

Provision of level 2 science qualifications in 2011

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Introduction

Recent changes to the level 2 curriculum have provided schools and students with a much greater choice of science qualifications. Awarding bodies in England offer a wide range of science qualifications aiming to ensure that pupils study science that is relevant and up-to-date and that there is choice in the courses pupils take to prepare them for different routes post-16.

The most recent programme of study for science at level 2 sets out a core content that is relevant to all pupils and specifies curriculum requirements for the equivalent of a single GCSE. The single ('core') science GCSE offers a firm foundation to go on to study applied science at AS or at A level and a good background to specialise in other sciences at A level (e.g. Biology, Chemistry or Physics). Additionally, students can take one of two complementary GCSEs: GCSE additional science or GCSE additional applied science in order to cover a more comprehensive programme of study in science. Additional science, which has a more academic focus, prepares students further for progression to study AS and A levels in the sciences. The additional applied science is for practitioners of science and there is a strong focus on work-related learning. Students can also study separately GCSE biology, GCSE chemistry and GCSE physics to gain three full science GCSEs.

Since 2010, the International General Certificate of Secondary Education, or IGCSE, is accredited and funded in maintained state schools in England, meaning it is now possible for these schools to offer this qualification (independent schools had been offering IGCSEs prior to this). The subjects offered include science, biology, chemistry and physics. The IGCSE prepares students for further academic work, including progression to AS/A level study and to the International Baccalaureate programme.

There is also a vocational route in science offered at GCSE level: applied science double award. This qualification is designed to offer students the opportunity to widen their participation in vocationally related learning.

There are other science qualifications at level 2, equivalent to one or more GCSEs, that account for a small percentage of the volume of science offered in schools (e.g. BTEC in applied science or OCR National Awards in science). They are an alternative to the courses mentioned above and they provide students with the technical knowledge and skills needed in the workplace, in further education or in training.

A recent report by the Royal Society (The Royal Society, 2011) recommends that: 1) the increasing diversity of science qualifications needs to be reviewed; and 2) awarding organisations should make available detailed data on the participation of students taking their specifications in science.

This statistical report, an update of Statistics Report no. 15 (Vidal Rodeiro, 2010) aims to provide details of the provision of science qualifications at level 2 in schools in England.

Data

The analyses in this report have been carried out using data from the National Pupil Database (NPD). The NPD, which is compiled by the Department for Education, is a longitudinal database for all children in schools in England. It holds pupil and school characteristics such as age, gender, ethnicity, level of deprivation, attendance and exclusions, matched to pupil level attainment data (Key Stage 4 and 5 assessments). Students who start in a school/college are only recorded in the NPD if they enter for a qualification; those who leave after a short time or do not sit the examinations are not present in the data.

In this report, provision in a subject is defined as the percentage of schools with at least one student taking the subject.

Sciences entries

Entries in all science qualifications at level 2 were obtained from the Key Stage 4 extract of the NPD. Since 2010, the NPD has included IGCSE¹ results in science subjects for all schools in England.

School type

School type information was obtained from the awarding bodies' NCN (National Centre Number) database of educational establishments. The following types of schools were considered:

- Comprehensive schools
- Academies
- Independent schools
- Selective schools
- Secondary modern schools
- Other / unknown

School attainment

The performance of a school was calculated as the average of the GCSE attainment of the students attending it. The GCSE attainment of the students was based on their mean GCSE score. This was calculated by assigning marks to the GCSE grades (A*=8, A=7, B=6, C=5, D=4, E=3, F=2, G=1, U=0) and the 'mean GCSE' indicator was calculated by dividing the total score by the number of subjects attempted. The mean GCSE score ranges from 0 to 8.

The pupil-level GCSE performance data used to calculate the school level indicator of attainment was obtained from the NPD (see above).

The schools attainment variable was continuous and therefore was divided into three equal-sized groups (low, medium, high) using percentile values and schools were classified accordingly.

¹ In 2010 and 2011 only Cambridge IGCSEs, known as Cambridge International Certificates, were accredited for teaching in UK state schools and therefore were the only IGCSE qualifications included in the NPD. The Edexcel IGCSEs, now known as Edexcel Certificates, have been available to state schools since September 2011 (although independent schools had been offering Edexcel IGCSEs prior to this) and the first examinations for those will take place in June 2012. Results from Edexcel Certificates will be included in the NPD from 2012.

