

## **The impact of accountability reforms on the Key Stage 4 curriculum: How have changes to school and college Performance Tables affected pupil access to qualifications and subjects in secondary schools in England?**

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The Conservative–Liberal Democrat Coalition Government's reforms to secondary school Performance Tables have changed how schools make decisions about the subjects and qualifications entered by their pupils. The National Pupil Database is used to explore these changes between 2005 and 2014. We find that schools are responding to accountability reforms by changing access to subjects and qualifications for pupils: entry rates for English Baccalaureate qualifications have increased, while those for qualifications no longer counted as a result of the Coalition's response to the Wolf Review have decreased. However, reforms have not yet led to equal access to subjects and qualifications for all pupils.

**Keywords:** Performance Tables; accountability; National Pupil Database; English Baccalaureate; Wolf Review; secondary schools

### **Introduction**

The Conservative–Liberal Democrat Coalition Government will be remembered, both positively and negatively, for its persistent drive for educational reform. Such reform has been part of a long-standing bureaucratic approach to public service management (Newman, 2000), relying principally on top-down policy levers such as Performance Tables, inspections, targets, and funding allocations to direct institutional behaviours (Hodgson and Spours, 2011). Under the Coalition Government, policy levers such as school performance and accountability measures have themselves been key targets for reform. Accountability reforms sit alongside myriad other changes, including reforms to the curriculum, school structures, inspection regimes, teacher training routes, and teacher pay (Allen, 2015). The recommendations of the Wolf Review of 14–19 vocational education (Wolf, 2011), the introduction of the English Baccalaureate (EBacc), the new Attainment 8 and Progress 8 measures, and reformed GCSEs have altered, and will continue to alter, how the performance of secondary schools is judged and how schools are held accountable. They will also alter the access pupils have to certain subjects and qualifications, with certain types of pupils (financially disadvantaged; less able; vocationally oriented; interested in creative subjects) more likely to have their access to subjects and qualifications restricted. The impact of these new measures on school and college Performance Tables (DfE, 2015a)

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and corresponding incentives for schools to ensure their pupils study certain subjects and qualifications mean that schools are very likely to change their pupils' qualification entry patterns. It is important to understand how and why pupils' qualification entry patterns change because of the profound implications subject and qualification choices have, in Britain, on young people's future education, training, and employment opportunities. It is also important to understand the impact of accountability reforms from an equality of opportunity perspective.

In this article we will cover how the Coalition Government's changes to Performance Tables and accountability measures have led to changes in both the types of qualifications entered by pupils and in the subjects offered to them. We will use data from the National Pupil Database (DfE, 2013a) to look at changes in overall qualification entry levels between 2005 and 2014 by pupil characteristics. We find that schools are responding to the Coalition Government's reforms to school accountability measures, with a noticeable increase in entry rates for qualifications eligible for inclusion in the English Baccalaureate, accompanied by a decrease in entry rates for ineligible qualifications. In broad terms, this might be characterized as a shift to a more academic curriculum at the expense of vocational subjects. Changes to accountability regimes have not reduced the long-standing tension in education between academic and vocational routes. Instead, pupil access to certain subjects and qualifications will be further restricted, with patterns suggesting that schools will further adjust their curriculum offer to pupils to align with the continued reforms to Performance Tables and qualifications. We find that reforms have not yet led to equality of educational opportunity, with financially disadvantaged pupils and less able pupils continuing to be entered for fewer eligible qualifications, and subject choices becoming increasingly restrictive. The effects of these accountability reforms disadvantage certain types of pupils – those who are less able, financially disadvantaged, vocationally oriented, or interested in creative subjects – suggesting that the Coalition Government's drive for reform was at the expense of equality of opportunity.

## **The Coalition Government's reforms to accountability**

The Coalition Government's vision for education was founded on two principles: autonomy and accountability. There was a strong belief that schools are most effective when they are given independence over how they teach, and when they are provided with a clear and robust accountability framework. These two principles were deeply intertwined within the Coalition Government's thinking, which perhaps explains why reforms to the National Curriculum and GCSEs happened in tandem with reforms to accountability measures.

Although schools are given some degree of independence over *how* they teach, there is much less flexibility over *what* they teach. The Coalition Government intervened regularly, and to a large degree, in the core subject knowledge and skills they believed to be most beneficial to young people today. The Coalition Government was in favour of a broad, balanced academic curriculum in secondary schools. Recent accountability reforms reflect this preference for a traditionalist curriculum.

### **1. English Baccalaureate**

The Coalition Government introduced the English Baccalaureate (EBacc) in January 2011 as a means of encouraging a more traditional curriculum in schools (DfE, 2010). The EBacc is attained by studying GCSEs in certain subjects: English, mathematics, two sciences, a humanities subject, and a foreign language. The percentage of pupils achieving at least a Grade C in six EBacc subjects is now included in school Performance Tables. By reforming Performance Tables

to include an accountability measure specifically linked to the EBacc, the Coalition Government drove curriculum restructuring in many schools. As a consequence, pupils are encouraged to take more qualifications in EBacc subjects and fewer non-EBacc arts and vocational subjects. Additionally, schools are incentivized to focus on a broader range of pupils because of Coalition Government reforms to Performance Tables that show examination results by pupil type (DfE, 2013b).

