,056	

Table 12 presents a breakdown of the number and percentage of candidates who got A\* grades in all of their GCSEs and those getting all A\* and A grades. Thus, there were 21,687 candidates taking 12 or more GCSEs, of which 177 (0.82%) achieved all A\* grades.

**Table 12: Percentages of students achieving all A\* grades or all A\*/A grades**

Number of GCSEs taken	No. of candidates	No. all A* grades	Percent all A* grades	No. all A*/A grades	Percent all A*/A grades
12+	21,687	177	0.82	2,224	10.25
11	62,311	463	0.74	5,465	8.77
10	121,926	542	0.44	6,794	5.57
9	119,670	240	0.20	2,740	2.29
8	84,827	241	0.28	1,333	1.57

Tables 13 and 14 present the same data, broken down by gender. In both tables the numbers and percentages were consistently higher amongst girls than boys.

**Table 13: Percentages of students achieving all A\* grades (by gender)**

Number of GCSEs taken	No. of girls	No. all A* grades	Percent all A* grades	No. of boys	No. all A* grades	Percent all A* grades
12+	11,515	97	0.84	10,172	80	0.79
11	33,318	317	0.95	28,993	146	0.50
10	64,492	365	0.57	57,434	177	0.31
9	61,503	197	0.32	58,167	43	0.07
8	40,578	147	0.36	44,249	94	0.21

**Table 14: Percentages of students achieving all A\*/A grades (by gender)**

Number of GCSEs taken	No. of girls	No. all A* grades	Percent all A* grades	No. of boys	No. all A* grades	Percent all A* grades
12+	11,515	1,391	12.08	10,172	833	8.19
11	33,318	3,711	11.14	28,993	1,754	6.05
10	64,492	4,422	6.86	57,434	2,372	4.13
9	61,503	1,985	3.23	58,167	755	1.30
8	40,578	848	2.09	44,249	485	1.10

Tables 15 and 16 present the data broken down by school type. Tables 17 and 18 present the data by deprivation group. Grammar and independent school students had the highest percentages amongst those taking 10 or more GCSEs. However, it is interesting that very few grammar school candidates taking 8 or 9 GCSEs achieved A\* grades only. This may be because the very high performing candidates took more than 9 GCSEs.

*Table 15: Percentages of students achieving all A\* grades (by school type)*

Number of GCSEs taken	Academy			Comprehensive			Grammar			Independent			Secondary Modern		
	Cands	All A* grades	% all A* grades	Cands	All A* grades	% all A* grades	Cands	All A* grades	% all A* grades	Cands	All A* grades	% all A* grades	Cands	All A* grades	% all A* grades
12+	10,993	103	0.94	8,300	45	0.54	1,301	13	1.00	646	11	1.71	394	3	0.76
11	31,155	225	0.72	25,130	110	0.44	3,175	73	2.30	1,773	35	1.98	912	14	1.54
10	56,565	269	0.48	54,347	111	0.20	3,593	77	2.14	4,771	77	1.61	2,189	6	0.27
9	53,435	78	0.15	55,994	44	0.08	1,009	2	0.20	6,213	115	1.85	2,513	0	0.00
8	37,474	9	0.02	38,177	3	0.01	296	1	0.34	5,767	227	3.94	2,336	0	0.00

*Table 16: Percentages of students achieving all A\*/A grades (by school type)*

Number of GCSEs taken	Academy			Comprehensive			Grammar			Independent			Secondary Modern		
	Cands	All A*/A grades	% all A*/A grades	Cands	All A*/A grades	% all A*/A grades	Cands	All A*/A grades	% all A*/A grades	Cands	All A*/A grades	% all A*/A grades	Cands	All A*/A grades	% all A*/A grades
12+	10,993	1,247	11.34	8,300	588	7.08	1,301	228	17.55	646	111	17.29	394	31	7.89
11	31,155	2,824	9.07	25,130	1,597	6.35	3,175	662	20.85	1,773	306	17.27	912	53	5.81
10	56,565	3,160	5.59	54,347	2,135	3.93	3,593	683	18.99	4,771	737	15.44	2,189	51	2.33
9	53,435	1,011	1.89	55,994	877	1.57	1,009	50	4.96	6,213	774	12.45	2,513	13	0.52
8	37,474	184	0.49	38,177	172	0.45	296	4	1.35	5,767	965	16.73	2,336	2	0.09

*Table 17: Percentages of students achieving all A\* grades (by deprivation group)*

Number of GCSEs taken	Low			Medium			High		
	Cands	All A* grades	% all A* grades	Cands	All A* grades	% all A* grades	Cands	All A* grades	% all A* grades
12+	8,683	90	1.04	4,576	59	0.82	5,490	22	0.40
11	26,592	271	1.02	7,159	115	0.59	14,634	42	0.29
10	47,907	275	0.57	19,544	129	0.33	30,562	63	0.21
9	39,766	80	0.20	38,895	33	0.09	35,425	12	0.03
8	22,435	6	0.03	38,490	6	0.02	29,728	1	0.00

*Table 18: Percentages of students achieving all A\*/A grades (by deprivation group)*

Number of GCSEs taken	Low			Medium			High		
	Cands	All A*/A grades	% all A*/A grades	Cands	All A*/A grades	% all A*/A grades	Cands	All A*/A grades	% all A*/A grades
12+	8,683	1,148	13.22	7,159	654	9.14	5,490	357	6.50
11	26,592	2,987	11.23	19,544	1,453	7.43	14,634	738	5.04
10	47,907	3,391	7.08	38,895	1,762	4.53	30,562	919	3.01
9	39,766	1,069	2.69	38,490	569	1.48	35,425	329	0.93
8	22,435	160	0.71	27,120	119	0.44	29,728	85	0.29