School deprivation

The deprivation measure of each school was calculated as the average score on the income deprivation affecting children index (IDACI) of the students attending it. This score is computed for each lower super output area (LSOA)² and it shows the percentage of children in the LSOA where the student resides who live in families that are income deprived. This data was obtained from the Pupil Level Annual School Census (PLASC) provided by the Department for Education. The PLASC data gives detailed information about all the pupils in the English state school system, including personal data, such as ethnicity, first language or mother tongue, special needs, deprivation and eligibility for school meals.

The schools' deprivation variable was continuous and therefore was divided into three equal-sized groups (low, medium, high) using percentile values and schools were classified accordingly.

There is a clear relationship between school attainment and school deprivation (see Table 1). For example, nearly 50% of the schools in the highest performing category are in areas of low deprivation compared to 13% of the schools in the lowest performing category.

Table 1: School attainment and deprivation, 2011

Attainment	Deprivation		
	Low	Medium	High
Low	13.0	37.6	59.7
Medium	37.4	46.8	31.5
High	49.6	15.6	8.8

Results

The provision of level 2 qualifications/subjects in science in 2011 is reported in this section. Appendix A includes provision figures for 2009 and Tables A1 to A8 can be used for comparison or to identify trends over time.

Provision of individual science qualifications/subjects

Table 2 presents the provision of individual qualifications/subjects in science offered in secondary schools in England. This table highlights that the GCSEs in biology, chemistry and physics were offered in about 60% of the secondary schools. This percentage increased about 18 percentage points since 2009 (see Table A1). This fact might, in part, account for the rise in the number of entries for GCSEs in biology, chemistry and physics in the last few years (Gill, 2011).

The provision figures for the GCSE in science and the GCSE in additional science (about 80 and 70%, respectively) were higher than for the GCSEs in biology, chemistry and physics but remained almost constant from 2009 to 2011.

² LSOAs are a conglomeration of a number of census output areas (each output area has about 150 households). They usually have a minimum population size of 1000 and an average of 1500. For more information visit <http://www.statistics.gov.uk>.

The provision figures for the applied science GCSE dropped from about 17% in 2009 to around 5% in 2011. The rise in BTECs and OCR Nationals in the same period might be the reason for this decrease. In particular, the BTEC First in applied science was offered in around 30% of schools in 2011, an increase of about 20 percentage points since 2009, and the OCR National in science was offered in about 6% of schools in 2011, the percentage doubling since 2009.

Table 3 presents the percentages of schools offering science subjects by school type. The provision of the three separate sciences was higher in selective schools than in any other type of schools. Note that there are some independent schools that offer the IGCSE in the single sciences (biology, chemistry and physics) rather than the GCSE.

Table 3 also shows (comparing with Table A2) an increase in the offer of the single sciences at GCSE (biology, chemistry, physics) in comprehensive schools, academies and secondary modern schools (provision figures rose from around 50% in 2009 to over 80% in 2011), but there was not much of an increase in independent schools. Provision for the science and additional science GCSEs was much lower in independent and selective schools than in comprehensive schools and academies. The provision figures for GCSE science and GCSE additional science remained almost constant from 2009 to 2011 in all types of schools (see Table A2 for 2009 provision figures by school type).

IGCSEs in biology, chemistry and physics were offered in only a small percentage of schools (Table 2) and predominantly in independent schools (Table 3). The IGCSE in science was not offered in any school. As the IGCSE has been accredited and funded in maintained state schools in England only since 2010, it is still early days for state maintained schools offering these qualifications. However, figures from the awarding bodies show a rise in the provision of these qualifications in the state sector (see, for example, CIE (2011)).

The percentages of selective and independent schools offering the BTEC First in applied science were very small (between 2% and 3%), compared to the percentages of comprehensive schools, academies or secondary modern schools doing so (around 50%). The provision figures for the OCR Nationals were lower but the patterns by school type were similar (about 10% of comprehensive schools and academies and below 1% of selective and independent schools).