The EBacc was introduced in 2011 and, controversially, retrospectively applied to the 2010 Performance Tables (DfE, 2011). Since it was introduced *post hoc* without any meaningful consultation, and, importantly, after schools had already made qualification entry decisions for pupils who were midway through Key Stage 4, there was considerable backlash from schools that were affected in Performance Tables in ways they had not anticipated (Mansell, 2011). Following this problematic introduction, the Coalition Government was very careful to announce reforms to accountability measures well in advance of their appearance in Performance Tables. Nevertheless, early findings on the effects of the introduction of the EBacc suggest that schools, particularly those being closely monitored by the schools' inspectorate Ofsted, responded quickly to EBacc Performance Table reforms by changing their Key Stage 4 curriculum to increase access to GCSE EBacc subjects (Hodgson and Spours, 2011). At the time, there were fears that changes to the Key Stage 4 curriculum would be to the detriment of access to non-EBacc subjects, such as creative subjects (Mansell, 2011), and could lead schools to focus on more able pupils, who are more likely to attain the EBacc (Hodgson and Spours, 2011).

## **2. Wolf Review of vocational education**

The introduction of the EBacc was closely followed by the recommendations arising from the Wolf Review of vocational education (Wolf, 2011). It argued that accountability reforms were needed to stop schools entering their pupils for qualifications that were easy to pass but of limited value to most pupils. Schools had been incentivized by the previous Labour Government to enter their pupils for certain non-GCSE qualifications because of equivalence measures, which allowed these non-GCSE qualifications to contribute alongside GCSEs in Performance Tables (Fuller and Unwin, 2011). The Wolf Review showed that the introduction of equivalence measures had led to a major increase in the number of vocational qualifications awarded to 16-year olds in England between 2004 and 2009 (Wolf, 2011: 47), but argued that these qualifications were not as rigorous as GCSEs, thereby limiting progression both on to the next level of study and on to employment (Fuller and Unwin, 2011). This is despite previous research suggesting that young people enrol in vocational qualifications partly because of their future job preferences (Davies *et al.*, 2008). The Wolf Review suggested that changes should be made to the qualifications that could be included in the Performance Tables, alongside maintaining a focus on English and mathematics. Additionally, the Wolf Review encouraged the Coalition Government to reduce early and repeated entry of pupils for examinations, so as to reduce manipulation of Performance Table positions through multiple examination entry.

The Coalition Government accepted Professor Wolf's recommendations, and the first cohort affected commenced Key Stage 4 in September 2012 and completed it in the summer of 2014. The range of qualifications that could be included in Performance Tables was reduced, with the Department for Education publishing an annual list of 'high value' vocational qualifications that counted towards Performance Tables (DfE, 2012) alongside 'academic' qualifications such as GCSEs and AS levels. As in previous Performance Tables, the percentage of pupils attaining

at least five GCSEs including English and mathematics at A\*–C grades remained the ‘headline’ accountability measure.

For the EBacc subjects, a ‘first-entry’ rule was phased in for the 2014 Key Stage 4 Performance Tables. Its aim is to reduce early and repeated examination entries in the same subject, which had been possible under previous ‘best-entry’ rules. The first-entry rule only applied to examinations taken from September 2013 onwards, meaning that for the 2014 Performance Tables, a pupil’s best result from qualifications entered prior to September 2013 was still counted if it was a better result than their first result from the 2013/14 academic year. The impact of the first-entry rule may be greater in the 2015 Performance Tables as it will cover the whole of Key Stage 4 for the 2014/15 cohort (i.e. the 2013/14 and 2014/15 academic years) rather than just the final year, as was the case for the 2013/14 cohort.

Further reforms focus on qualification equivalences. The number of non-GCSEs that could be included in the 2013/14 Performance Tables was reduced to two, and no qualification could be counted as equivalent to more than one GCSE. Prior to this change, some qualifications counted as up to four GCSEs, even though many such qualifications were designed to be completed in around 360 guided learning hours (equivalent to three GCSEs). The introduction of subject discounting meant that multiple entries in the same subject but in different types of qualification could no longer be included in Performance Tables, with only one qualification being counted. Previously, multiple qualifications in broadly the same subject could still be counted if they were in different qualification ‘families’. This meant that, for example, pupils could enter both a GCSE and a BTEC in information and communication technology and both results would be counted. Finally, certain GCSE equivalents, such as IGCSEs, were no longer approved for pre-16 use, and so were also excluded from the 2014 Performance Tables.

### **3. Attainment 8 and Progress 8**

The third strand of accountability reforms involves two new headline measures: Attainment 8 and Progress 8, against which schools will be judged from 2016 (DfE, 2015b). Both measures were announced in October 2013 and revolve around pupil performance in qualifications in eight key subject ‘slots’: English; mathematics; three other qualifications in the EBacc subjects (sciences, computer science, geography, history, and languages); and three further qualifications, which can be other GCSE qualifications in subjects not already counted, or any other ‘high value’ vocational qualification. A pupil’s Attainment 8 score is their average examination grade across their eight key subjects (with English and mathematics grades being double-weighted) (DfE, 2015b). A pupil’s Progress 8 score is a type of value-added measure, calculated by capturing their average grade (their Attainment 8 score) with the average grade of all pupils nationally who had similar prior attainment at the end of primary school (DfE, 2015b). Progress 8 and Attainment 8 will be calculated for schools by taking the respective averages of their pupils’ scores.

The implications of Attainment 8 and Progress 8 are that schools are incentivized to choose certain subjects for their pupils, to focus on all subjects (rather than just English and mathematics) eligible for inclusion in Performance Tables from 2016 onwards, and to ensure pupil achievement across all subject grades (rather than just the C/D border). Although up to three non-GCSEs can be included in Attainment 8 and Progress 8 measures from 2016, the focus on English and mathematics, as recommended by the Wolf Review, is retained through a double-weighting of scores for English and mathematics GCSEs in these measures. The percentage of pupils achieving grades A\*–C in both English and mathematics will also be published as an additional indicator,

replacing the old five A\*–C GCSE benchmark. Although Attainment 8 and Progress 8 will be used to hold all schools accountable from their 2016 examination results onwards, schools can opt in to the new accountability system from 2015, and so evidence of changed subject entry patterns may already be available for some schools.

