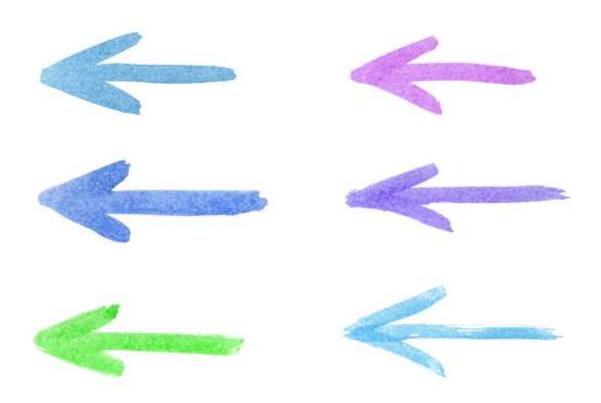


A step Baccward

Analysing the impact of the 'English Baccalaureate' performance measure

Tom Richmond



About the author

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He subsequently spent two years as an advisor to ministers at the Department for Education, first under Michael Gove and then Nicky Morgan, where he helped to design and deliver new policies as well as improve existing ones. After leaving the Department for Education, he spent two years teaching at a Sixth Form College and then moved back into education policy and research, first at the Reform think tank and then at Policy Exchange.

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Contents

	Executive Summary	1
1	Introduction	7
2	GCSE entries since 2010	10
3	EBacc entry and achievement rates since 2010	16
4	Research on the purpose and effects of the EBacc	20
5	Recommendations	36
	Conclusion	41
	References	43

Executive Summary

Ever since its retrospective introduction in 2010, the English Baccalaureate (EBacc) has generated considerable debate. Despite its confusing name, the EBacc is a 'performance measure' for schools that records the percentage of pupils who enter and pass their GCSEs in all the following subjects:

- English language and English literature;
- Mathematics;
- Either history or geography;
- A language (modern or ancient); and
- At least two of the three single sciences (biology, chemistry, computer science and physics) or 'Combined Science'

Supporters of the EBacc claim that it promotes the study of a broad range of GCSE subjects and that it is needed to prevent schools offering less challenging subjects to their pupils, particularly those from disadvantaged backgrounds. Improving the academic prospects of poorer pupils would, in turn, support greater social mobility. Meanwhile, the EBacc's detractors claim that it has harmed subjects that are not included in the EBacc, leading to a narrow curriculum in many schools as well as the demise of important subjects.

This new report analyses what has happened since the EBacc first appeared in terms of GCSE subject entries and outcomes as well as the extent to which any observed changes can be reasonably attributed to the EBacc itself.

GCSE subject entries since 2010

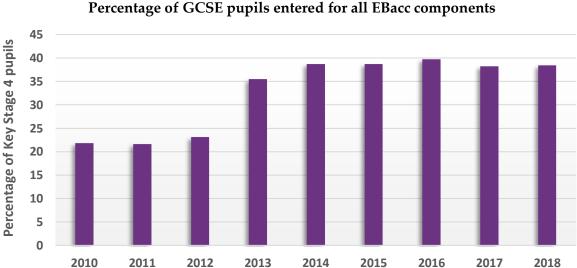
The subjects included within the EBacc have mostly thrived over the past decade. The single sciences (+38%) and both history (+23%) and geography (+42%) have seen substantial increases in GCSE entries. Languages have fared less well as both French (-27%) and German (-36%) have fewer entries than in 2010, although Spanish has performed much better (+51%) - albeit from a lower base. Teacher numbers have changed commensurately, with many EBacc subjects experiencing a growth in staffing levels since 2010.

The contrast between EBacc subjects and non-EBacc subjects could hardly be greater. After initially seeing a slight boost in GCSE entries post-2010 due to changes in the qualifications included within school performance tables, Art & Design (-6%), Dance (-46%), Drama (-29%), Media/Film/TV Studies (-35%), Music (-24%) and the six Design & Technology subjects (-65%) have all seen a decline in entries and are now falling year-on-year. The number of teachers for these subjects has also dropped, with many non-EBacc subjects experiencing a fall of over 1,000 teachers (the number of D&T teachers has fallen by over 3,500).

Other non-EBacc subjects such as Religious Studies, PE and Social Studies also experienced a small increase in GCSE entries because of changes to performance tables after the EBacc was introduced, but their entries are now falling sharply in many cases and so are the number of qualified teachers for these subjects.

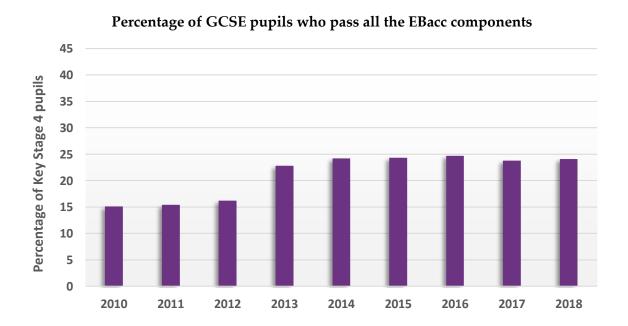
EBacc entry and achievement rates

After a rise in pupils being entered for all the EBacc subjects from 2012 to 2013, this quickly stabilised at around 35-40 per cent and shows no signs of improvement.



Less than a quarter of GCSE pupils 'pass' all their EBacc subjects and this too shows no signs

of improving. What's more, if the benchmark for passing GCSEs is set at grade 5 instead of grade 4 on the 9-1 scale, the percentage of pupils passing the EBacc falls to just 16.7 per cent.



The impact of the EBacc on pupils, teachers and school leaders

Numerous studies have raised concerns about how the EBacc has changed the behaviour of teachers and school leaders. A study by Ipsos Mori commissioned by the Department for Education (DfE) found that many schools had changed their curriculum offer to accommodate more EBacc subjects and sometimes redeployed staff to deliver this, but this often resulted in schools withdrawing or restricting other subjects (particularly creative arts courses). Moreover, the EBacc did not typically result in pupils making different decisions about which GCSE subjects to choose.

The same study also found considerable confusion about what the EBacc was trying to achieve, particularly around whether it would help pupils with university entry. This led to schools giving pupils different messages about the EBacc's importance. Most parents felt that they already had enough information about a school's performance without needing the EBacc, and some expressed concerns about its narrow academic focus and its impact on non-EBacc subjects. In addition, almost all schools were experiencing significant problems with recruiting enough teachers of EBacc subjects, especially science and mathematics – a theme that continues to this day.

Two studies by the Sutton Trust in recent years have shown that the EBacc does not appear to have been any great benefit to disadvantaged pupils. The government's EBacc targets (75% of pupils studying EBacc subjects by 2022; 90% of pupils by 2025) may also have resulted in some schools entering large numbers of pupils for EBacc subjects even when they were not likely to pass the examinations and may not have been interested in the subjects to begin with. Far from improving social mobility, this could have the opposite effect if it reduces poorer pupils' GCSE performance. In addition, a recent study commissioned by the DfE showed that schools which have seen notable rises in EBacc entry rates since 2010 appear to have achieved this by significantly downgrading non-EBacc subjects to the point where they were sometimes being taught after school or as optional activities.

Research has suggested that other factors such as the financial pressures on schools may have contributed to the decline of arts provision since 2010 in addition to the EBacc. For example, surveys of headteachers have found that the vast majority of schools have cut back on the lesson time and resources allocated to arts subjects. In some cases, funding has been redistributed towards EBacc subjects at the expense of non-EBacc subjects, which has affected both curriculum time and extra-curricular activities.

Other developments have raised further questions about the value of the EBacc. The introduction of 'Progress 8', another headline performance measure for schools, in 2016 appears to have driven more pupils towards EBacc subjects even though the same pupils were not entered for (or achieved) the full complement of EBacc subjects. This strongly suggests

that the EBacc has now been superseded as the main driver of decisions within schools. Furthermore, the decision by the Russell Group of universities to withdraw their list of 'facilitating subjects' for university entry – which has always been one of the key justifications used by the DfE to support the list of subjects included within the EBacc – is a significant setback for the credibility of the EBacc as a performance measure.

Recommendations

RECOMMENDATION 1

The two EBacc performance measures for schools – the percentage of pupils entering the English Baccalaureate and the English Baccalaureate Average Point Score (EBacc APS) – should be withdrawn with immediate effect. The associated targets of 75 per cent of pupils entering the EBacc subjects by 2022, and 90 per cent by 2025, should also be dropped.

The introduction of the EBacc appeared to nudge pupils and schools towards the subjects it includes, but this effect faded rapidly after 2012 and the proportion of pupils entering and achieving the EBacc has subsequently flatlined. Furthermore, it is possible that some, if not all, of the changes seen in entries for EBacc subjects in the years immediately after its introduction were actually driven by the removal of 'low-quality' qualifications from performance tables following the review by Professor Alison Wolf in 2011.

