

Provision of international GCSE subjects 2014

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Introduction

This report looks at the provision of international GCSE¹ subjects in England in 2014, as a follow-up to our previous report for 2012 (Sutch, 2013). Provision is defined as the number or percentage of schools with at least one student taking an international GCSE in a particular subject.

International GCSEs are offered in England by AQA, Edexcel, Cambridge International Examinations and WJEC. Some international GCSE syllabuses have been approved for teaching in state schools; these are more formally known as Level 1/Level 2 Certificates and are regulated by Ofqual. **In this report, only regulated international GCSEs are presented, as data on unregulated international GCSEs is no longer available from the National Pupil Database.**

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.

Data

The data for these analyses were taken from the National Pupil Database (NPD). This is a database held by the Department for Education of results for all students in all subjects in schools and colleges in England. This report presents only the provision of regulated international GCSE subjects in schools with pupils taking GCSEs or international GCSEs in 2014.

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 international GCSE may not therefore reflect the school's provision.

School Type

There are several different types of school offering international GCSEs. For this report these were classified into five groups (Table 1), using data from the 2013 version of the National Centre Number database. Although some sixth form and further education colleges also offer KS4 qualifications, these are relatively rare and GCSEs/ international GCSEs 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 international GCSE
Academy	1308	32.8	60.6
Comprehensive	1586	39.7	55.2
Grammar	74	1.9	47.3
Independent	922	23.1	39.9
Secondary Modern	100	2.5	66.0

¹ IGCSE® is the registered trade mark of Cambridge International Examinations.

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 international GCSE 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 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 international GCSE
Low ↓ High	Group I	798	0.6	4.3	3.7	61.5
	Group II	798	4.3	4.7	4.5	60.9
	Group III	798	4.7	5.1	4.9	52.0
	Group IV	798	5.1	5.8	5.4	46.2
	Group V	798	5.8	8.0	6.5	47.1

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.

Deprivation level

The level of deprivation that a student experiences was measured using a government index, based on home postcode. The Income Deprivation Affecting Children Index (IDACI) is 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. For each individual student this measure varies between 0 and 1. The level of deprivation in a school was taken as the average of the deprivation experienced by the students attending it.

The IDACI measure is included as a variable in the NPD. However, it should be noted that there was a significant amount of missing data for this measure. Therefore, only schools for which more than 50% of students had an IDACI score were included in the calculation.

Schools were divided up into five equal groups according to their deprivation level. Low IDACI scores mean low levels of deprivation and high IDACI scores mean high levels of deprivation. Thus, in Table 3 group A includes schools with students experiencing low deprivation on average, and group E schools with students experiencing high deprivation.

Table 3: School deprivation level

	School deprivation group	Number of schools	Minimum	Maximum	Mean	Percentage offering international GCSE
Low ↓ High	Group A	625	0.00	0.12	0.09	49.1
	Group B	625	0.12	0.17	0.14	54.2
	Group C	625	0.17	0.23	0.20	55.7
	Group D	625	0.23	0.33	0.28	60.5
	Group E	625	0.33	0.79	0.42	67.0

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 4 shows the numbers and percentages of the different types of schools.

Table 4: School gender

School gender	Number of schools	Percentage of schools	Percentage offering international GCSE
Boys	305	7.6	49.2
Girls	480	12.0	41.9
Mixed	3205	80.3	55.7

School size

In Table 5 schools were classified into five groups according to their size (based on the number of students taking at least one GCSE/international GCSE). 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 5: School size

School size	Number of schools	Percentage of schools	Percentage offering international GCSE
Less than 30	463	11.6	21.6
30-59	245	6.1	36.3
60-119	618	15.5	54.0
120-239	2164	54.2	60.6
240 or greater	500	12.5	60.4

Provision of individual international GCSE subjects

In Tables 6 to 10 on the following pages the provision of individual subjects is presented by the school classifications outlined in Tables 1 to 5.