#### **4. GCSE reform**

Alongside reforms to Performance Tables, the Coalition Government believed that reforms to GCSEs themselves were needed so as to better prepare pupils for their next steps in education or employment (DfE, 2015c). Almost all GCSEs are being reformed to make them more challenging and rigorous. In line with the Coalition Government's literacy and numeracy priorities, reformed GCSEs in English language, English literature, and mathematics will be taught in schools from September 2015. Reformed GCSEs in a range of other subjects will be taught in schools from September 2016 (DfE, 2015c). By releasing reformed GCSE subject content in stages, the government is able to influence the degree of take-up of different subjects, with subjects that are reformed sooner potentially experiencing higher take-up.

Alongside changes to subject content, the government is also introducing changes to examination regulations (DfE, 2015c). Through Ofqual, modular GCSEs will be replaced by GCSEs where assessment takes place at the end of the course. Additionally, examinations will become the default method of assessment. Crucially, grades themselves will be changed, with reformed GCSEs using a new numbered grading scale from 1 (lowest) to 9 (highest). In both 2017 and 2018 Performance Tables will be based on a 'mixed economy' of grades measured on the 1–9 scale for reformed GCSEs and A\*–G for legacy GCSEs. The proposed conversion of A\*–G grades into points on the 1–9 scale Performance Tables (DfE, 2014a) may favour schools with higher ability intakes (Thomson and Treadaway, 2015).

#### **Effects on pupil access to subjects and qualifications**

It seems clear that interventions in accountability measures – specifically reforms to Performance Tables – have been introduced in order to encourage schools to follow the curriculum believed to be most beneficial by the government. These reforms will incentivize schools to choose certain qualifications for their pupils, such as those recognized as part of the EBacc, or those considered to be of a suitably high value. Conversely, schools will be discouraged from entering their pupils for qualifications that do not contribute to Performance Tables, even if pupils prefer to enrol in these qualifications because of their future job aspirations (Davies *et al.*, 2008). Additionally, these reforms encourage schools to enter their pupils for at least eight subjects, if not more. In some instances, this will mean pupils will be entered for more qualifications eligible for inclusion in Performance Tables (particularly in EBacc subjects) than similar pupils would have taken previously. This means that changes to accountability reforms will have two main effects on qualification entry patterns for pupils: a change in the type of qualifications and a change in the number of qualifications.

It is important to note that although pupils are typically able to express a degree of choice in the qualifications they follow, by controlling the curriculum offer, schools are able to shape and constrain the set of options available to pupils. There is a large degree of variation in the subjects and qualifications offered by secondary schools, with evidence suggesting that about one in five pupils were unable to pursue the subjects or courses they wanted because of school organizational or resource constraints (Jin *et al.*, 2010). Further, curriculum offers vary by the

pupil composition of the school, with higher proportions of financially disadvantaged pupils in schools being associated with a lower likelihood of entrance into academic examinations, such as GCSE qualifications in geography, history, or German (Davies *et al.*, 2008). School size and popularity have also been shown to make a difference, with smaller, declining schools finding it harder to maintain a comprehensive curriculum than larger, successful schools (Davies *et al.*, 2010). This means that pupil access to subjects and qualifications is greatly influenced by schools.

The new Performance Tables reward schools that have adapted their curricula and qualification entry patterns to align with the Coalition Government's reforms. This means that although schools are given autonomy, those that choose to exercise their independence in a way contrary to the desires and expectations of the government (for example, by choosing not to enter their pupils for the qualifications that are rewarded in the new Performance Tables) will find themselves being held to account, and potentially penalized, for their decisions. The consequence of this is a major change in the Key Stage 4 curriculum and qualifications studied for by young people in England and Wales, which may have profound implications on the longer-term opportunities and outcomes of these pupils. The next section outlines the data and methods that can be used to demonstrate the impact so far of the first two of the Coalition Government's accountability reforms (English Baccalaureate; Wolf Review) on Key Stage 4 qualification entry patterns. We offer commentary on the expected impact of the second two reforms (Attainment 8 and Progress 8; reformed GCSEs) in the concluding section.

## **Data**

Data on the qualifications entered (and attained) by pupils who reached the end of compulsory schooling (Key Stage 4) at state-funded schools in England were sourced from the National Pupil Database (NPD) (DfE, 2013a). This is a longitudinal database of pupil attainment from Key Stage 1 (usually at age 7) through to the end of Key Stage 4 (usually at age 16) and into further and higher education. In addition, data on attainment can be linked (via a student identifier) to data on school enrolments and pupil characteristics collected from the School Census. The NPD provides almost complete coverage of attainment in state-funded schools and partial coverage of attainment in independent (private) schools. Pupils attending independent schools are not included in the analysis presented below.

The NPD contains details of all qualifications entered by pupils who reach the end of Key Stage 4, the most common of which is the General Certificate in Secondary Education (GCSE). The majority of pupils will typically enter between eight and ten GCSEs in a range of different subjects. Details of entries in all other qualifications approved for use pre-16 in Section 96 of the Learning and Skills Act 2000 are also included. Schools are able to offer qualifications from a wide range of awarding organizations (sometimes called awarding bodies) operating in an open market (Kelly, 2014). Awarding organizations supply qualifications to fulfil the demands of schools and pupils.

Summary indicators of attainment are calculated for each pupil from qualification-level data. These indicators are then aggregated to school-level and presented in School and College Performance Tables (DfE, 2015a), often referred to as 'league tables' (Foley and Goldstein, 2012). The most widely recognized indicator is the percentage of pupils attaining five or more A\*–C grades at GCSE (or equivalent) including English and mathematics. The equivalence to GCSE



of non-GCSE qualifications is determined in order to calculate performance indicators (DfE, 2015d). There are three aspects to this. Firstly, determining the 'size' of a qualification (e.g. some qualifications are equivalent to two GCSEs) based on the number of guided learning hours. Secondly, the level of the National Qualifications Framework (NQF) is assigned. Achievements equivalent to Grade A\*–C in GCSEs are considered to be Level 2, Grades D–G are considered to be Level 1, and achievements in qualifications considered to be below a Grade G pass in a GCSE are considered to be entry-level qualifications (ELQ). Finally, the grade achieved in each qualification is allocated a number of points, with fails accruing zero points and higher grades achieving more points.