The lack of clarity around the purpose of the EBacc is still prevalent, and research has shown that parents are largely uninterested in what the EBacc statistics say about a school. The absence of a solid evidence-based argument for the group of subjects included in the EBacc raises further doubts about its value to pupils and the wider school system. In addition, what is now being recorded across almost every non-EBacc subject regarding GCSE entries and teacher numbers is concerning. On every main measure analysed in this report, creative arts and other non-EBacc subjects have been in decline, and this decline has often accelerated over the past few years. In any case, since 2016 it has been Progress 8 that appears to have encouraged more pupils to choose EBacc subjects.

In light of these findings as a whole, this report concludes that the two separate EBacc performance measures no longer serve any useful purpose and should therefore be withdrawn along with their associated targets. Removing the EBacc performance measures will not automatically undo the fall in the provision of non-EBacc subjects witnessed since 2010. Nevertheless, it would mean that a more productive conversation about the impact of Progress 8 could then take place (see Recommendation 2).

RECOMMENDATION 2

Following the removal of the EBacc performance measures, the Department for Education should refer instead to 'core' and 'additional' subjects in the context of GCSEs.

The removal of the EBacc will require the DfE to change their use of language when describing the different groups of GCSE subjects. At present, Progress 8 includes a double-weighted element ('bucket') for English and mathematics (provided that a pupil has taken GCSEs in both English literature and English language) as well as a bucket that can include the three highest point scores from any EBacc subjects. It is recommended that the DfE cease referring to science, history, geography and languages as 'EBacc subjects' and instead simply label them as 'core' subjects along with English and mathematics. 'Additional' subjects would then be counted towards the third and final bucket for calculating Progress 8. The aim of this recommendation is to defuse some of the tension creating by separating 'EBacc' (i.e. valued) and non-EBacc (i.e. not valued) subjects.

RECOMMENDATION 3

Consideration should be given to reforming the 'Progress 8' performance measure if policymakers want to put a greater emphasis on 'additional' subjects including arts provision.

If this government or a future government wishes to address the recent decline in arts provision, removing the EBacc is only likely to be part of the answer. Progress 8 will still encourage schools to prioritise the 'core' subjects. When this is combined with the effect of their weakening financial position, schools will continue to be faced with difficult choices around the provision of creative arts and other 'additional' subjects.

Should schools receive an increase in funding, either through the government's planned 'spending review' in late 2019 or through another mechanism, this might help to deal with some of the difficulties facing school leaders when seeking to promote arts subjects in the curriculum. Even so, if a better funding settlement is not deemed sufficient to improve the prospects of 'additional' subjects, there are three options available to policymakers in terms of using Progress 8 to bring about further change:

1. Combine the second and third bucket in Progress 8 to remove any distinction between 'core' (EBacc) and 'additional' (non-EBacc) subjects, allowing pupils to choose any six subjects alongside English and maths which then feed into a school's Progress 8 score;

- 2. Combine the second and third bucket in Progress 8 but increase the weighting of subjects currently in bucket 2 ('Core' / EBacc subjects) to incentivise schools to keep entering pupils for 'core' subjects where appropriate but still allow them to enter pupils for up to six 'additional' subjects if it is in the pupils' best interests;
- 3. Reduce bucket 2 ('Core' / EBacc subjects) from three to two subjects to give schools more space in the curriculum for 'additional' subjects, which should in turn reduce the incentive on schools to put more resources into providing EBacc subjects.

Each of these options have merit and this report does not express a preference for any of them, as ultimately the priorities of policymakers will determine which of these options are suitable for their wider agenda on subject choices at GCSE and the school curriculum.

Conclusion

Given that the 'creative industries' feature prominently in the government's 'Industrial Strategy' for boosting the UK economy in the coming years, it seems strange that for the last nine years the government has pursued a method of holding schools to account that works in precisely the opposite direction. This report does not seek to detract from the importance of offering all pupils a broad and balanced curriculum. It is plainly apparent that in the years running up to the 2010 General Election, some subjects – particularly humanities and languages – had seen their popularity fall for various reasons. There is nothing inherently wrong with a new government encouraging schools to enter pupils for subjects that had suffered a decline in the preceding years and there is no doubt that the EBacc was a well-intentioned initiative. However, this logic has now been turned on its head because since the EBacc was introduced, science, history and geography have thrived while many other subjects – most visibly in the creative arts – have seen their numbers dwindle.

It would be wrong to suggest that removing the EBacc will lead to an immediate upsurge in the number of pupils taking GCSEs in arts subjects. That said, the advent of Progress 8 in 2016 has provided the government with a perfectly sufficient tool for promoting their view of the subjects that schools should be prioritising – effectively negating the need for the EBacc. Financial pressures are continuing to hamper the ability of school leaders to provide a broad and balanced curriculum, which remains a cause for concern. Given that so many subjects sitting outside of the EBacc have been struggling for so long, it is now time for a new approach to school performance measures that stops fighting the battles of 2010 and instead focuses on what needs to happen in 2019 and beyond. For this reason, the continued use and prominence of the EBacc is therefore, as the title of this report says, a step 'baccward'.

1. Introduction

"I think most people would agree that English and maths GCSE are an irreducible core that nearly all young people should be expected to achieve at 16. But I believe there is an argument that the vast majority of young people should take a wider range of core academic GCSEs: an English Baccalaureate that would ensure that all children – especially those from less privileged backgrounds – have a chance to gain a base of knowledge and a set of life chances too often restricted to the wealthy." ¹

When the then Education Secretary Michael Gove first announced the English Baccalaureate (EBacc) in the months following the 2010 General Election, he cited three problems that needed to be solved. First, the government believed that too few pupils were studying a broad range of GCSE subjects when "in nearly every other developed country in the world children are assessed in a range of core academic subjects at 15 or 16 even if they are on a 'vocational' route." Second, it was important to strengthen the position of these 'core subjects' in schools to "stop the shift to less challenging courses driven by the current perverse accountability system", particularly when entries for subjects such as foreign languages had fallen sharply in the years leading up to the 2010 election. Third, the EBacc would contribute to the Coalition Government's focus on social mobility by improving the academic prospects of those from the most disadvantaged parts of society.

Despite its confusing title, the EBacc is a performance measure for schools – not a qualification. Since its announcement in the 2010/11 academic year, the measure has recorded the percentage of pupils who pass their GCSEs in the following subjects:

- English language and English literature⁴;
- Mathematics;
- Either history or geography;
- A language (modern or ancient); and
- At least two of the three single sciences (biology, chemistry, computer science and physics) after entering three of them
 - OR Core and additional science GCSEs
 - OR GCSE double science award⁵

In the summer of 2010 – before the EBacc measure was announced – only 22 per cent of pupils in England were entered for the full set of EBacc subjects at GCSE and only 16 per cent of pupils passed all of them.⁶ This leant weight to the government's argument that these subjects were being somewhat neglected. What's more, a YouGov poll in 2011 found that, when asked which subjects should count in measuring a school's league table position, the subjects most frequently cited by respondents were mathematics (86%), English language (85%), Science

(79%), English literature (67%), History (66%), Geography (64%) and French, German, Spanish or other modern languages (61%). This contrasted with subjects such as Art and design (25%), Religious Studies (22%), Media Studies (15%), Drama (13%) and Dance (8%).⁷

When the Education Select Committee investigated the introduction of the EBacc in 2011, they identified other evidence that supported the government's choice of 'core subjects'. For example, the Russell Group – representing research-intensive universities – published a booklet entitled 'Informed Choices' in 2011, which listed what are often referred to as 'facilitating' A-level subjects: mathematics and further maths, English, physics, biology, chemistry, geography, history, and classical and modern languages. According to the booklet, these facilitating subjects are "required more often than others" for entry to Russell Group universities. Similarly, the London School of Economics had published a list of 'non-preferred subjects' that only featured subjects excluded from the EBacc. When combining these developments with the YouGov poll, the government's case for introducing the EBacc to emphasise the importance of their chosen set of core subjects at GCSE appeared to be strong.

Nevertheless, the Select Committee raised several early alarms regarding the EBacc. The Committee noted that there was "significant resentment on the part of schools at the retrospective application of the [EBacc] to 2010 data" as it was only announced after GCSEs had already been taken in the summer of that year. The Committee also questioned the rationale put forward by the government. For example, while the Committee supported the desire to increase the attainment of pupils from poorer backgrounds, "the evidence is unclear as to whether entering more disadvantaged students for [EBacc] subjects would necessarily make a significant contribution to this aim." In addition, it also "might lead to a greater focus on those students on the borderline of achieving [good GCSEs in EBacc subjects], and therefore have a negative impact on the most vulnerable or disadvantaged young people, who could receive less attention as a result." The Committee agreed with the government that emulating international best practice can sometimes be a sensible course of action, yet "the evidence we received does not suggest a link, in other countries, between the prescribed study of certain academic subjects and improved attainment and prospects for poorer students."