Tables 4 and 5 show the percentages of schools offering level 2 science qualifications/subjects by schools' attainment and deprivation, respectively.

There was a strong pattern in the provision of science by school attainment. Schools with high ability students were more likely to offer GCSEs in the three separate sciences than schools with low ability students (almost 80% of the high attaining schools in comparison to over 25% of the low attaining schools offered GCSEs in biology, chemistry or physics in 2011). The percentages of schools offering the core or the additional science GCSEs were higher among the schools in the medium attainment group. OCR Nationals and BTECs were more likely to be offered in schools in the medium and low attainment groups rather than in schools with high ability students.

Likewise, schools with pupils who live in areas of low deprivation were far more likely to offer GCSEs in the three separate sciences than schools with pupils who live in areas of high deprivation (75% vs. 50%). Also, the percentages of schools offering GCSE science, GCSE additional science, OCR National and BTECs increased with higher levels of deprivation. This might lead to restricted options for high ability students who live or attend school in a deprived area.

For 2009 provision figures by schools' attainment and deprivation see Tables A3 and A4 in Appendix A.

Table 2: Level 2 science related qualifications/subjects on offer for certification in June 2011

Science qualification/subject at level 2	Number of schools	Percentage of schools
GCSE Science	4277	81.0
GCSE Additional Science	3632	68.8
GCSE Additional Applied Science	672	12.7
Applied Science GCSE	265	5.0
GCSE Biology	3122	59.1
GCSE Chemistry	3032	57.4
GCSE Physics	3020	57.2
GCSE Environmental Science	121	2.3
IGCSE Biology	21	0.4
IGCSE Chemistry	26	0.5
IGCSE Physics	31	0.6
OCR National Applied Science	312	5.9
BTEC First Applied Science	1594	30.2

Table 3: Level 2 science related qualifications/subjects on offer for certification in June 2011 ~ by type of school

Science qualification/subject at level 2	Comprehensive	Academy	Independent	Selective	Secondary modern	Other
GCSE Science	98.7	96.3	73.1	83.0	98.0	49.4
GCSE Additional Science	97.3	93.8	65.8	79.5	93.9	11.2
GCSE Additional Applied Science	22.4	17.9	1.9	4.5	20.4	1.8
Applied Science GCSE	8.8	8.2	0.6	0.0	6.8	0.8
GCSE Biology	83.5	82.8	57.9	91.1	57.1	8.9
GCSE Chemistry	83.2	81.6	56.0	90.2	56.5	4.5
GCSE Physics	83.2	80.9	55.1	91.1	55.1	4.6
GCSE Environmental Science	3.6	3.2	1.3	0.0	2.7	0.7
IGCSE Biology	0.1	0.2	1.7	0.0	0.0	0.1
IGCSE Chemistry	0.1	0.0	2.1	0.0	0.0	0.4
IGCSE Physics	0.1	0.4	2.3	0.0	0.0	0.4
OCR National Applied Science	10.5	10.3	0.7	0.9	4.1	0.7
BTEC First Applied Science	51.0	48.9	3.6	2.7	49.0	6.1

Table 4: Level 2 science related qualifications/subjects on offer for certification in June 2011 ~ by school ability

Science qualification/subject at level 2	Low ability	Medium ability	High ability
GCSE Science	77.2	93.3	85.7
GCSE Additional Science	44.7	90.9	82.1
GCSE Additional Applied Science	7.1	20.1	13.1
Applied Science GCSE	4.8	7.4	3.7
GCSE Biology	30.0	78.0	79.1
GCSE Chemistry	26.6	77.1	78.1
GCSE Physics	26.8	76.7	77.6
GCSE Environmental Science	1.5	4.1	1.7
IGCSE Biology	0.2	0.2	0.8
IGCSE Chemistry	0.2	0.2	1.1
IGCSE Physics	0.2	0.4	1.3
OCR National Applied Science	5.4	9.4	3.9
BTEC First Applied Science	27.5	48.1	19.5

Table 5: Level 2 science related qualifications/subjects on offer for certification in June 2011 ~ by school level of deprivation