In the first set of analyses, we look at the impact of the Coalition Government's reforms on qualification entry levels. We have calculated the number of qualifications entered by each pupil, measured in GCSE equivalents, who reached the end of Key Stage 4 between 2004/5 and 2013/14. We first calculate the number of entries using the system of equivalences that prevailed until 2012/13, which we refer to as 'old rules'. For 2013/14 we also calculate the number of entries based on the 'new rules' introduced through the Wolf reforms. In line with the School and College Performance Tables, we exclude qualifications that are not approved for use pre-16. We also ignore any qualifications that a pupil has entered more than once, and any qualification entered by a pupil that overlaps another qualification in content (e.g. attaining a qualification as a stepping stone to a more advanced qualification). These are known as discounted qualifications.

In the second set of analyses, we look at the impact of reforms on the subjects entered by pupils. Here we distinguish between GCSEs and qualifications other than GCSEs. The definition of GCSEs we adopt is based upon the subset of qualification types on which the English Baccalaureate is based. From 2010 these included full course GCSEs, double award GCSEs, double award extended scale GCSEs, IGCSEs, and CIE level 1 and level 2 certificates. AS levels and Edexcel level 1 and level 2 certificates were added from 2011. Other level 1 and level 2 certificates were added in 2014 and IGCSEs were removed. The 2010 definition is used for years prior to 2010. As vocational GCSEs are not available in the EBacc subjects, we do not include vocational GCSEs in our definition of GCSEs.

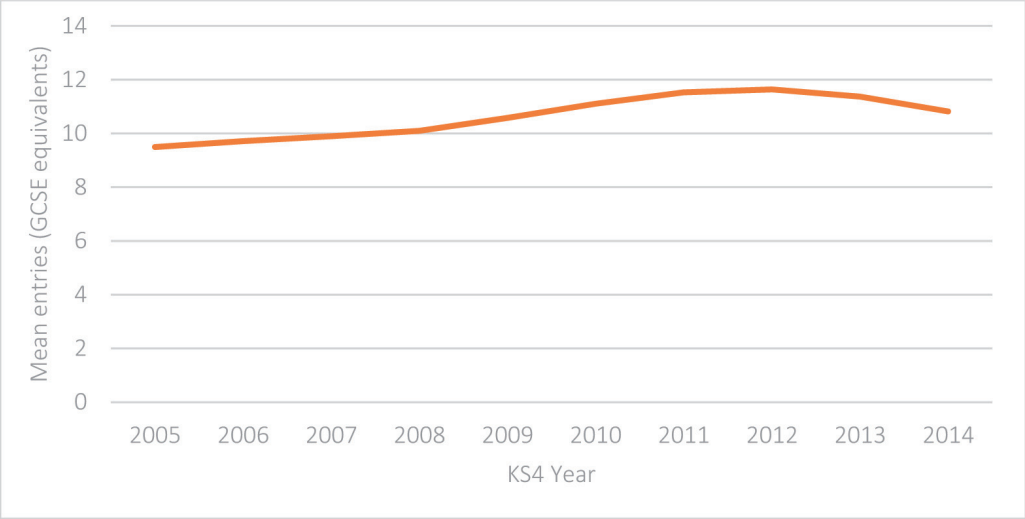
## Findings

### ***1. Changes in the number of qualifications entered***

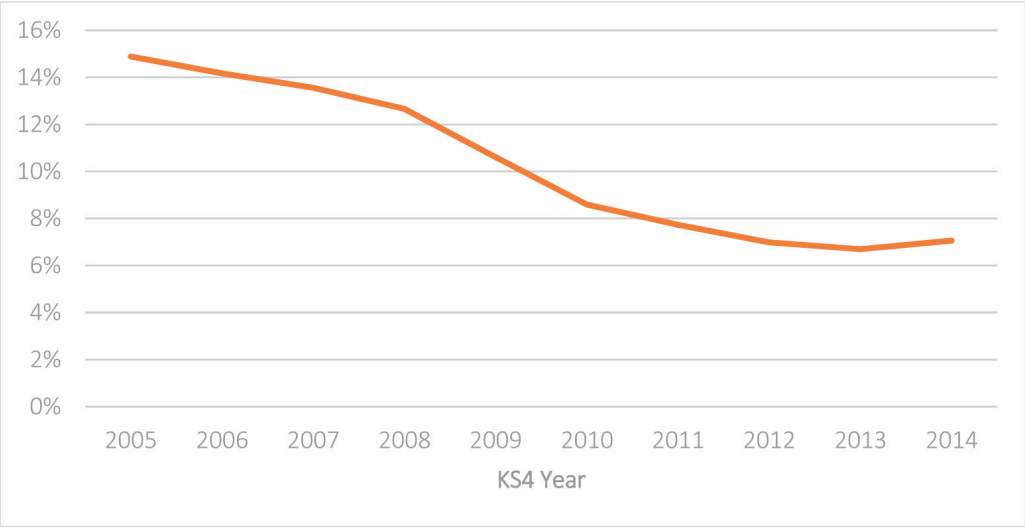
The Wolf Review informed the list of qualifications eligible for the 2014 Performance Tables published by the Department for Education in early 2012 (DfE, 2012). Figure 1 suggests that schools responded accordingly and entered pupils for fewer qualifications overall, including those that were not eligible for inclusion. Based on the 'old rules' for Performance Tables, pupils in England were entered for just under 11 GCSEs and equivalent qualifications on average in 2013/14 compared to almost 12 in 2011/12.