These criticisms aside, the most controversial aspect of the EBacc was undoubtedly the list of subjects that it included and, by extension, the subjects that it did not. The exclusion of Religious Education triggered a vocal parliamentary campaign calling for the inclusion of RE that attracted the signatures of over 100 MPs.¹³ The government's view was that this was not necessary because RE was already required by law and had seen an increased uptake from 1995 to 2010 in any case (unlike history, geography and languages). The omission of creative arts subjects from the EBacc also met strong opposition, with the Select Committee receiving 340 letters supporting the inclusion of Music as well as many other submissions to the Committee supporting creative arts more broadly.¹⁴ Awkwardly for the government, in

Michael Gove's speech that launched the EBacc he said that he was "proposing that the Government look at how many young people in each secondary school secure five good GCSEs including... a humanity like history or geography, art or music." However, just two months later the government confirmed that a 'humanity' subject only referred to history or geography. No rationale was provided at the time, although the Schools Minister Nick Gibb acknowledged it was "a difficult judgment call whether to include music and art as well". 16

Other issues facing the EBacc included its potential impact on the supply of teachers. The Committee heard that schools were already realigning their curricula to increase uptake of EBacc subjects, which could have a significant effect on teacher supply. The government recognised the challenges that this posed, including the fact that schools may need to recruit extra teachers "in areas where shortages already exist, such as physics, or areas where we would expect there to be high demand, such as language teachers".¹⁷ The Committee were encouraged that the government was working on solutions to the impact of the EBacc on teacher recruitment and deployment, but this failed to overcome their concern at the exclusion of certain subjects from the EBacc. The Committee concluded that "academic subjects are not the only path to a successful future, and all young people, regardless of background, must continue to have opportunities to study the subjects in which they are likely to be most successful, and which pupils, parents and schools think will serve them best."¹⁸

From 2010 to 2014, the proportion of pupils being entered for the full range of EBacc subjects climbed from 22 per cent to 39 per cent,¹⁹ which suggested that the performance measure was having the desired effect in its early stages. Despite this apparent progress, in June 2015 then Education Secretary Nicky Morgan announced that the EBacc would become compulsory to ensure pupils "study the core academic subjects at GCSE, the subjects that keep your options open, and allow you to enter the widest ranges of careers and university courses." This bold commitment has been gradually watered down over time, as the government consultation following the original announcement said that only 90 per cent of pupils should be entered for the EBacc rather than 100 per cent,²¹ and following the 2017 General Election the government stated that only 75 per cent of year 10 pupils in state schools will study EBacc GCSEs by 2022 (rising to 90 per cent by 2025).²² Nevertheless, the EBacc has now become a headline measure of performance for secondary schools and the government plans to make it easier for parents to compare the relative success of schools in relation to how many pupils are entered for, and achieve, the EBacc.

This new report will analyse what has happened since the EBacc first appeared in 2010 in terms of GCSE subject entries and the extent to which any observed changes in the number of students choosing different subjects can be attributed to the EBacc itself. Following this analysis, a set of recommendations will be put forward that describe how our accountability system for schools should be reformed in future.

2. GCSE entries since 2010

This chapter will assess changes in the number of GCSE entries across the following subject groups from 2010 to 2018:

- Subjects included in the EBacc: English, mathematics, science, languages (French, Spanish and German²³), history and geography;
- Creative arts subjects not included in the EBacc: Art and Design, Dance, Drama, Media/Film/TV, Music and Design and Technology (D&T) subjects²⁴;
- Large non-arts subjects / subject groups not included in the EBacc (i.e. those with more than 10,000 GCSE entries in 2010): Religious Studies, Physical Education, Business Studies, Home Economics, Social Studies²⁵ and Vocational Studies²⁶.

The data used for this analysis come from the 'subject time series' published by the Department of Education in January 2019 that shows the GCSE entries and results of pupils at the end of Key stage 4 from 2010 to 2018.²⁷

It is important to note that the overall number of GCSE entries has declined since 2010 due to the decreasing size of the pupil cohort reaching age 16. Pupil numbers at the end of Key Stage 4 have fallen by approximately 9 per cent from 2010 to 2018, which has caused the total number of entries across all GCSE subjects to fall from 4.7 million in 2010 to 4.3 million in 2018 (also a 9 per cent reduction).²⁸ This means that the default change for GCSE entries in all subjects over this period should be a slight downward trend.

Subjects included in the EBacc

Given their compulsory nature, GCSE English and mathematics had the highest number of entries in 2018 (Figure 1). They have also mirrored the national downward trend caused by the shrinking pupil cohort since 2010. That said, the pattern during the 2010-2018 period is very different for the two subjects.

While mathematics has been relatively steady since 2010, the respective English GCSEs have taken different trajectories. This is likely to be the result of two changes made by government. First, before 2015 the EBacc could be achieved by gaining a grade C or above in English language but pupils only had to sit the English literature examination rather than achieve a

particular threshold. From 2016 onwards, a grade C had to be achieved in both examinations. This increased threshold might have encouraged schools to enter pupils for the combined 'GCSE English Language and Literature' course or for the 'iGCSE' (a similar qualification to the GCSE, often used internationally) instead of entering them for the separate GCSE examinations, which is likely to have contributed to the reduction in English language entries. Second, the combined 'GCSE English Language and Literature' course and iGCSEs were removed from performance tables in 2016, which explains the spike in entries for both GCSE English courses from 2016 to 2017. The removal of these alternative courses has brought English Language and English Literature entries back into line with the overall student population.

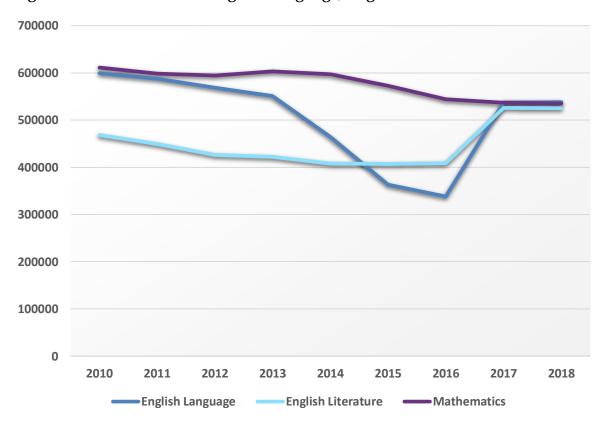


Figure 1: GCSE entries for English Language, English Literature and mathematics

Like English and mathematics, studying science at GCSE level is compulsory but the sciences have seen considerable fluctuations in entries since 2010 (Figure 2). The three separate sciences – biology, chemistry and physics – have followed almost identical patterns because students who study one of these subjects almost invariably take the other two as well (often referred to as 'triple science'). Following the introduction of the EBacc, there was a notable increase in entries for the separate sciences while entries for Core and Additional Science fell markedly, only for the latter pairing to recover in subsequent years. This was most likely caused by the removal of subjects such as BTEC Science and numerous Level 1 and 2 certificates from

performance tables, meaning that schools switched students onto Core and Additional Science from 2014 onwards. In 2018, Core and Additional Science were replaced by 'Combined Science' (represented by the short dotted line towards the top of Figure 2) that had similar, albeit marginally lower, entries than Core Science had in 2017. Since its introduction in 2013, Computer Science – which is included in the EBacc as a 'science' subject – has grown reasonably quickly although entry numbers have levelled off in recent years.

Overall, the separate sciences have thrived under the EBacc. There has been an increase of almost 40 per cent in entries from 2010 to 2018 (including an increase of over 20,000 entries from 2017 to 2018), while Core / Combined Science entries have slightly decreased over the same period.

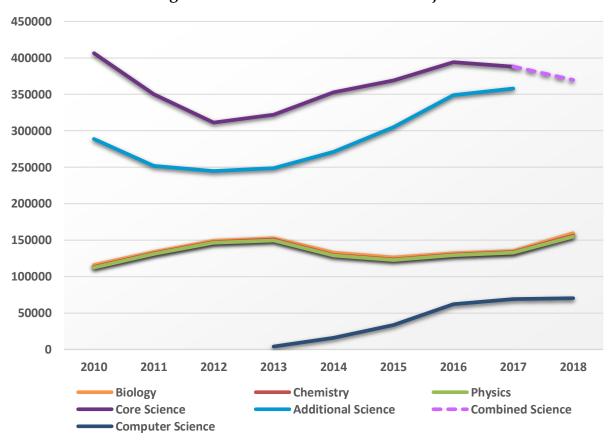


Figure 2: GCSE entries for science subjects

When it comes to languages and humanities (Figure 3), the stories could not be more different. Geography and history entries have risen around 40 per cent and 25 per cent respectively since 2010. Both subjects had seen entries fall in the years leading up to the introduction of the EBacc, but this has been decisively reversed – even in the context of a shrinking pupil cohort.

In contrast, entries for French have dropped by over 25 per cent since 2010 and entries for German have fallen by around 35 per cent. Spanish has managed to buck the trend for languages, though, as entries have risen by over 50 per cent and it has now comfortably replaced German as the second most popular language GCSE. The decision to make languages non-compulsory from 2004 onwards meant that, as indicated in Figure 3, French and German were already on a downward trajectory before 2010 and this trend has continued under the EBacc.