Science qualification/subject at level 2	Low deprivation	Medium deprivation	High deprivation
GCSE Science	87.6	87.6	83.3
GCSE Additional Science	80.8	74.8	66.1
GCSE Additional Applied Science	21.9	14.9	10.8
Applied Science GCSE	6.0	5.8	7.1
GCSE Biology	76.9	62.2	50.4
GCSE Chemistry	75.6	61.4	48.8
GCSE Physics	75.5	61.1	48.6
GCSE Environmental Science	4.1	2.7	1.2
IGCSE Biology	0.1	0.0	0.1
IGCSE Chemistry	0.1	0.1	0.0
IGCSE Physics	0.3	0.1	0.1
OCR National Applied Science	6.7	8.0	7.8
BTEC First Applied Science	28.6	38.2	47.0

Provision of combinations of qualifications/subjects

There were 149 different combinations of the qualifications/subjects listed in Table 2 in the 2011 Key Stage 4 extract of the NPD. Tables 6 to 9 below show the provision of a group of selected combinations. Comparable tables using data from 2009 are available in Appendix A (Tables A5-A8).

Table 6: Combinations of level 2 science qualifications/subjects³ on offer for certification in June 2011

Combinations of science qualifications/subjects at level 2	Number of schools	Percentage of schools
Biology + Chemistry + Physics	2973	56.3
Science + Additional Science	3595	68.1
Science + Additional Science + Additional Applied Science	627	11.9
Biology + Chemistry + Physics + Science + Additional Science	2752	52.1
Biology + Chemistry + Physics + Applied Science	213	4.0
Science + Additional Science + Applied Science	238	4.5
Biology + Chemistry + Physics + Science + Additional Science + Applied Science	199	3.8
Biology + Chemistry + Physics + BTEC	1176	22.3
Biology + Chemistry + Physics + OCR National	251	4.8
Science + Additional Science + BTEC	278	5.3
Science + Additional Science + OCR National	1460	27.7
IGCSE Biology + IGCSE Chemistry + IGCSE Physics	14	0.3
IGCSE Biology + IGCSE Chemistry + IGCSE Physics + BTEC	1	0.0
IGCSE Biology + IGCSE Chemistry + IGCSE Physics + OCR National	0	0.0
Applied Science + BTEC	82	1.6
Applied Science + OCR National	17	0.3
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + BTEC	53	1.0
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + OCR National	11	0.2

³ Unless stated, the qualifications are GCSEs.

Table 7: Combinations of level 2 science qualifications/subjects on offer for certification in June 2011 ~ by school type

Combinations of science qualifications/subjects at level 2	Comprehensive	Academy	Independent	Selective	Secondary modern	Other
Biology + Chemistry + Physics	82.6	80.3	53.8	90.2	55.1	3.3
Science + Additional Science	97.0	93.3	63.6	79.5	93.2	10.8
Science + Additional Science + Additional Applied Science	21.5	17.2	1.9	4.5	19.0	0.4
Biology + Chemistry + Physics + Science + Additional Science	80.4	75.2	42.7	74.1	53.7	1.5
Biology + Chemistry + Physics + Applied Science	7.5	6.4	0.5	0.0	4.8	0.0
Science + Additional Science + Applied Science	8.1	8.2	0.5	0.0	5.4	0.1
Biology + Chemistry + Physics + Science + Additional Science + Applied Science	6.9	6.4	0.5	0.0	4.1	0.0
Biology + Chemistry + Physics + BTEC	40.6	37.9	2.3	1.8	26.5	0.5
Biology + Chemistry + Physics + OCR National	9.1	7.4	0.5	0.0	2.7	0.1
Science + Additional Science + BTEC	10.0	8.9	0.3	0.0	2.0	0.1
Science + Additional Science + OCR National	49.5	46.8	2.6	2.7	46.3	0.8
IGCSE Biology + IGCSE Chemistry + IGCSE Physics	0.1	0.0	1.1	0.0	0.0	0.1
IGCSE Biology + IGCSE Chemistry + IGCSE Physics + BTEC	0.0	0.0	0.0	0.0	0.0	0.0
IGCSE Biology + IGCSE Chemistry + IGCSE Physics + OCR National	0.0	0.0	0.0	0.0	0.0	0.0
Applied Science + BTEC	2.9	2.5	0.1	0.0	2.0	0.1
Applied Science + OCR National	0.5	0.7	0.0	0.0	0.7	0.0
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + BTEC	1.9	1.8	0.1	0.0	0.7	0.0
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + OCR National	0.4	0.4	0.0	0.0	0.7	0.0