Having consistently decreased between 2005 and 2013, the percentage being entered for fewer than eight qualifications increased slightly in 2014 (Figure 2). This relatively low percentage is at least in part the result of the publication of a school value added measure based on pupils' best eight GCSEs (or equivalent).

**Figure 1:** Mean number of qualifications entered (GCSE equivalents, old rules), pupils reaching the end of Key Stage 4 in maintained mainstream schools 2005 to 2014



**Figure 2:** Percentage of pupils entered for fewer than 8 GCSEs (or equivalents) between 2005 and 2014



The impact of ‘new rules’ was much greater for financially disadvantaged pupils (those eligible for the extra ‘pupil premium’ funding provided for students from low-income backgrounds), who were entered on average for just under 8 qualifications (Table I). This is compared to an average of almost 9.5 qualifications for non-disadvantaged pupils.



**Table 1:** Mean number of GCSEs (or equivalents) entered by disadvantaged and non-disadvantaged pupils reaching the end of Key Stage 4 in maintained mainstream schools in 2014

	Old rules	New rules	Difference	Pupils (thousands)
Disadvantaged pupils	10.29	7.97	2.32	148.2
Non-disadvantaged pupils	11.09	9.36	1.73	404.8
<b>All pupils</b>	<b>10.88</b>	<b>8.99</b>	<b>1.89</b>	<b>553.1</b>

Roughly half of the difference between ‘old rules’ and ‘new rules’ shown in Table 1 arises because some qualifications previously considered to be equivalent to two (or more) GCSEs are now counted as a single GCSE. The remaining difference is due to some qualifications no longer being counted at all.

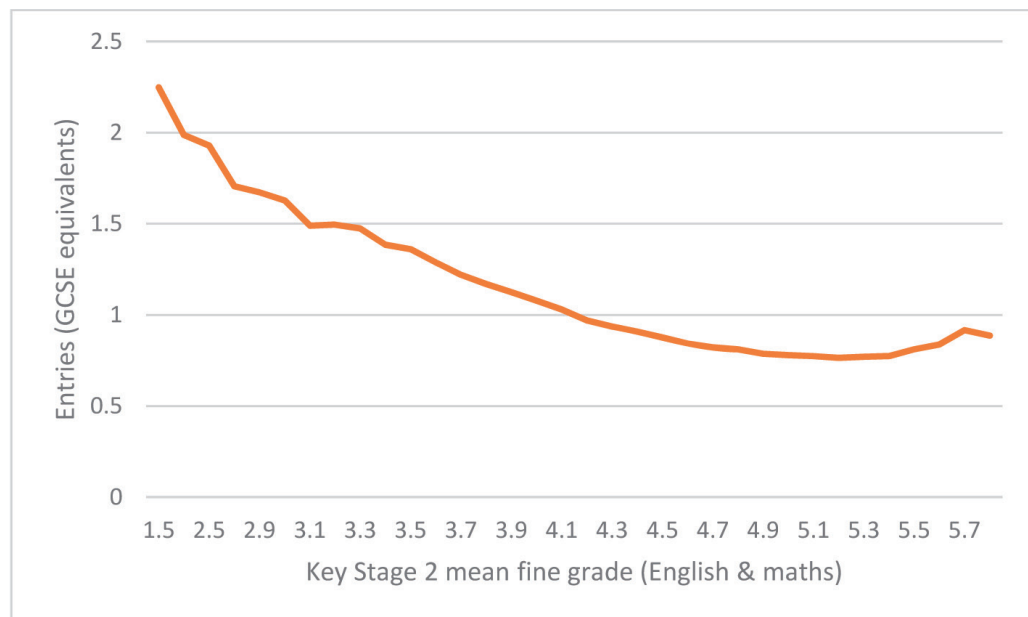
Related to this, Figure 3 demonstrates that the impact of the ‘new rules’ in 2013/14 was greater for pupils with lower levels of prior attainment (the approximately 17 per cent of pupils with a mean KS2 fine grade of lower than 4.0). For example, pupils with a mean KS2 fine grade of 3.5 were entered for ten GCSEs (or equivalents) based on ‘old rules’ but only seven GCSEs (or equivalents) based on ‘new rules’.

**Figure 3:** Mean number of GCSEs (or equivalents) entered by prior attainment, pupils reaching the end of Key Stage 4 in maintained mainstream schools 2014



Similarly, as Figure 4 indicates, schools still tend to enter pupils with lower prior attainment for qualifications not counted in the 2014 Performance Tables, with the least able pupils being entered for more than twice the number of GCSE equivalents as the most able pupils. This suggests that qualification entry patterns continue to vary by prior attainment, although Attainment 8 and Progress 8 reforms to 2016 Performance Tables may address this. However, it is likely that the least able pupils will still be entered for fewer than eight qualifications and will continue to study for qualifications that are not counted in Performance Tables.

**Figure 4:** Mean number of entries (GCSE equivalents, old rules) in qualifications not counted in Performance Tables by prior attainment, pupils reaching the end of Key Stage 4 in maintained mainstream schools 2014



It seems likely that schools have continued to offer qualifications not counted in Performance Tables because they believe they are relevant and worthwhile for some pupils. Of course, this does not necessarily mean that they would be relevant and worthwhile for the majority of pupils.