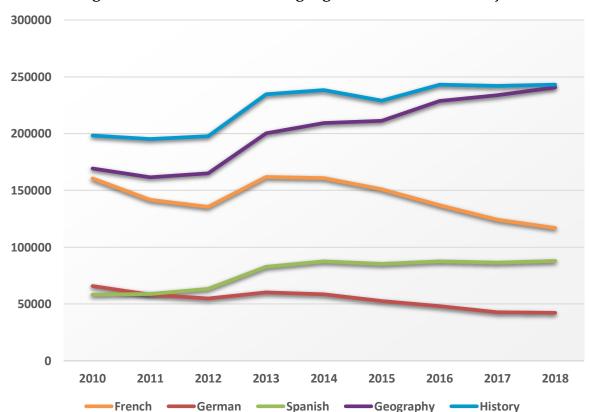


Figure 3: GCSE entries for languages and humanities subjects

Creative arts subjects

One of the most common criticisms of the EBacc since its inception has been the apparent lack of emphasis on the arts. The data seem to support this perspective. Figure 4 shows that in the initial years following the introduction of the EBacc, many arts subjects appeared unaffected while entries for art and design actually increased. However, as mentioned earlier in this chapter, the changing patterns of what was included in performance tables during this period is crucial to understanding variations in examination entries. The removal of non-GCSE subjects such as BTECs from the performance tables in the years after a major review of vocational qualifications by Professor Alison Wolf in 2011 meant that schools were strongly incentivised to switch back to GCSEs, particularly in art and design.²⁹ This means that the

increase in entries for some creative arts subjects from 2012 to 2015 is more a reflection of the changes to performance tables than any intrinsic shift in their appeal to young people.

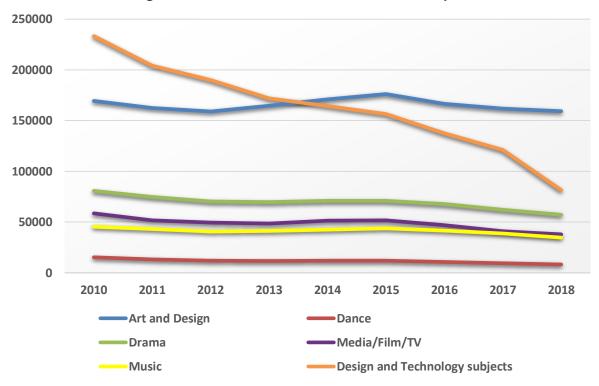


Figure 4: GCSE entries for creative arts subjects

The trend since 2015 in almost every arts subject has been downward – in some cases, dramatically so. All the arts subjects shown in Figure 4 now have fewer entries than in 2015 and all are below their 2010 levels as well. Music and Drama have seen entries fall by around a quarter since 2010 while Dance has dropped by almost half. The six D&T subjects have also seen entry numbers collapse since 2010, although the sharp drop in the last 12 months also reflects the cessation of D&T: Food Technology, which was replaced by a new GCSE in Food Preparation and Nutrition. As with languages, D&T subjects were already on a downward trend before 2010 due to their status being changed from compulsory to non-compulsory several years earlier.

Large non-arts subjects not included in the EBacc

Similar to the arts subjects described above, other non-EBacc subjects have been affected by changes to the qualifications included in performance tables. At first glance, the steep rise in entries for GCSE Religious Studies appears to have confounded the concerns expressed when the EBacc was announced. That said, the GCSE short course in Religious Studies was a

popular way of meeting the requirement for schools to provide a religious education but the course was excluded from performance tables from 2013/14 onwards.³⁰ As Figure 5 shows, entries from the last few years have shown a consistent decline, including a drop of over 50,000 entries in the last year alone.

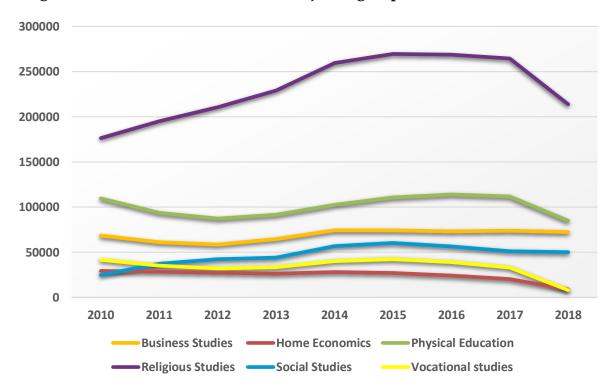


Figure 5: GCSE entries for non-arts subjects / groups not included in the EBacc

Physical Education appears to have fared relatively well since 2010 but, again, the removal of numerous alternatives to GCSEs in PE and sports studies caused an increase in GCSE entries from 2012 to 2015 that has subsequently faded away.³¹ 2018 saw over 25,000 fewer entries in Physical Education than the previous year. GCSEs in Business Studies, Social Studies (e.g. Sociology) and Vocational Studies (e.g. Accounting) experienced a similar boost from 2012 to 2015. Since then, entries for Vocational Studies have almost disappeared entirely, as have entries for Home Economics (although the latter will have been affected by the new GCSE in Food Preparation and Nutrition). Business Studies and Social Studies seem to have held up better than other subjects in recent years, with both now above their entry numbers in 2010 and holding relatively steady.

3. EBacc entry and achievement rates since 2010

Leaving aside its impact on GCSE entries, the nature of the EBacc as a performance measure means that the government records and publishes the proportion of pupils who are entered for, and pass, the full set of component subjects that constitute the EBacc as well as the proportion of pupils who enter and pass each individual component of the EBacc. This chapter will analyse the main statistics published by the DfE related to the EBacc³² to ascertain its popularity and success rates for pupils at the end of Key Stage 4 in state-funded schools.

How many pupils are entered for the EBacc?

After the announcement of the EBacc in 2010, schools could not immediately switch pupils between subjects as they would have already chosen their GCSEs. This could explain the lull in EBacc entry rates before a surge from 2012 to 2013. In addition, the 'Wolf Review' of qualifications in 2011 would have encouraged schools to switch from non-EBacc qualifications to their EBacc equivalents during the same period. Since 2013, though, the percentage of pupils being entered for the EBacc has remained relatively constant at just below 40 per cent (Figure 6) despite the government's target of 75 per cent of GCSE pupils being entered for the EBacc by 2022. These overall figures mask a considerable difference between boys and girls, with only 32.8 per cent of boys being entered for all components of the EBacc compared with 44.2 per cent of girls.

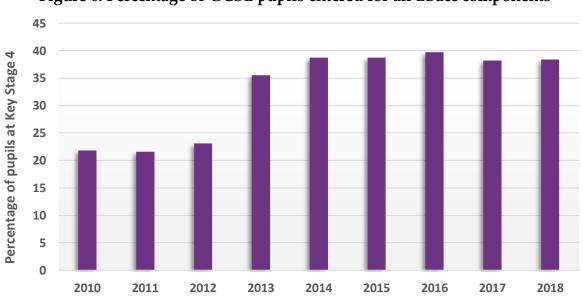


Figure 6: Percentage of GCSE pupils entered for all EBacc components

How many pupils achieve the EBacc?

While almost 40 per cent of pupils are entered for the EBacc, the proportion of pupils who actually pass all the EBacc subjects is another matter altogether. As shown in Figure 7, less than a quarter of GCSE pupils pass their EBacc subjects at grade 4 on the new 9-1 scale and, as with the stable EBacc entry rates, this shows no signs of improving. If the benchmark for passing the EBacc is set at grade 5 instead of grade 4, the percentage of pupils passing the EBacc falls to just 16.7 per cent. Girls comfortably outperform boys in their EBacc pass rates at both grade 4 (29.5 vs 18.9 per cent) and grade 5 (20.8 vs 12.8 per cent).

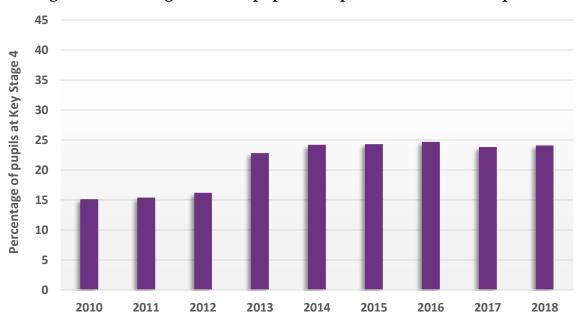


Figure 7: Percentage of GCSE pupils who pass all the EBacc components

From 2018 onwards, the new headline EBacc attainment measure will be the EBacc average point score (EBacc APS). EBacc APS measures pupils' point scores on the 9-1 scale across the five components of the EBacc. The objective of the EBacc APS is to ensure "the attainment of all pupils is recognised, not just those at particular grade boundaries, encouraging schools to enter pupils of all abilities, and support them to achieve their full potential." On this new EBacc APS measure, the average attainment in EBacc subjects in 2018 was 4.04 on the 9-1 scale (3.80 for boys and 4.29 for girls).

How much variation is there between the EBacc subjects?