Table 8: Combinations of level 2 science qualifications/subjects on offer for certification in June 2011 ~ by school ability

Combinations of science qualifications/subjects at level 2	Low ability	Medium ability	High ability
Biology + Chemistry + Physics	25.4	76.1	76.7
Science + Additional Science	44.3	90.0	81.2
Science + Additional Science + Additional Applied Science	5.2	19.5	12.8
Biology + Chemistry + Physics + Science + Additional Science	22.9	73.2	68.9
Biology + Chemistry + Physics + Applied Science	2.7	6.8	3.3
Science + Additional Science + Applied Science	3.9	6.9	3.5
Biology + Chemistry + Physics + Science + Additional Science + Applied Science	2.4	6.4	3.2
Biology + Chemistry + Physics + BTEC	14.0	39.2	17.3
Biology + Chemistry + Physics + OCR National	3.1	8.3	3.7
Science + Additional Science + BTEC	4.2	8.8	3.7
Science + Additional Science + OCR National	22.4	46.5	18.6
IGCSE Biology + IGCSE Chemistry + IGCSE Physics	0.1	0.1	0.6
IGCSE Biology + IGCSE Chemistry + IGCSE Physics + BTEC	0.0	0.0	0.1
IGCSE Biology + IGCSE Chemistry + IGCSE Physics + OCR National	0.0	0.0	0.0
Applied Science + BTEC	1.8	2.2	0.9
Applied Science + OCR National	0.4	0.4	0.2
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + BTEC	0.7	1.7	0.8
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + OCR National	0.2	0.3	0.2

Table 9: Combinations of level 2 science qualifications/subjects on offer for certification in June 2011 ~ by school level of deprivation

Combinations of science qualifications/subjects at level 2	Low deprivation	Medium deprivation	High deprivation
Biology + Chemistry + Physics	75.1	60.5	47.8
Science + Additional Science	80.3	74.3	65.7
Science + Additional Science + Additional Applied Science	21.2	14.0	9.4
Biology + Chemistry + Physics + Science + Additional Science	70.9	58.4	45.0
Biology + Chemistry + Physics + Applied Science	5.4	5.1	5.0
Science + Additional Science + Applied Science	5.7	5.6	6.0
Biology + Chemistry + Physics + Science + Additional Science + Applied Science	5.1	4.9	4.4
Biology + Chemistry + Physics + BTEC	24.7	29.3	30.7
Biology + Chemistry + Physics + OCR National	6.4	6.9	4.9
Science + Additional Science + BTEC	6.2	7.2	6.6
Science + Additional Science + OCR National	27.3	36.4	41.9
IGCSE Biology + IGCSE Chemistry + IGCSE Physics	0.1	0.0	0.0
IGCSE Biology + IGCSE Chemistry + IGCSE Physics + BTEC	0.1	0.0	0.0
IGCSE Biology + IGCSE Chemistry + IGCSE Physics + OCR National	0.0	0.0	0.0
Applied Science + BTEC	1.2	2.0	2.8
Applied Science + OCR National	0.3	0.5	0.4
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + BTEC	0.9	1.6	1.4
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + OCR National	0.3	0.4	0.1

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Appendix: Provision of science at level 2 in 2009

This appendix shows the provision of qualifications/subjects at level 2 in science in 2009. IGCSEs are not included in the tables below because until 2009, these qualifications were not accredited or funded in maintained schools in England. Only independent schools had been offering these qualifications prior to and in 2009 and their results were not recorded in the NPD.