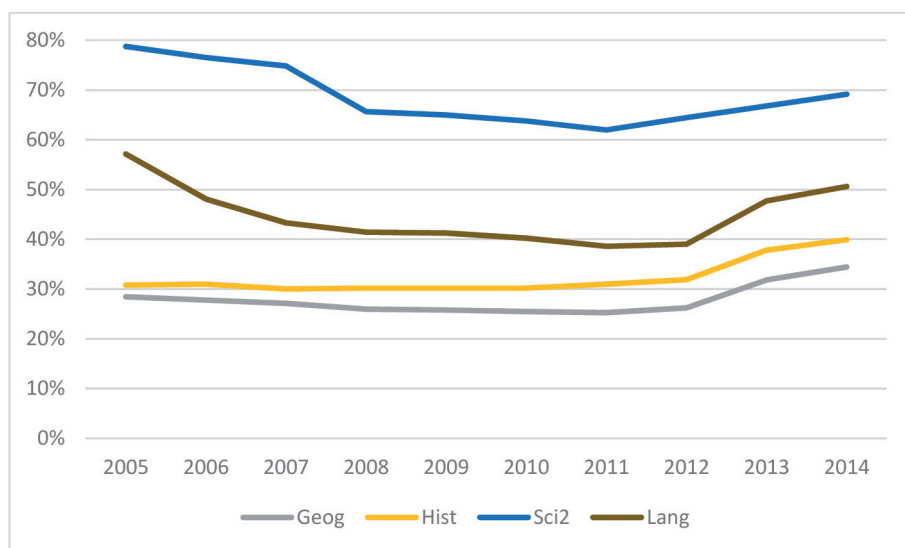
## 2. Changes in the subjects entered

The Coalition Government's reforms to accountability have tended to be met by concern that 'creative' subjects will become marginalized as a result of schools placing greater emphasis on traditional 'academic' subjects (Neelands *et al.*, 2015). In this second set of analyses, we look at the impact of the Coalition Government's reforms on subject entry patterns.

There is no doubt that recent changes to the accountability regime have led to increases in entry rates in GCSEs in the EBacc subjects (Figure 5). Particularly since 2012, when the first Year 10 cohort under the Coalition Government began their Key Stage 4 courses, the percentage of pupils entering at least one full GCSE (two in science) in the EBacc subjects of geography, history, science, and languages has risen. Nonetheless, entry rates in languages and science remain below 2005 levels, mainly because pupils and schools could attain the 5 A\*–C grades at GCSE (including English and mathematics) threshold measure without completing qualifications in these subjects.

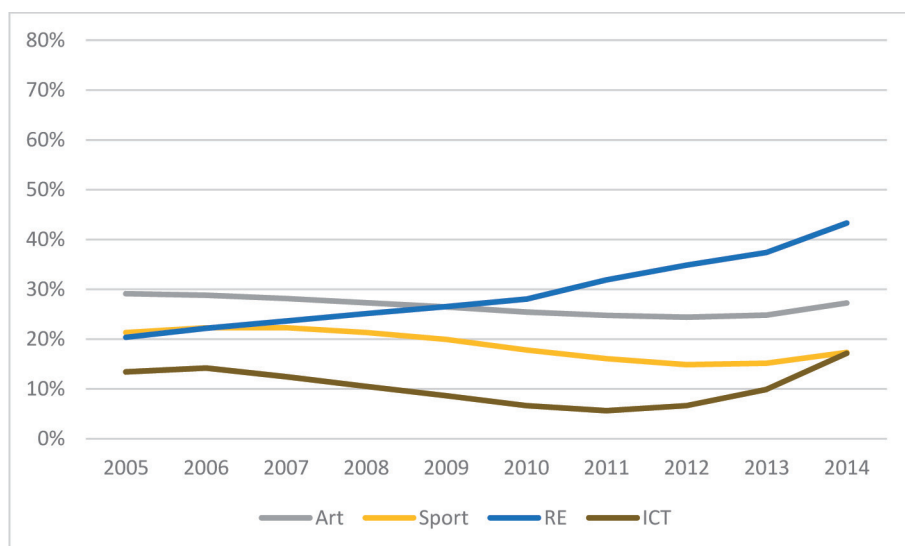
Turning to changes in entry rates in non-EBacc subjects, there has been a somewhat counterintuitive increase in these among *some* courses (Figure 6). For example, since 2005 there has been a sustained increase in GCSE religious education (RE), which is surprising as it is not a compulsory examination subject, although many schools had previously required their pupils to complete the short course in GCSE religious education. It is likely that schools have found it easy to alter their curriculum offer to enrol pupils for the full GCSE, which can be included in Attainment 8 and Progress 8 measures.

**Figure 5:** Percentage of pupils entered in GCSEs in EBacc subjects 2005 to 2014



Entry rates in ICT have also increased sharply since 2012; some of this can be attributed to the inclusion of computing in the EBacc in 2014. But even without these entries, the national average in 2014 would have stood at 15 per cent instead of 17 per cent. In contrast, entry rates in other non-EBacc subjects have stalled. For example, GCSE entry rates for art and design and PE/sport studies have only experienced a modest upturn in response to the Wolf Review, remaining slightly below 2005 levels. Some non-EBacc subjects are clearly falling by the wayside, despite the preference for a 'broad and balanced curriculum' by the Department for Education (DfE, 2010).

