

Provision of IGCSE subjects 2012

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Introduction

This report looks at the provision of IGCSE subjects in England in 2012, in a similar manner to the series of Cambridge Assessment Statistics Reports on GCSE provision (e.g. Gill, 2013). Provision is defined as the number or percentage of schools with at least one student taking an IGCSE in a particular subject.

IGCSEs are offered in England by AQA, Edexcel, Cambridge International Examinations and WJEC. Some IGCSE syllabuses have been approved for teaching in state schools; these are more formally known as Level 1/Level 2 Certificates and are accredited by Ofqual. In this report, provision of accredited and unaccredited IGCSEs has been presented separately.

The level of provision is presented by different school classifications: school type, school attainment, school gender and school size. However, it should be noted that the analysis is at the simplest level and takes no account of interactions between these classifications. For instance, Table 3 of this report shows that provision of unaccredited IGCSEs in single sex schools was generally higher than in mixed sex schools. This can partly be attributed to the fact that single sex schools are more likely to be independent schools, which are more likely to offer unaccredited IGCSEs (Table 1).

Data

The data for these analyses were taken from the National Pupil Database (NPD). This is a database of results for all students in all subjects in schools and colleges in England. This report presents only the provision of IGCSE subjects in schools with pupils taking GCSEs or IGCSEs in 2012.

As the provision data are calculated at school level, pupils flagged in the NPD as not contributing to Key Stage 4 (KS4) school-level results were excluded from this analysis. A common reason for this is that these pupils were not on the school roll (for example if they had moved schools). Any such pupils recorded as entering IGCSE may not therefore reflect the school's provision.

Analysis of IGCSE provision by deprivation level has not been carried out, because provision is dominated by independent schools, for which information on pupil deprivation is rarely available.

School Type

There are several different types of school offering IGCSEs. For this report these were classified into five groups (Table 1). Although some sixth form and further education colleges also offer KS4 qualifications, these are relatively rare and GCSEs/IGCSEs are not their main focus. Therefore, they were excluded from the analysis. Other non-maintained schools, such as special schools, were also excluded.

Table 1: School type

School Type	Number of schools	Percentage of schools	Percentage offering IGCSE		
			Any	Accredited	Unaccredited
Academy	1008	25.2	18.8	13.2	8.4
Comprehensive	1855	46.4	16.8	12.9	5.8
Grammar	90	2.3	16.7	10.0	7.8
Independent	925	23.1	51.7	20.3	46.9
Secondary Modern	118	3.0	22.9	16.1	6.8

As Table 1 shows, provision of IGCSEs (particularly unaccredited IGCSEs) was much higher among independent schools than other school types. This in turn affects the breakdown by other factors throughout this report: for example, Table 3 shows that provision of unaccredited IGCSE

was lower among mixed schools than single-sex schools, reflecting the composition of independent schools.

Ability of Schools

The ability or attainment level of each school was calculated as the mean of the attainment of the students attending it. The attainment of the students was measured by the mean of their combined GCSE and IGCSE grades, calculated by converting grades to scores (A*=8, A=7, B=6 etc).

A frequency distribution of these scores was obtained and used to allocate the schools into five approximately equally sized attainment groups. The cut-off points for these groups are shown in Table 2, along with the minimum, maximum and mean for each group. Group I is the lowest attainment category and Group V is the highest.

Table 2: School attainment/ability group

	School ability group	Number of schools	Minimum	Maximum	Mean	Percentage offering IGCSE		
						Any	Accredited	Unaccredited
Low ↓ ↓ ↓ High	Group I	799	0.0	4.3	3.8	18.0	14.6	5.9
	Group II	799	4.3	4.7	4.5	18.3	13.9	7.5
	Group III	799	4.7	5.1	4.9	15.9	11.5	6.0
	Group IV	799	5.1	5.8	5.4	23.4	11.6	14.6
	Group V	799	5.8	8.0	6.6	52.2	21.9	46.2

There were individual students who obtained high grades in a Group I school and some who obtained low grades in a Group V school. However, a Group V school will have more high attaining students than a Group I school, which has obvious implications for provision and teaching.