Table A1: Level 2 science related qualifications/subjects on offer for certification in June 2009

Science qualification/subject at level 2	Number of schools	Percentage of schools
GCSE Science	4331	80.4
GCSE Additional Science	3711	68.9
GCSE Additional Applied Science	935	17.4
Applied Science GCSE	382	7.1
GCSE Biology	2301	42.7
GCSE Chemistry	2182	40.5
GCSE Physics	2177	40.4
GCSE Biology: Human	101	1.9
GCSE Environmental Science	132	2.5
OCR National Applied Science	144	2.7
BTEC First Applied Science	574	10.7

Table A2: Level 2 science related qualifications/subjects on offer for certification in June 2009 ~ by type of school

Science qualification/subject at level 2	Comprehensive	Academy	Independent	Selective	Secondary modern	Other
GCSE Science	98.6	95.0	73.0	85.6	96.8	48.5
GCSE Additional Science	97.3	93.3	67.1	81.1	94.2	12.7
GCSE Additional Applied Science	31.3	22.3	2.6	6.3	28.6	2.3
Applied Science GCSE	12.4	11.5	0.8	0.0	9.7	1.2
GCSE Biology	54.3	56.4	55.0	82.9	36.4	9.4
GCSE Chemistry	52.6	55.7	53.5	82.9	27.3	6.0
GCSE Physics	53.1	55.1	52.8	82.9	26.6	5.6
GCSE Biology: Human	2.1	1.4	0.3	0.9	3.2	2.6
GCSE Environmental Science	3.9	3.2	1.0	0.0	3.9	0.8
OCR National Applied Science	4.5	5.1	0.6	0.0	3.2	0.3
BTEC First Applied Science	17.6	20.0	0.9	0.0	18.8	1.9

Table A3: Level 2 science related qualifications/subjects on offer for certification in June 2009 ~ by school ability

Science qualification/subject at level 2	Low ability	Medium ability	High ability
GCSE Science	77.1	92.5	83.2
GCSE Additional Science	47.3	88.9	80.5
GCSE Additional Applied Science	12.1	28.2	14.3
Applied Science GCSE	6.7	10.6	5.1
GCSE Biology	19.1	50.1	65.2
GCSE Chemistry	15.5	47.9	64.1
GCSE Physics	15.5	48.1	63.5
GCSE Biology: Human	2.7	2.0	1.2
GCSE Environmental Science	1.8	4.0	1.9
OCR National Applied Science	3.0	3.8	1.6
BTEC First Applied Science	12.8	15.7	5.0

Table A4: Level 2 science related qualifications/subjects on offer for certification in June 2009 ~ by school level of deprivation

Science qualification/subject at level 2	Low deprivation	Medium deprivation	High deprivation
GCSE Science	87.5	89.2	85.0
GCSE Additional Science	76.9	79.0	72.8
GCSE Additional Applied Science	22.7	23.7	21.2
Applied Science GCSE	6.7	10.3	10.3
GCSE Biology	55.2	44.2	31.9
GCSE Chemistry	52.9	42.3	29.9
GCSE Physics	52.8	42.2	30.1
GCSE Biology: Human	2.0	2.6	1.1
GCSE Environmental Science	4.2	3.7	1.2
OCR National Applied Science	2.1	3.2	5.0
BTEC First Applied Science	7.6	12.9	20.9

Table A5: Combinations of level 2 science qualifications/subjects on offer for certification in June 2009

Combinations of science qualifications/subjects at level 2	Number of schools	Percentage of schools
Biology + Chemistry + Physics	2101	39.0
Science + Additional Science	3646	67.7
Science + Additional Science + Additional Applied Science	879	16.3
Biology + Chemistry + Physics + Science + Additional Science	1879	34.9
Biology + Chemistry + Physics + Applied Science	203	3.8
Science + Additional Science + Applied Science	337	6.3
Biology + Chemistry + Physics + Science + Additional Science + Applied Science	191	3.5
Biology + Chemistry + Physics + BTEC	268	5.0
Biology + Chemistry + Physics + OCR National	71	1.3
Science + Additional Science + BTEC	122	2.3
Science + Additional Science + OCR National	517	9.6
Applied Science + BTEC	39	0.7
Applied Science + OCR National	17	0.3
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + BTEC	15	0.3
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + OCR National	8	0.1

Table A6: Combinations of level 2 science qualifications/subjects on offer for certification in June 2009 ~ by school type