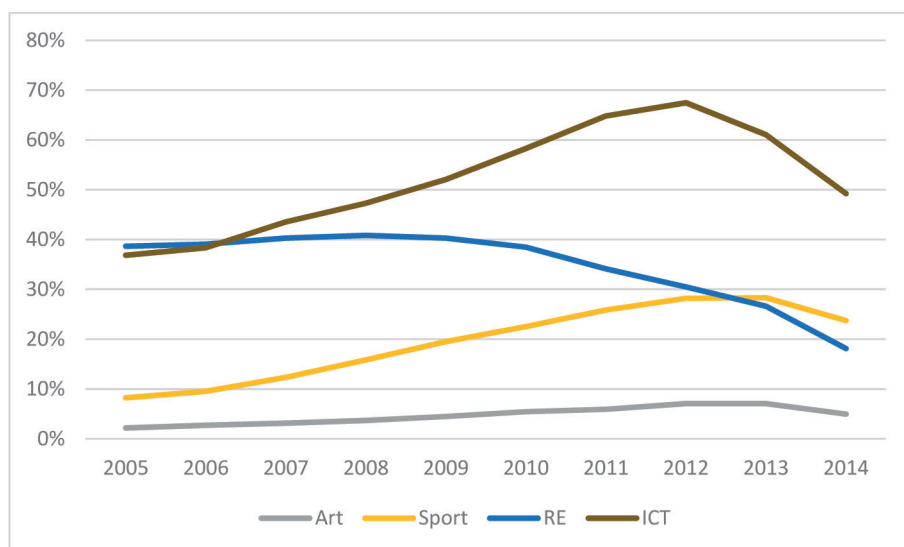
**Figure 6:** Percentage of pupils entered in GCSEs in art and design, ICT, PE/sport studies, and religious education 2005 to 2014



Increases in GCSE entry rates in recent years in the subjects shown in Figure 6 have tended to coincide with falling entry rates in similar subjects in non-GCSE qualifications (Figure 7). Most of the increase in GCSE religious education (RE) has been at the expense of the short-course GCSE (equivalent to half a full GCSE) in religious studies. Most of the growth in vocational qualifications in England's schools since 2005 tended to be in ICT, applied science (not shown) and, to a lesser extent, PE/sport studies. It appears as if schools are moving away from vocational qualifications in ICT (and, to a lesser extent, in PE/sport studies) and towards GCSEs, suggesting that they are responding to the Coalition Government's accountability reforms.

Some of the increase in entry rates in GCSEs in creative subjects in 2014 may also be due to the fact that a maximum of two vocational qualifications could be counted in Performance Tables in both 2014 and 2015. This cap will be lifted in 2016 when three vocational subjects can count towards Attainment 8 and Progress 8. However, the vocational subjects that will be eligible for Performance Tables in 2016 will not necessarily be an easy option and GCSEs in some creative subjects may even continue to increase in popularity.

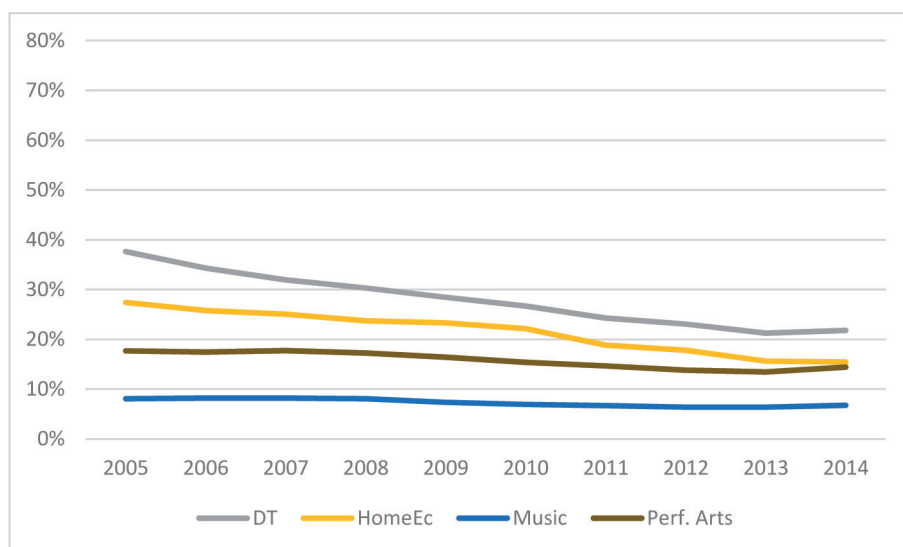
**Figure 7:** Percentage of pupils entered in qualifications other than GCSEs in art and design, ICT, PE/sport studies, and religious education 2005 to 2014



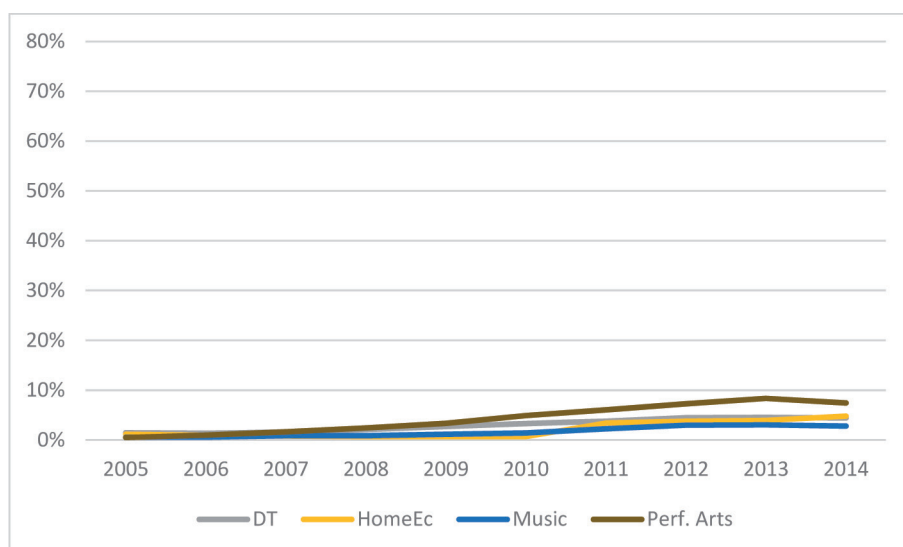
While some creative subjects show increased entry rates, the picture in other subject areas is not quite so healthy. Figure 8 shows that entry rates in GCSE design and technology, home economics (including food technology) and, to a lesser extent, performing arts (which includes dance and drama) have been in decline for some time, predating the Coalition Government. Entry rates in GCSE music have been rather flat at between 6 per cent and 8 per cent over the last ten years. Tiny increases were evident in entry rates for these subjects in 2014.