School gender

A variable categorising schools by their gender make-up was created. The categorisation was determined by the female ratio in the school (number of females over the total number of students). If this ratio was greater than 0.95, the school was considered to be a “Girls” school. If the female ratio was less than 0.05, then the school was designated a “Boys” school. The rest of the schools were “Mixed” schools. Table 3 shows the numbers and percentages of the different types of schools.

Table 3: School gender

School gender	Number of schools	Percentage of schools	Percentage offering IGCSE		
			Any	Accredited	Unaccredited
Boys	308	7.7	37.0	22.7	24.7
Girls	496	12.4	33.5	13.1	26.4
Mixed	3192	79.9	23.2	14.2	13.6

School size

In Table 4 schools were classified into five groups according to their size (based on the number of students taking at least one GCSE/IGCSE). The categories were chosen on the basis of what is generally considered to be a reasonable size for a teaching group (i.e. 30 students).

Table 4: School size

School size	Number of schools	Percentage of schools	Percentage offering IGCSE		
			Any	Accredited	Unaccredited
Less than 30	442	11.06	22.4	8.8	17.6
30-59	245	6.13	46.1	18.0	38.0
60-119	625	15.64	39.7	18.1	32.0
120-239	2207	55.23	21.3	14.5	10.9
240 or greater	477	11.94	19.1	15.3	6.3

Cross-tabulation of other factors with school type

As seen above, school type is a significant contributor to the level of provision. This is to be expected as independent schools have more latitude to choose qualifications, and many began using IGCSEs before accredited versions were developed. It is important to consider how school type is distributed among the other factors: school ability, school gender and school size. Tables 5 to 7 present the percentage of each classification group within each school type.

Table 5 shows that independent schools dominate the highest ability group (68% of schools within this group are independents), while Table 6 shows that they are disproportionately represented among single sex schools. Finally Table 7 shows that the majority of the two smallest school size groups consist of independent schools.

Table 5: Percent of school type within each school ability group

School Ability Group		Academy	Comprehensive	Grammar	Independent	Secondary Modern
Low ↓	Group I	27.0	53.8	0.3	11.6	7.3
	Group II	24.8	66.8	0.0	4.4	4.0
	Group III	30.0	59.7	0.0	7.9	2.4
	Group IV	30.9	44.3	0.3	23.8	0.8
High	Group V	13.4	7.5	10.8	68.1	0.3

Table 6: Percent of school type within each school gender

School Gender	Academy	Comprehensive	Grammar	Independent	Secondary Modern
Boys	17.5	25.3	11.0	40.6	5.5
Girls	17.3	22.4	5.8	53.2	1.2
Mixed	27.2	52.2	0.8	16.8	3.0

Table 7: Percent of school type within each school size group

School Size	Academy	Comprehensive	Grammar	Independent	Secondary Modern
Less than 30	3.4	8.6	1.1	85.3	1.6
30-59	6.5	7.3	0.0	83.7	2.4
60-119	18.1	36.8	3.5	37.6	4.0
120-239	31.9	57.2	2.9	4.8	3.3
240 or greater	33.8	64.4	0.0	0.4	1.5

Provision of individual IGCSE subjects

In Tables 8 to 11 on the following pages the provision of individual subjects is presented by the school classifications outlined in Tables 1 to 4. Each table has been split into unaccredited IGCSEs and accredited IGCSEs. For example, Table 8(a) shows that 2.5% of secondary modern schools offered unaccredited English Language IGCSE, compared with 27.2% of independent schools, whereas the figures for the accredited qualification in Table 8(b) were 7.6% and 2.2% respectively.

Table 8: Provision of IGCSEs by school type (percentages)**a) Unaccredited**

Subject	Academy	Compre- hensive	Grammar	Independent	Secondary Modern
Art & Design	.	.	.	0.1	.
Biology	0.6	0.1	1.1	14.4	0.8
Chemistry	0.5	0.2	1.1	13.7	0.8
Chinese	1.6	1.3	5.6	13.4	.
English Language	3.9	2.0	.	27.2	2.5
English Literature	0.5	0.5	1.1	22.4	.
English for Speakers of other Languages	0.7	0.7	.	4.8	.
French	0.4	0.3	.	13.4	.
Geography	0.6	0.2	.	7.4	.
German	0.1	0.2	.	10.4	.
History	0.5	0.4	.	8.1	0.8
Information & Communications Technology	.	.	.	0.2	.
Mathematics	1.9	0.9	1.1	29.2	1.7
Music	.	.	.	0.1	.
Physics	0.4	0.1	.	14.7	0.8
Science: Double Award	0.6	0.2	.	9.8	.
Spanish	0.5	0.2	.	11.6	1.7