Table 6: Provision of regulated international GCSEs by school type (percentages)

Subject	Academy	Compre- hensive	Grammar	Independent	Secondary Modern
Applied Business	0.3	0.2	.	0.3	.
Art & Design	0.2	0.1	.	0.4	1.0
Biology	5.8	2.3	16.2	11.1	4.0
Business Studies:Single	0.6	0.3	1.4	1.4	.
Chemistry	5.4	1.6	16.2	11.0	3.0
Chinese	0.5	0.4	5.4	0.5	1.0
English Language	50.2	47.2	23.0	10.3	58.0
English Language & Literature	0.2	0.3	.	0.1	.
English Literature	21.9	20.5	13.5	5.5	34.0
English for Speakers of other Languages	3.4	2.9	2.7	6.2	2.0
French	1.5	0.9	8.1	4.1	2.0
Geography	1.7	1.0	1.4	6.7	2.0
German	1.4	0.8	9.5	3.8	2.0
Hindi	0.6	0.2	.	0.2	.
History	2.4	1.3	1.4	6.9	4.0
Information & Communications Technology	1.7	1.5	4.1	4.4	2.0
Italian	0.2	.	.	0.4	.
Mathematics	7.5	6.0	6.8	4.2	7.0
Modern Greek	.	.	.	0.1	.
Music	0.2	.	2.7	3.3	.
Physics	5.4	1.6	12.2	11.4	1.0
Preparation for Work	1.8	1.8	.	0.4	3.0
Science: Double Award	2.0	0.9	6.8	0.7	4.0
Spanish	1.4	0.9	4.1	3.6	3.0

Table 7: Provision of regulated international GCSEs by school attainment group (percentages)

Subject	Low attainment —————▶			High attainment	
	Group I	Group II	Group III	Group IV	Group V
Applied Business	0.5	0.1	0.1	0.5	.
Art & Design	0.3	0.4	0.1	.	0.3
Biology	2.6	3.6	3.8	4.5	14.4
Business Studies:Single	0.3	0.6	0.3	0.5	1.6
Chemistry	1.5	2.6	3.1	4.0	15.2
Chinese	0.4	0.6	0.6	0.1	1.3
English Language	54.9	52.0	43.9	33.6	13.0
English Language & Literature	.	0.5	0.1	0.3	0.1
English Literature	29.2	23.6	16.0	12.7	7.1
English for Speakers of other Languages	4.0	4.4	2.5	3.6	4.5
French	0.8	0.8	0.8	2.1	5.8
Geography	1.3	1.3	1.0	1.5	7.9
German	0.5	0.8	0.8	1.8	5.5
Hindi	0.3	0.6	.	0.4	0.4
History	2.0	1.3	0.9	3.4	7.8
Information & Communications Technology	1.0	1.8	1.0	2.5	5.1
Italian	.	0.1	.	0.1	0.5
Mathematics	7.5	6.9	5.4	5.1	5.6
Modern Greek	.	.	.	.	0.1
Music	.	.	.	0.1	4.1
Physics	1.6	2.1	3.3	4.3	15.3
Preparation for Work	2.8	1.9	1.4	0.9	0.4
Science: Double Award	1.6	1.4	1.0	0.9	2.1
Spanish	0.6	0.9	0.8	1.8	5.0

Table 8: Provision of regulated international GCSEs by school deprivation (percentages)