Unlike in ICT and PE/sport studies, entry rates in non-GCSE qualifications in the subject areas shown in Figure 8 have also tended to be relatively low (Figure 9). In other words, the decline of GCSE in design and technology did not coincide with a substantial rise in vocational design and technology, but instead with a rise in other vocational subjects, particularly ICT.

**Figure 8:** Percentage of pupils entered in GCSEs in design and technology, home economics, music, and performing arts 2005 to 2014



**Figure 9:** Percentage of pupils entered in non-GCSEs in design and technology, home economics, music, and performing arts 2005 to 2014



Equality of opportunity with regard to subject choice is a key issue here. For example, in 2014 there were over 250 state-funded mainstream schools (out of 3,033) with end-of-Key Stage 4 pupils at which no pupils at all were entered for a GCSE in design and technology (Table 2). Almost one in five schools in inner London fall into this category.

**Table 2:** Number of schools with no entrants in GCSE design and technology in 2014 by region

Region	Number of schools with no entrants in GCSE D&T	Total	Per cent
North East	8	151	5
Yorkshire and Humber	22	298	7
North West	35	439	8
East Midlands	18	199	9
West Midlands	38	368	10
East of England	28	386	7
Inner London	25	133	19
Outer London	28	289	10
South East	31	470	7
South West	23	300	8
Total	256	3033	8

The decline of design and technology is likely to continue after delays in the introduction of its reformed GCSE, meaning schools will not be able to teach the new content until September 2017. Such delays are likely to further discourage schools from entering pupils for this subject and qualification, thereby narrowing equality of opportunity for some pupils. We note, however, that changes in subject choices may not wholly be due to accountability reforms, but may instead reflect broader trends in subject preferences, teacher recruitment and retention, or even changes in the use of space within schools.

## Conclusion

Under the Coalition Government, school performance and accountability measures were used to drive widespread curriculum reforms. These curriculum reforms are part of a wider debate about the nature and purpose of general education at secondary level (Hodgson and Spours, 2011). By incentivizing schools to focus on certain types of subjects and certain types of qualifications, the Coalition Government gave a signal to schools about the type of education it valued and the qualifications it prioritized. Schools have responded accordingly to Performance Table reforms and it is expected that they will continue to do so, given that many reforms will only be evident in Performance Tables produced under the new Conservative Government.

The introduction of the EBacc in Performance Tables has had clear effects on qualification and subject entry levels. The percentage of pupils entering at least one full GCSE (two in science) in the EBacc subjects of geography, history, science, and languages has risen since 2012. However, entry rates in languages and science remain below 2005 levels, which suggests there may be some further increase to come. Alongside these 'academic' subjects, there has also been an increase in entry for GCSEs in some other subjects, such as RE. The increase in entry levels for a full GCSE in RE corresponds with a decrease in entry levels for the short-course GCSE. Similarly, increases in GCSE ICT entry are aligned to movements by schools away from vocational qualifications in the same subject. In contrast, entry rates for other creative subjects, such as performing arts and design and technology, have declined, indicating access to these subjects is further restricted. In general, there has been a decrease in entry levels

in qualifications not eligible for inclusion in Performance Tables, although some schools have continued to enter their pupils for ineligible qualifications in Year 10, perhaps as a stepping stone to other qualifications taken in Year 11.

The recommendations of the Wolf Review have had the clearest effect on qualification entry levels, with schools generally moving away from qualifications (particularly vocational ones) that no longer count in Performance Tables. A consequence of these reforms is that pupils with lower levels of prior attainment are now entered for fewer qualifications than under the previous system. This means that the gap in numbers of qualifications entered has widened, particularly at lower levels of prior attainment. Similarly, the gap in numbers of qualifications entered has also widened under the new system for financially disadvantaged pupils (those eligible for the extra pupil premium funding provided for students from low-income backgrounds). The introduction of Attainment 8 and Progress 8 measures in 2016 may go some way to address these gaps, as schools will be incentivized to focus on all pupils across the ability spectrum, but it is of concern nonetheless.

Although the new headline Attainment 8 and Progress 8 measures are yet to be included in Performance Tables, trends in qualification and subject entry patterns suggest that schools are already preparing for them. This is because both Wolf Review reforms and EBacc reforms correspond with the new headline measures, so that schools adjusting their curriculum offer in relation to the former two reforms will also be addressing some of the issues related to the new measures. However, Attainment 8 and Progress 8 measures take the focus away from higher-attaining pupils (who are likely to do better on the EBacc measure) and instead move it towards all pupils. This means schools will need to ensure that their middle- and lower-attaining pupils are also progressing at the expected level, as falling below the Progress 8 floor standard will put schools under scrutiny through inspection (DfE, 2014b).

Further reforms to qualifications (such as the new mathematics and English qualifications due in 2017), entry rules (such as the first-entry rule in the 2015 Performance Tables), subject importance (such as the focus on pass grades in English and mathematics in the 2016 Performance Tables), and headline measures (specifically the introduction of Attainment 8 and Progress 8 measures in 2016) mean that schools will have to continue to adjust their practices to ensure they do not fall foul of the new rules. The adjustments schools make will also alter the access pupils have to certain subjects and qualifications, with certain types of pupils (financially disadvantaged; less able; vocationally oriented; interested in creative subjects) more likely to have their access to subjects and qualifications restricted. Pupils have limited say in the curriculum choices they are offered, although their future educational and employment opportunities are contingent on the qualifications they attain at this stage of their schooling. As such, the Coalition Government's legacy should be judged not just by changes in qualification entry patterns and school Performance Tables, but by the longer-term outcomes achieved by young people.

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