b) Accredited

Subject	Academy	Compre- hensive	Grammar	Independent	Secondary Modern
Applied Business	.	.	.	0.2	.
Art & Design	.	0.1	.	0.8	.
Biology	0.9	0.5	1.1	2.8	.
Business Studies	0.2	0.1	.	1.5	.
Chemistry	0.8	0.3	2.2	3.1	.
English Language	6.2	6.3	5.6	2.2	7.6
English Language & Literature	0.1	.	1.1	0.1	.
English Literature	1.9	1.9	4.4	1.0	0.8
English for Speakers of other Languages	1.6	1.9	.	3.9	0.8
French	0.5	0.2	2.2	0.2	.
Geography	0.3	0.1	.	2.9	.
German	0.3	0.1	.	0.1	.
Hindi	0.6	0.4	.	0.1	.
History	0.2	0.2	1.1	4.4	.
Information & Communications Technology	0.6	0.3	1.1	3.4	.
Mathematics	3.6	4.4	1.1	2.6	9.3
Modern Greek	0.1	.	.	.	.
Music	.	.	.	2.7	.
Physics	0.8	0.3	2.2	3.6	.
Science: Double Award	0.2	0.1	.	.	.
Spanish	0.3	0.1	.	0.1	.

Table 9: Provision of IGCSEs by school attainment group (percentages)

a) Unaccredited

Subject	Low attainment			High attainment	
	Group I	Group II	Group III	Group IV	Group V
Art & Design	0.1	.	.	.	.
Biology	0.3	0.6	0.3	2.5	14.1
Chemistry	0.1	0.8	0.3	2.0	14.0
Chinese	0.8	0.9	0.5	4.9	14.1
English Language	2.5	3.3	3.3	6.0	26.5
English Literature	0.6	0.9	0.9	3.6	21.9
English for Speakers of other Languages	0.8	0.9	0.5	2.3	3.6
French	.	0.5	0.6	1.4	14.3
Geography	0.4	0.5	0.4	1.3	7.3
German	0.1	0.3	0.1	1.0	11.1
History	0.4	0.6	0.5	2.0	7.5
Information & Communications Technology	.	.	.	0.1	0.1
Mathematics	1.1	1.8	1.5	4.4	29.9
Music	.	.	.	.	0.1
Physics	0.3	0.5	0.4	2.5	14.3
Science: Double Award	0.4	0.3	0.6	1.1	10.3
Spanish	0.1	0.1	0.4	2.1	12.0

b) Accredited

Subject	Low attainment			High attainment	
	Group I	Group II	Group III	Group IV	Group V
Applied Business	.	.	.	0.3	.
Art & Design	0.1	.	0.1	0.3	0.5
Biology	0.6	0.3	0.6	1.6	2.5
Business Studies	0.1	.	0.1	0.6	1.3
Chemistry	0.4	0.3	0.5	1.8	2.8
English Language	7.4	7.4	6.1	3.1	2.6
English Language & Literature	0.1	.	.	.	0.3
English Literature	2.3	1.9	0.9	1.4	2.1
English for Speakers of other Languages	2.4	2.0	1.5	2.4	2.9
French	.	0.4	0.1	0.1	0.9
Geography	.	.	0.1	0.3	3.5
German	.	0.3	.	0.1	0.3
Hindi	0.4	0.4	0.1	0.8	0.1
History	0.1	0.4	0.3	0.8	4.5
Information & Communications Technology	0.1	0.1	0.6	1.1	3.5
Mathematics	5.3	4.9	3.1	2.9	3.1
Modern Greek	0.1	.	.	.	.
Music	.	.	.	.	3.1
Physics	0.5	0.1	0.8	1.1	3.5
Science: Double Award	.	0.1	.	0.1	0.1
Spanish	.	0.1	.	0.3	0.4