Subject	Low deprivation			High deprivation	
	Group A	Group B	Group C	Group D	Group E
Applied Business	0.3	0.2	.	0.5	0.2
Art & Design	0.2	.	0.5	.	.
Biology	6.2	5.4	3.7	2.6	3.4
Business Studies:Single	0.6	0.5	0.3	0.3	0.3
Chemistry	6.6	3.7	3.5	2.2	2.2
Chinese	0.3	0.6	0.3	1.1	0.6
English Language	38.2	44.5	46.7	51.7	58.6
English Language & Literature	.	0.5	0.2	0.2	0.3
English Literature	13.6	17.6	21.6	24.0	29.6
English for Speakers of other Languages	0.6	1.9	1.9	3.7	7.0
French	2.6	1.4	1.3	1.0	0.8
Geography	1.4	1.9	0.6	1.0	1.6
German	2.6	1.4	0.8	0.6	0.8
Hindi	0.2	0.3	.	0.3	1.0
History	3.0	1.3	1.8	1.9	1.3
Information & Communications Technology	2.2	2.2	1.0	1.9	0.6
Italian	.	.	0.2	0.2	.
Mathematics	5.3	5.4	7.4	7.0	8.0
Modern Greek	.	.	.	.	.
Music	0.5	0.2	.	.	.
Physics	6.4	4.0	3.4	1.9	2.1
Preparation for Work	1.3	1.3	2.2	1.9	2.1
Science: Double Award	2.1	1.6	2.1	1.3	1.3
Spanish	1.3	1.4	1.8	0.6	1.1

Table 9: Provision of regulated international GCSEs by school gender (percentages)

Subject	Boys	Girls	Mixed
Applied Business	.	.	0.3
Art & Design	0.7	.	0.2
Biology	11.8	8.3	4.8
Business Studies:Single	1.6	0.6	0.6
Chemistry	11.8	9.0	4.1
Chinese	0.3	1.0	0.6
English Language	25.9	22.7	43.3
English Language & Literature	.	.	0.2
English Literature	14.8	8.1	19.4
English for Speakers of other Languages	3.0	2.5	4.1
French	3.9	3.3	1.7
Geography	4.3	2.9	2.4
German	4.6	2.7	1.5
Hindi	0.3	0.6	0.3
History	8.9	3.3	2.5
Information & Communications Technology	3.3	2.3	2.2
Italian	.	0.4	0.1
Mathematics	6.6	3.3	6.5
Modern Greek	.	.	0.0
Music	3.6	2.5	0.3
Physics	12.5	8.5	4.1
Preparation for Work	.	0.6	1.7
Science: Double Award	2.0	2.3	1.2
Spanish	2.6	2.5	1.6

Table 10: Provision of regulated international GCSEs by school size (percentages)

Subject	Less than 30	30–59	60–119	120–239	240 or greater
Applied Business	0.2	0.6	.	0.1	0.4
Art & Design	0.4	0.2	0.4	0.1	0.2
Biology	4.8	11.5	6.1	4.8	3.8
Business Studies:Single	1.3	0.6	0.8	0.6	0.2
Chemistry	4.3	11.5	6.5	4.1	3.2
Chinese	.	0.6	0.4	0.6	1.2
English Language	9.1	30.7	13.1	48.9	50.6
English Language & Literature	.	.	.	0.3	0.4
English Literature	4.1	17.2	6.1	21.8	19.2
English for Speakers of other Languages	2.8	5.7	5.7	3.4	3.2
French	0.4	4.7	4.1	1.5	1.6
Geography	2.2	7.0	2.9	1.8	0.8
German	0.9	4.2	3.7	1.3	1.2
Hindi	.	0.5	.	0.4	0.4
History	2.2	4.2	4.9	2.9	2.4
Information & Communications Technology	1.5	3.2	5.3	2.0	1.6
Italian	.	0.2	0.4	0.2	.
Mathematics	2.6	6.5	3.3	6.6	8.4
Modern Greek	.	.	.	0.0	.
Music	.	2.3	2.0	0.6	0.2
Physics	4.3	11.3	7.8	3.8	4.0
Preparation for Work	1.1	1.0	0.8	1.6	2.2
Science: Double Award	0.6	1.1	1.6	1.6	1.6
Spanish	0.4	3.9	2.4	1.4	1.8

Reference

Sutch, T. (2013). *Provision of IGCSE subjects 2012*. Statistics Report Series No. 62. Cambridge: Cambridge Assessment.