While the national entry and achievement rates for the EBacc are understandably important, it is also necessary to consider the variation between the different subject components of the

EBacc. Figure 8 shows that, in line with the GCSE entries discussed in the previous chapter, both the science and humanities component of the EBacc have risen since 2012 while almost every pupil continues to be entered for English and mathematics. What is most striking about Figure 8, though, is the entry rate for languages which has consistently fallen in recent years despite showing signs of an initial recovery from 2012 to 2014.

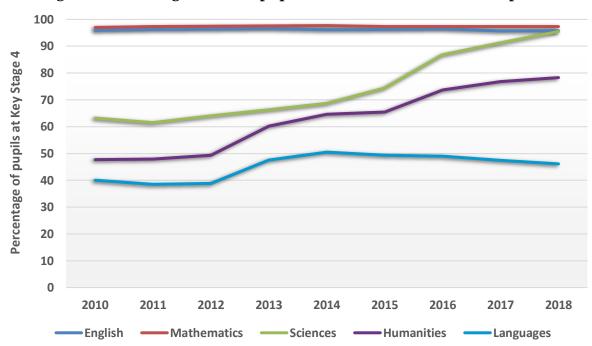


Figure 8: Percentage of GCSE pupils entered for each EBacc component

Not only is there noticeable variation in entry rates between the five EBacc components, the performance of pupils also differs markedly between the components. As mentioned earlier, the new measure of EBacc attainment will be the EBacc APS that records the average score of pupils in each subject on the 9-1 scale. The performance of pupils in English, mathematics and science is broadly similar, with EBacc APS scores of between 4.50 and 4.94. However, the EBacc APS for Humanities is much lower at 3.55 and the EBacc APS for Languages is just 2.26.

If pupils are awarded a score of 'zero' for any subjects that they do not enter then this could account for the apparent differences in the APS between the subjects. To adjust for this, the APS scores for each subject can be divided by the percentage of students who enter each subject. This gives adjusted APS scores of 5.16 for English, 4.64 for mathematics, 4.71 for sciences, 4.53 for humanities and 4.90 for languages - representing the scores on the 9-1 scale of those students who were entered for each subject.

The fact that students appear to be performing relatively well in languages is perhaps surprising, given that previous research from the examination regulator Ofqual in 2015 suggested that modern foreign languages are graded more severely than many other GCSE subjects.³⁴ That said, schools might prefer not to enter lower-ability students for the GCSEs that they find the hardest (see next chapter), which could explain why the group of students entered for GCSEs in languages seem to be performing slightly better than the groups of students entered for other EBacc subjects. Further research would be required to understand the extent of this phenomenon.

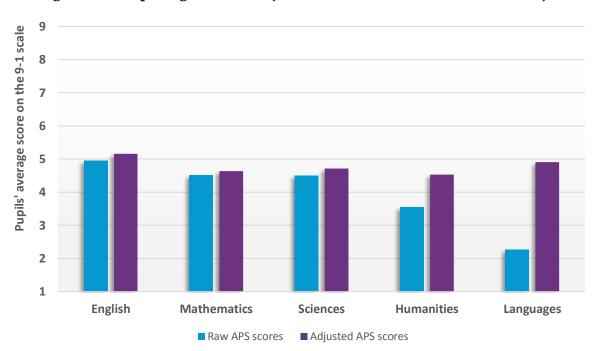


Figure 9: Comparing raw and adjusted EBacc APS scores for each subject

4. Research on the purpose and effects of the EBacc

What do schools, parents and pupils think about the EBacc?

After the EBacc had been in place for a few years, the DfE commissioned the polling firm Ipsos Mori to carry out research into the effects of the EBacc on schools, parents/carers and pupils. The research included a survey of 618 teachers from a representative sample of secondary schools as well as qualitative research involving 11 schools that consisted of interviews, case studies and focus groups. The research found that the great majority of schools gave at least some of their pupils the chance to study the EBacc: 99 per cent offered a language; 99 per cent offered history; 98 per cent offered geography; and 99 per cent offered science (double and/or triple science). 98 per cent of schools offered a choice of GCSE subjects that enabled their pupils to study for the EBacc and 89 per cent of teachers said their option blocks allowed all pupils who wanted to study towards the EBacc to do so.³⁵ Where schools did not offer some pupils the opportunity to study towards the EBacc, this was typically because pupils with lower attainment were not offered the EBacc subjects (63 per cent of schools that did not allow all pupils to study towards the EBacc give this as a reason).³⁶

The research also showed that many schools had actively changed their curriculum offer and GCSE options for students, with almost half of schools reporting changes in the previous academic year. By 2013, only 15 per cent of schools reported that they were planning to make future changes, suggesting that whatever adjustments schools felt needed to be made in response to the EBacc had already been introduced.³⁷

While observers may have seen this as a positive step in light of the objective of the EBacc, there was strong evidence that non-EBacc courses were already under severe pressure. 27 per cent of schools said that some courses had been withdrawn or failed to recruit enough pupils for the 2012/13 academic year due to the EBacc, with the most commonly withdrawn subjects being drama and performing arts followed by art and design technology. Furthermore, 30 per cent of teachers indicated that the EBacc had led to staffing changes at their school, with 20 per cent still expecting more staffing changes. This was supported by the qualitative research that suggested some teachers were redeployed towards EBacc subjects. 99

Although schools were evidently trying to adapt to the EBacc, the evidence did not suggest that pupils were necessarily changing the way that they choose subjects:

"...the overriding considerations when pupils are selecting their GCSE options are to select subjects that they enjoy and are good at and, where pupils have a career path in mind

that will help towards their preferred career. These factors were more important than the EBacc in guiding GCSE choices in all the case studies, and teachers, parents/carers and pupils all held firmly to this principle. While most recognised that the EBacc subjects were in general the most useful subjects for some pupils – they are seen as inherently valuable and lend themselves to any career path a pupil might choose in future – pupils and parents/carers firmly believed that choices had to be down to the individual's preferences and abilities. As such, the EBacc in itself often did not play a central role in pupils' decision-making." ⁴⁰

Schools typically reported that more academic pupils 'gravitated' towards EBacc subjects without needing any additional inducement. That said, "in some cases, the EBacc had helped to refine subject selections – for example, where pupils were deciding between two subjects they found equally appealing, only one of which was part of the EBacc, they often opted for the EBacc-eligible subject."⁴¹

However, languages were the exception to the rule as "in some case study schools languages were not a natural choice for most pupils, who were unconvinced of their value or simply did not enjoy the subject." The qualitative research revealed that languages were seen as a 'sticking point' in some schools, often those where teachers indicated their pupils have low aspirations because "these pupils are less likely to see the value of studying a language, and often find languages more difficult and less engaging than other subjects." Teachers at these schools reported that even their more academic pupils were often reluctant to study towards a language.

It was also unclear to schools what the EBacc was trying to achieve, even though they were making changes in response to its introduction:

"The qualitative research revealed considerable confusion about the value of the EBacc and its potential future importance for pupils; as a result, schools gave a variety of messages about its value. Some schools told pupils it would be an essential requirement for elite universities, others said it would not matter to universities, and other schools acknowledged they did not know. Some schools were sceptical about how long the EBacc would be in place, and continued to prioritise other school performance metrics. This uncertainty is reflected in the survey responses, which also indicate that schools are giving mixed messages about the EBacc to pupils. ... This uncertainty led in some cases to pupils taking the EBacc 'just in case' it proved important in the future, or in the belief that it would 'be something else for the CV' or give them 'an extra qualification'." ⁴⁴

Such mixed messages were evidently causing problems for pupils and schools without any obvious benefit. Parents were similarly unenthused by the EBacc:

"Most parents/carers felt that they already had enough information about school performance without needing the EBacc; several stressed that they judge school performance on many factors – such as the school ethos and atmosphere – rather than purely on measures of academic success. Some parents/carers were concerned about the narrow academic focus of the EBacc, and the detrimental impact it might have on the uptake of non-EBacc subjects. Ultimately, however, parents/carers felt that pupils have to make individual choices that are right for them and were sceptical of the value of the EBacc in encouraging children down routes that might not be appropriate for them." ⁴⁵

Although a few parents/carers felt the EBacc helped to steer schools and pupils away from prioritising 'softer' subjects, the majority of parents/carers saw little value in the EBacc and were keenly aware of its potentially negative impact on both pupils and non-EBacc subjects.

Have arts subjects really suffered under the EBacc?