Combinations of science qualifications/subjects at level 2	Comprehensive	Academy	Independent	Selective	Secondary modern	Other
Biology + Chemistry + Physics	51.8	53.7	50.7	82.9	24.7	4.3
Science + Additional Science	96.8	91.8	64.6	80.2	92.2	11.3
Science + Additional Science + Additional Applied Science	30.5	20.9	2.5	5.4	27.3	0.5
Biology + Chemistry + Physics + Science + Additional Science	50.1	49.6	39.2	66.7	24.0	1.5
Biology + Chemistry + Physics + Applied Science	7.1	6.4	0.5	0.0	2.6	0.0
Science + Additional Science + Applied Science	11.5	10.5	0.7	0.0	8.4	0.1
Biology + Chemistry + Physics + Science + Additional Science + Applied Science	6.6	6.2	0.5	0.0	2.6	0.0
Biology + Chemistry + Physics + BTEC	8.7	10.1	0.3	0.0	3.9	0.3
Biology + Chemistry + Physics + OCR National	2.5	2.1	0.1	0.0	1.3	0.1
Science + Additional Science + BTEC	4.0	3.7	0.6	0.0	2.6	0.1
Science + Additional Science + OCR National	16.7	18.6	0.7	0.0	15.6	0.5
Applied Science + BTEC	1.2	1.1	0.2	0.0	1.9	0.0
Applied Science + OCR National	0.5	0.9	0.0	0.0	0.6	0.0
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + BTEC	0.4	0.5	0.2	0.0	0.0	0.0
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + OCR National	0.3	0.2	0.0	0.0	0.0	0.0

Table A7: Combinations of level 2 science qualifications/subjects on offer for certification in June 2009 ~ by school ability

Combinations of science qualifications/subjects at level 2	Low ability	Medium ability	High ability
Biology + Chemistry + Physics	14.1	46.4	62.2
Science + Additional Science	46.3	87.7	78.9
Science + Additional Science + Additional Applied Science	9.9	27.5	14.0
Biology + Chemistry + Physics + Science + Additional Science	12.4	43.9	53.5
Biology + Chemistry + Physics + Applied Science	1.9	6.2	3.7
Science + Additional Science + Applied Science	5.0	9.7	5.0
Biology + Chemistry + Physics + Science + Additional Science + Applied Science	1.8	5.7	3.7
Biology + Chemistry + Physics + BTEC	3.7	8.4	3.5
Biology + Chemistry + Physics + OCR National	0.8	2.5	0.9
Science + Additional Science + BTEC	2.2	3.4	1.5
Science + Additional Science + OCR National	11.0	14.4	4.8
Applied Science + BTEC	0.8	1.0	0.5
Applied Science + OCR National	0.6	0.1	0.3
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + BTEC	0.2	0.5	0.2
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + OCR National	0.1	0.1	0.2

Table A8: Combinations of level 2 science qualifications/subjects on offer for certification in June 2009 ~ by school level of deprivation

Combinations of science qualifications/subjects at level 2	Low deprivation	Medium deprivation	High deprivation
Biology + Chemistry + Physics	51.7	40.9	28.9
Science + Additional Science	76.2	78.5	71.7
Science + Additional Science + Additional Applied Science	21.5	22.5	19.8
Biology + Chemistry + Physics + Science + Additional Science	48.8	38.8	27.1
Biology + Chemistry + Physics + Applied Science	4.7	6.0	4.2
Science + Additional Science + Applied Science	6.3	9.9	8.6
Biology + Chemistry + Physics + Science + Additional Science + Applied Science	4.6	5.8	3.7
Biology + Chemistry + Physics + BTEC	5.2	6.1	8.5
Biology + Chemistry + Physics + OCR National	1.8	1.8	1.6
Science + Additional Science + BTEC	1.9	2.9	4.1
Science + Additional Science + OCR National	6.9	11.8	19.2
Applied Science + BTEC	0.4	0.9	1.6
Applied Science + OCR National	0.3	0.2	0.7
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + BTEC	0.3	0.4	0.4
Biology + Chemistry + Physics + Science + Additional Science + Applied Science + OCR National	0.2	0.1	0.2