Table 10: Provision of IGCSEs by school gender (percentages)**a) Unaccredited**

Subject	Boys	Girls	Mixed
Art & Design	.	.	0.0
Biology	8.1	6.5	2.7
Chemistry	8.1	6.5	2.5
Chinese	5.2	8.3	3.5
English Language	14.0	12.5	7.1
English Literature	11.7	9.3	4.4
English for Speakers of other Languages	1.9	1.0	1.7
French	7.5	7.3	2.3
Geography	4.2	2.0	1.7
German	5.8	5.2	1.8
History	3.9	1.6	2.1
Information & Communications Technology	.	.	0.1
Mathematics	16.6	16.1	5.6
Music	.	0.2	.
Physics	8.1	6.3	2.7
Science: Double Award	4.5	5.6	1.8
Spanish	7.1	5.6	2.1

b) Accredited

Subject	Boys	Girls	Mixed
Applied Business	.	.	0.1
Art & Design	0.3	0.4	0.2
Biology	1.9	0.8	1.1
Business Studies	0.6	.	0.5
Chemistry	1.9	1.0	1.1
English Language	6.5	3.2	5.5
English Language & Literature	.	.	0.1
English Literature	3.6	1.4	1.6
English for Speakers of other Languages	2.3	2.0	2.3
French	1.6	0.2	0.2
Geography	1.3	1.4	0.6
German	0.3	0.2	0.1
Hindi	0.6	0.4	0.3
History	4.2	1.2	0.9
Information & Communications Technology	1.3	0.8	1.1
Mathematics	5.5	2.6	3.9
Modern Greek	.	.	0.0
Music	2.6	1.8	0.3
Physics	2.3	0.8	1.2
Science: Double Award	0.3	.	0.1
Spanish	0.6	0.4	0.1

Table 11: Provision of IGCSEs by school size (percentages)**a) Unaccredited**

Subject	Less than 30	30–59	60–119	120–239	240 or greater
Art & Design	0.2	.	.	.	.
Biology	2.9	11.0	8.2	2.2	0.4
Chemistry	2.3	10.2	8.0	2.3	0.4
Chinese	1.8	13.5	10.6	2.6	1.0
English Language	7.9	16.7	18.6	6.0	1.7
English Literature	6.6	12.2	15.5	3.0	.
English for Speakers of other Languages	1.6	4.1	3.5	1.0	0.8
French	3.6	6.5	8.0	2.2	0.6
Geography	2.5	3.7	3.8	1.4	0.6
German	1.6	5.3	7.2	1.6	0.2
History	5.9	2.4	4.5	1.1	0.8
Information & Communications Technology	0.5	.	.	.	.
Mathematics	5.4	19.2	20.0	4.9	1.0
Music	.	.	0.2	.	.
Physics	2.5	11.8	8.3	2.2	0.4
Science: Double Award	1.6	7.8	6.1	1.6	0.2
Spanish	2.3	6.1	7.4	2.0	0.6

b) Accredited

Subject	Less than 30	30–59	60–119	120–239	240 or greater
Applied Business	0.2	.	0.2	.	.
Art & Design	1.1	.	0.3	0.0	.
Biology	2.0	2.0	2.4	0.6	0.4
Business Studies	1.6	1.2	0.3	0.2	0.2
Chemistry	2.3	1.6	2.6	0.6	0.2
English Language	2.3	3.3	4.6	5.7	8.4
English Language & Literature	.	.	0.2	0.0	0.2
English Literature	0.7	2.9	1.6	1.7	2.3
English for Speakers of other Languages	2.0	2.9	2.9	2.1	1.9
French	.	0.4	0.3	0.4	.
Geography	0.5	1.6	1.8	0.6	0.2
German	.	.	0.2	0.2	.
Hindi	.	.	0.2	0.5	0.6
History	1.6	2.9	1.8	0.9	0.6
Information & Communications Technology	1.1	3.7	1.9	0.7	0.4
Mathematics	1.4	0.8	3.5	4.9	3.1
Modern Greek	.	.	.	0.0	.
Music	.	2.0	1.6	0.4	0.2
Physics	1.8	2.4	3.0	0.6	0.2
Science: Double Award	.	.	.	0.1	0.2
Spanish	.	.	.	0.2	0.2

References

Gill, T. (2013). *Provision of GCSE subjects 2012*. Statistics Report Series No. 56. Cambridge: Cambridge Assessment.