In February 2017, the New Schools Network (NSN) – a charity funded by government to support the creation of Free Schools – published a report on the EBacc. It set out to challenge the notion that "nearly all [arts organisations] believe, as do a majority of people in the arts world, that the introduction of the EBacc in the last Parliament has had a devastating impact on arts education."⁴⁶ The foreword to the report, written by Schools Minister Nick Gibb and Digital and Culture Minister Matthew Hancock, stated that "arts and culture are part of the fabric of our society [and] they are one of our most successful exports, support millions of UK jobs and play a crucial role in the happiness of the nation."⁴⁷ They added that "this Government strongly believes that the arts and culture should be for everyone and not just a privileged few [as] they are hugely valuable in and of themselves, and they have the potential to be forces for openness and social mobility."⁴⁸

On the subject of the EBacc, the ministers believed "it is vital that the next generation is well prepared by having a well-rounded education" and went on to declare that "the EBacc is ensuring greater numbers of pupils are now taking the combination of GCSE subjects that facilitate pupils pursuing any post-16 path they should choose – including attending one of the country's world-leading universities."⁴⁹ They concluded that "the findings of this report put to rest arguments that EBacc policy is stifling cultural education [because] since the creation of the EBacc, the entry numbers to GCSE arts subjects and number of arts GCSEs being taken per pupil have risen."⁵⁰ They quoted figures showing that the proportion of pupils in state funded schools taking at least one arts subject had increased from 44.7 per cent in 2012

(the first full academic year after the EBacc was announced) to 48.0 per cent in 2016. This was seen as evidence to support "the deliberate decision to restrict the EBacc to 5 subject areas", which was "leaving ample room for pupils to study a number of arts subjects alongside the EBacc."⁵¹

The additional foreword written by then Director of the NSN Toby Young commented that "happily, the conventional wisdom about the impact of the EBacc turns out to be wrong. If you compare 2012 with 2016, the total number of arts GCSEs taken has risen. By the same token, the average number of arts GCSEs studied by each pupil has increased."⁵² He finished by saying that "no doubt some people will dispute [the report's] analysis and quarrel with its conclusions" but he was nevertheless "relieved that the data was on our side."⁵³

The report opened by listing several benefits related to studying arts subjects. These subjects were found to correlate strongly with positive academic and labour market outcomes and are vital in supporting the UK's burgeoning creative industries. For example, the report cited evidence that studying the arts has a beneficial impact on progression in other subjects, and these gains may be even greater for pupils from disadvantaged backgrounds.⁵⁴ In addition, it cited research showing that there were more general behavioural and cognitive benefits from studying the arts in terms of improved scores in cognitive tests, better transferrable skills such as communication and social competency and greater problem-solving skills.⁵⁵ No doubt supporters of the arts would endorse all these findings.

The NSN's analysis of the benefits of an arts education was accompanied by the unequivocal statement that "there is no evidence that the EBacc has affected GCSE arts entries", along with two specific claims to support their position regarding what has happened to arts subjects:

- 1. Between 2011/12 and 2015/16 individual arts entries rose
- 2. More pupils took at least one arts GCSE in 2015/16 than in 2011/12 56

The first claim has already been critiqued in the previous chapter. One cannot look at the number of entries for arts GCSEs without accounting for the significant changes to performance tables that were implemented shortly after the EBacc was introduced, which led to many non-GCSE arts subjects being discounted (forcing schools to move back to GCSEs instead). Entries for all the main arts subjects shown earlier in Figure 4 are below their 2010 levels and are now falling year-on-year – in some cases, dramatically so.

The second claim relates to a figure that the DfE has begun publishing in recent years, which shows the percentage of pupils at the end of Key Stage 4 studying at least one of the following arts subjects: Applied Art and Design, Art and Design, Drama, Media/Film/TV, Music, Dance or Performing Arts. The NSN report cited the figures from 2012 to 2016 and stated, correctly,

that the percentage of pupils studying at least one arts subject had increased from 44.7 per cent to 48 per cent over this period. Even so, the full data set tells a different story.

Although the figure for 2016 is indeed higher than 2012, this again fails to control for the performance table changes that pushed more students away from non-GCSE arts subjects to their GCSE equivalents from 2012 onwards. What's more, now that the effect of these changes has been fully realised, the percentage of pupils entering at least one arts GCSE has been falling noticeably and steadily (including from 2015 to 2016, before the NSN report was published, although this was not recorded in their findings). The percentage of pupils entering at least one arts GCSE is now lower than at any point since the EBacc was introduced.

In short, neither of the main claims made in this report stand up to scrutiny. Despite what ministers said at the time, this report does not put to rest arguments that the EBacc is stifling cultural education, nor, as asserted by the then director of the NSN, does this report show that "the conventional wisdom about the impact of the EBacc turns out to be wrong".⁵⁷ On the contrary, all the data support the 'conventional wisdom' that the provision of arts subjects has declined since the EBacc was introduced.

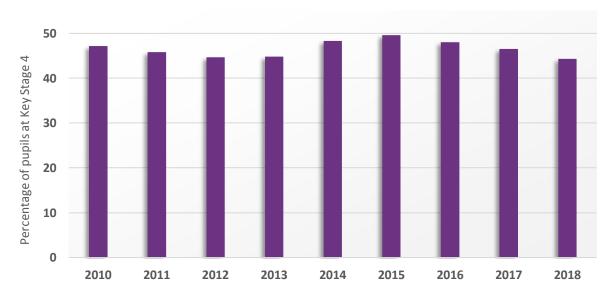


Figure 10: the percentage of GCSE pupils studying at least one arts subject

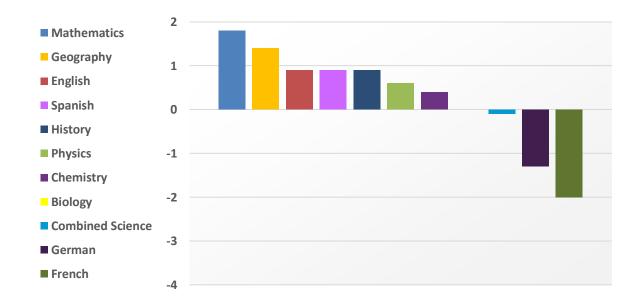
Are there enough teachers for EBacc and non-EBacc subjects?

Leaving aside its incorrect statements regarding the impact of the EBacc on GCSE entries, the NSN report unearthed another set of statistics that deserved greater attention. It noted that, despite its own claims that arts subjects were flourishing, "between November 2011 and

November 2015, the number of arts teachers at Key Stage 4 in England's state-funded schools declined from 25,300 to 21,900 - a 13.4 per cent fall. By contrast, the number of Key Stage 4 geography and history teachers increased by 8.5 per cent". This demonstrates how relying on GCSE entries is far from perfect as a measure of each subject's relative health and popularity, not least because analysing the number of teachers circumvents any potential issues caused by the (re)classification of subjects within performance tables.

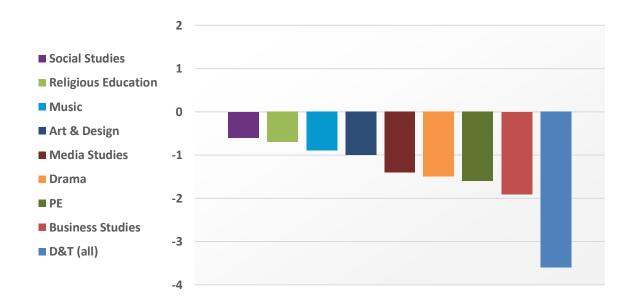
The latest figures from the DfE on teacher numbers⁵⁹ paint a contrasting picture between EBacc and non-EBacc subjects. Figure 11 shows that, for the most part, the number of teachers in EBacc subjects has increased since the performance measure was introduced. Mathematics and geography have experienced the largest increases of around 1,800 and 1,400 teachers respectively and many other subjects such as English, Spanish and history have also seen teacher numbers grow significantly. The dwindling popularity of languages has inevitably resulted in a drop in the number of French and German teachers.

Figure 11: changes in the number of qualified teachers for EBacc subjects in statefunded secondary schools from 2012 to 2017 (thousands)



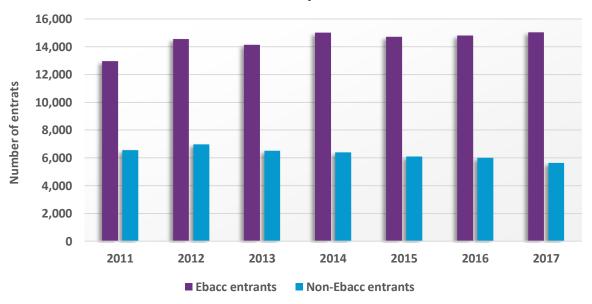
In light of how much growth there has been in the number of EBacc teachers, Figure 12 (overleaf) is perhaps unsurprising. Since the EBacc emerged, teacher numbers have fallen in the vast majority of non-EBacc subject areas. Numerous subjects have seen staffing levels drop by well over 1,000 during this period, with PE, Business Studies and D&T showing particularly sharp declines. Other subject areas such as PSHE and Citizenship have also experienced substantial falls of 9,100 and 3,800 respectively, although it is possible that some of these teachers may have been redeployed to other subjects.

Figure 12: changes in the number of qualified teachers for large non-EBacc subjects in state-funded secondary schools from 2012 to 2017 (thousands)



Not only has the overall stock of teachers for EBacc and non-EBacc teachers diverged, the number of people entering teaching in secondary schools shows a similar pattern. The latest figures on entrants to each subject⁶⁰ (Figure 13) suggests that EBacc subjects are on a more positive trajectory in terms of new teachers entering the profession. At the same time, non-EBacc subjects are finding it increasingly hard to attract new teachers with the number of entrants falling for six years in a row.

Figure 13: the number of new entrants⁶¹ teaching EBacc and non-EBacc subjects in secondary schools



Even though the number of EBacc teachers has risen in recent years, this has not detracted from the considerable difficulties facing schools in finding enough of them to meet the government's ambition of 75 per cent of pupils entering the EBacc by 2022. Research published by the DfE in September 2018 showed that many school leaders are struggling to fulfil the government's objective:

"The vast majority (92 per cent) of secondary leaders stated that they have difficulty recruiting teachers for at least one of the five EBacc subject areas. Difficulties were most commonly reported for science and maths, with around three-quarters of leaders stating they have difficulty hiring for these subjects. Just over half, flagged difficulties with recruiting modern foreign languages teachers (56 per cent) and English teachers (52 per cent). The least problematic area, though still an issue for 44 per cent of leaders, was recruiting for teaching jobs in humanities. ... A broadly similar pattern was seen across the subjects when leaders were asked a similar question regarding retaining teachers: again, science and maths were the most problematic, English ranked next rather than modern foreign languages." 62

These findings highlight the demands facing schools in terms of recruiting and retaining EBacc teachers. To compound this, the same study found that "just over half of all secondary school leaders (52 per cent) reported that their schools currently have the teaching capacity to achieve the EBacc ambition [but] forty-three percent reported that they do not have the capacity", 63 further illustrating how the government's target for the EBacc is becoming an increasingly distant prospect.

What impact has the EBacc had on disadvantaged students?

In 2016, Dr Rebecca Allen and Dave Thomson published a paper with the Sutton Trust that assessed the impact of the EBacc and 'Attainment 8'⁶⁴ performance measures from 2010 to 2013. They identified 300 secondary schools that "transformed their Key Stage 4 curriculum between 2010 and 2013 in response to government policy, achieving a rise in the proportion of pupils entering the EBacc from 8% to 48%."⁶⁵ It was also noted that, following these curriculum changes, pupils in these schools were more likely to achieve good GCSEs in English and maths. This was despite the schools in question being more likely to have a low average attainment on entry (Key Stage 2) profile, more likely to have a higher proportion of pupil premium pupils and less likely to have received an 'Outstanding' or 'Good' Ofsted judgement at their last inspection.⁶⁶

These findings raised the possibility that disadvantaged pupils could be benefitting from the EBacc, although the research highlighted several important caveats to their work. While it was

true that the EBacc had sometimes been factored into the thinking of headteachers when planning their curriculum, the research identified numerous other influences that could have played a role, such as specific criticisms from Ofsted about not entering students for more academic subjects and a change in leadership at the school bringing about a change in approach and/or priorities.⁶⁷ The research also showed that the overall changes in EBacc entry rates at these schools was largely caused by more entries from pupils with a mid- or highentry profile at age 11, whereas lower attainers were still not taking the full set of EBacc subjects.⁶⁸ That said, it was noted that "the pupil premium students in these curriculum change schools have benefited a little more, on average, than others" compared to pupil premium students in other schools with similar characteristics.⁶⁹

This research recognised that "it is particularly important that disadvantaged pupils have access to [EBacc] subjects, alongside their peers" and even recommended that "schools should be required to demonstrate parity of entry to EBacc subjects between their pupil premium and non-pupil premium students with similar prior attainment." The government's call for 90 per cent of pupils to be entered for the EBacc was also criticised on the basis that "there is little point in having a government target that schools are incapable of meeting due to severe shortages of teachers in EBacc subjects." What's more, the authors felt that "in setting the EBacc as the 'gold standard' Key Stage 4 curriculum, we risk deprioritising the educational experiences of those for whom it is inappropriate [and] this group of pupils – whether 10% or 30% of cohort – deserve to receive a curriculum that will equip them with the right skills to progress to further study and onto work."

A separate piece of research by Professor Merryn Hutchings and Professor Becky Francis for the Sutton Trust in 2018 found that the EBacc was only being achieved by a small minority of disadvantaged pupils nationally and in the group of academy chains included in their analysis. Moreover, there was considerable variation across academy chains in the percentage of pupils entered for all EBacc subjects, which suggested that chains have different strategies in relation to this issue. For example, *Outwood Grange Academies Trust* entered only 19% of disadvantaged pupils for all EBacc subjects, but 13% achieved standard passes (well above the average across all the academy chains). In contrast, the two *David Meller* academies entered 36% of disadvantaged pupils in all EBacc subjects but only 1.4% achieved a standard pass in all of them. Similarly, the *Greenwood Academies Trust* entered almost half its disadvantaged pupils, but only 8.5% achieved standard passes.⁷³

Entering large numbers of pupils for EBacc subjects, only for the vast majority of them to not 'pass' all the examinations, indicates that some schools appeared to be bringing their curriculum offer into line with the government's target of 75 per cent of pupils entering the EBacc by 2022 even if it was not necessarily in the pupils' interests for them to do so. As the authors remarked, entering pupils for the EBacc when they do not have the aptitude for, or

interest in, these particular subjects, or stretching pupils too thinly across subjects and inadvertently lowering their performance as a result, does not seem like a sensible approach to improving pupils' long-term outcomes.

What other factors could affect entries for, and achievement of, the EBacc?

School finances

The DfE says it is supporting arts provision through schemes such as 'music hubs' to offer every pupil the chance to learn an instrument as well as providing almost £120 million to fund students to attend prestigious arts institutions.⁷⁴ Nevertheless, the overall funding landscape for schools has become increasingly restrictive. Spending on schools expressed in per-pupil funding has fallen by 8 per cent in real terms between 2009–10 and 2017–18.⁷⁵ Although schools will inevitably respond differently to such challenges, subjects and activities that fall outside of the government's main performance measures such as the EBacc were always likely to be vulnerable. A BBC survey of 1,200 secondary schools in 2018 found that creative arts subjects were being cut back, with 9 in every 10 schools saying they had cut back on lesson time, staff or facilities in at least one creative arts subject. Schools reported that "the increased emphasis on core academic subjects, together with funding pressures, were the most common reasons for cutting back on resources for creative subjects."⁷⁶

This was echoed by a report from the Education Policy Institute (EPI) in 2017, which found that funding issues were "cited as causing cuts to the arts curriculum, with some schools not replacing arts teachers when they left."⁷⁷⁷ The research suggested that "it may be that in some cases the financial pressures cited consisted largely of a re-distribution of funding within the school, to focus resources towards subject areas which were gaining pupils and curriculum time as a consequence of the EBacc". ⁷⁸ In addition, "there was some concern expressed that budget cuts had reduced the extra-curricular arts offer", ⁷⁹ meaning that arts provision was under pressure both within and outside the normal school day. These findings mirror the changing pattern of GCSE entries and teacher numbers for both EBacc and non-EBacc subjects, suggesting that funding pressures could indeed be playing a role in the decline of arts subjects and that any DfE schemes could be merely replacing lost provision rather than providing additional opportunities for pupils. The impact of funding pressures is further supported by the observation that entries in most non-EBacc subjects are falling in Wales too, even though Wales does not use the EBacc performance measures that apply to schools in England. ⁸⁰

A similar story emerged in research published by the DfE in early 2019 that looked at how thirty schools across England, with a range of characteristics and all rated 'Good' or 'Outstanding' by Ofsted, had increased their EBacc entry rates by 40 percentage points or

more between 2011 and 2017. One pattern that emerged was that these schools were routing pupils into an EBacc 'pathway' in one of three ways:

- Making the study of EBacc subjects compulsory for almost all pupils
- Selecting certain pupils to enter into an EBacc pathway at Key Stage 4
- Allowing a free choice of options but strongly encouraging the take-up of EBacc subjects⁸¹

These appear to be legitimate strategies for achieving the goal of increasing EBacc entry rates. However, the schools also said they supported pupils who found EBacc subjects more difficult by giving them more time on those subjects. Some of the following options were being used to "balance competing demands on time":

- Extending the school day for all to incorporate longer lesson times and/or more time for EBacc subjects
- Allocating less curriculum time to non-EBacc subjects by having them taught for all students a term at a time or offering them through enrichment or after school sessions, and not necessarily studied to GCSE.
- Offering compulsory RE, PE and Personal, Social and Health Education (PSHE) in more creative ways, including as extra-curricular activities, during tutor time or 'intensive' days, or within other subjects⁸²

Although the research noted that such strategies were "being balanced with ways to increase pupil engagement, enthusiasm and achievement", 83 non-EBacc subjects were evidently being significantly downgraded to the point where they were sometimes being taught after school or as a replacement for other crucial activities such as providing pastoral support. The same trend was identified by the National Foundation for Educational Research in 2016. They found that all EBacc subjects except science had increased Key Stage 4 teaching time per pupil since 2010, with history and geography seeing their curriculum time rise by over 40 per cent. Meanwhile, almost all non-EBacc subjects had seen significant reductions in teaching hours. 41 schools are only able to increase their EBacc entry rates by making non-EBacc subjects almost undetectable within the school curriculum, it raises yet more questions about the suitability of the EBacc and its associated targets.

Progress 8

Although the EBacc has achieved considerable prominence in recent years, the main headline measure of secondary school performance is 'Progress 8'. Introduced in 2016, it is calculated based on pupils' performance in three groups ('buckets') of qualifications: first, English and maths; second, any three remaining EBacc subjects (e.g. history, chemistry, French); and third, any other subject (either EBacc or non-EBacc, including vocational qualifications).

The main difference between Progress 8 and the EBacc as performance measures is that to achieve the EBacc pupils must pass all the EBacc subjects at GCSE, whereas for Progress 8 a pupil's result in any individual EBacc subject will still count towards the measure even if they don't pass all of them. This may sound like merely a technical difference, but the implications are profound. Figure 14 shows the number of EBacc subjects entered by pupils taking their GCSEs. The purple section of each bar represents the proportion of all pupils who entered the full set of five EBacc qualifications. The light blue bars show the proportion of pupils who were entered for four EBacc qualifications, which has grown from around 30 per cent in 2010 to almost 47 per cent in 2018. Over this same period, the proportion of pupils entering three subjects (orange bars) has fallen from around 26 per cent to 11 per cent while the proportion entering two subjects (green bars) has dropped from about 19 per cent to just 1 per cent.

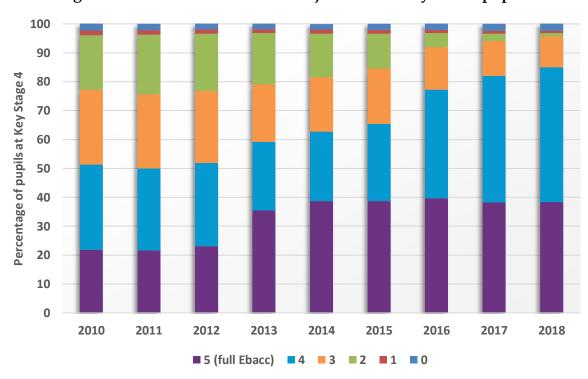


Figure 14: the number of EBacc subjects entered by GCSE pupils

If the EBacc was driving school leaders' decisions about qualification options then it is hard to explain why the number of pupils entering four EBacc subjects has grown while the number entering two or three subjects has decreased so significantly, seeing as the metric of how many pupils entered the EBacc makes no distinction between pupils who entered fewer than five EBacc subjects. This indicates that Progress 8 is directly affecting qualification options because a school's Progress 8 score can be improved with every additional EBacc subjects that a student passes, unlike the EBacc measure. It is therefore reasonable to conclude that Progress 8 exerts a great deal of influence on school leaders when designing their timetable and qualification options for GCSE students.

The aforementioned report by the EPI on arts subjects reached a similar conclusion. They found that "even where the full set of EBacc subjects is not taken, they are occupying a greater proportion of [the] curriculum than was previously the case, and are likely to be reducing the number of subject options available to pupils." This may be partly explained by pupils' examination results in English and maths being double-weighted within Progress 8 to encourage headteachers to prioritise them when constructing the school timetable. The EPI report commented that "in some cases, more curriculum time for maths and English had been created at the expense of arts subjects; either the curriculum time for arts or the number of option slots offered to pupils had been reduced."

In addition, "some respondents also reported that the prioritisation of English, maths, and other core subjects had reduced the time available for extra-curricular arts activities, as after-school time was increasingly being used for interventions and booster sessions in English and maths, or to make up for lost curriculum time in the arts by offering additional exam preparation." Although some people interviewed for the report felt that Progress 8 still left enough time for arts subjects, the overall impact on arts provision appears to have been negative in terms of reducing the time available for non-EBacc subjects within and outside the school curriculum.

Subject choices for university

As discussed in the introduction to this report, then Education Secretary Michael Gove was keen to "ensure that all children – especially those from less privileged backgrounds – have a chance to gain a base of knowledge and a set of life chances too often restricted to the wealthy". So In his view, this provided a compelling case to introduce the EBacc because it focused on a set of subjects that delivered this 'knowledge'. Earlier in this chapter, it was noted that soon after the EBacc was introduced, it became clear that some schools started telling pupils that it "would be an essential requirement for elite universities". This chimed with a recent report from leading visual and performing arts organisations that gathered the views of 6,000 teenagers in 30 schools across England about what they gain from creative subjects. One respondent commented that "there is definitely a lot of pressure, even from when you are choosing your GCSES, when you're told the Ebacc subjects will help you get into university." The same report warned that elite universities "have contributed to a decline in the priority given to creative arts, by not listing them as facilitating applications to study for a degree."

This refers to a document called 'Informed Choices' produced by the Russell Group, an organisation representing research-intensive universities.

First published in 2011, 'Informed Choices' was devised by the Russell Group because they believed "it is really important for all young people - especially those whose parents didn't go to university - to have clear information about how the subjects that they choose to study in the sixth form or at college can affect their options at university and their chances in life."⁹³

Thus the aim of the guide was to help students "see which advanced level subjects - which we call 'facilitating subjects' - open doors to more degrees and more professions than others." Later in the guide, it provided further details on what counted as a 'facilitating subject':

"...some university courses may require you to have studied a specific subject prior to entry, others may not. However, there are some subjects that are required more often than others. These subjects are sometimes referred to as facilitating subjects. Subjects that can be viewed as facilitating subjects are: Mathematics and Further Mathematics; English Literature; Physics; Biology; Chemistry; Geography; History; Languages (Classical and Modern)" 95

The overlap between these A-level subjects and those included in the EBacc at GCSE level is hard to ignore. That said, immediately after presenting this list, the guide provided an important clarification:

"You don't necessarily need to have studied three facilitating subjects at A-level. Some courses require one or two facilitating subjects, whilst for other courses there are no specific subject requirements. If you don't know what you want to study then it's a really good rule of thumb that taking two facilitating subjects will keep a wide range of degree courses open to you." ⁹⁶

It appears that the Russell Group were claiming these facilitating subjects 'opened doors' for students, while at the same time being clear that some degrees did not require any facilitating subjects to be studied at A-level.

One might assume that such declarations from the Russell Group about the relative value of 'facilitating subjects' would be supported by research evidence. On the contrary, the Russell Group never published any data to unequivocally demonstrate the role they claimed facilitating subjects play in the admissions process across their entire range of universities and degree courses. The guide itself simply references the fact that it was developed "in close consultation with admissions staff and managers in all Russell Group universities and with very helpful advice from the Institute of Career Guidance". No details were provided on how this consultation was organised, what information it considered or whether the information links to real-world data on applications and admissions.

Research conducted in 2013 by Laura McInerney, then a Senior Research Associate at LKMco, analysed several popular degree subjects by comparing the A-level choices of those who applied and those who were offered a place. ⁹⁸ It was discovered that the concept of 'facilitating subjects' was not corroborated by the figures. For example, A-Level economics students were consistently accepted at one of the highest rates, beating out applicants with history, English

and modern foreign languages across almost every degree course. For two degree programmes included in this analysis, more than 12 other subjects had a higher success rate than applicants with 'facilitating subjects'. Furthermore, a few 'non-facilitating' A-level subject combinations seemed to work well for specific subjects (e.g. Drama appeared to be very useful if you wanted to take Law at university). As Laura McInerney commented at the time, it is curious that it was left to her to run this kind of analysis instead of the Russell Group producing it themselves.

Given how schools appear to be pushing the EBacc to their students based on the supposed advantage that EBacc subjects confer when applying to university, it is concerning that there remains no empirical data to support this advice. What's more, the 'Informed Choices' guide was clear about the risks that promoting facilitating subjects might pose to students. For instance, the guide stated that, while facilitating subjects may give students a wider range of courses to choose from, "it is important to balance this consideration against others, including your potential to get good grades in your subjects." 'Informed Choices' was aimed at students choosing their A-levels, which also raises doubts about whether such advice about the relative value of subjects can be superimposed onto GCSEs. The guide stated that "the English Baccalaureate includes academic subjects highly valued by the Russell Group, but it is not currently required for entry to any Russell Group university". The guide added that "studying for more GCSEs at the expense of getting high grades in a smaller number is not advantageous." 101

Even now in 2019, the DfE still refer to facilitating subjects as a central justification for the EBacc: "The EBacc is made up of the subjects which the Russell Group says, at A Level, open more doors to more degrees." It could be that this position will soon become defunct, as the Russell Group has recently announced that they are discarding the approach of naming a handful of 'facilitating subjects'. In its place, they have launched a new interactive website (also called 'Informed Choices') that will be accessible to all pupils and their parents. On this new site, students will be able to select different degrees to see which subjects they may need to study first and they can input various A-level combinations to understand which university courses are then opened up.¹⁰³

Alongside the launch of 'Informed Choices', the Russell Group explained that they originally introduced facilitating subjects "because of the large number of degrees for which they are considered essential preparation" and because disadvantaged A-level students were only half as likely as their wealthier classmates to be taking subjects considered to provide access to good universities. Their aim was therefore to "help pupils who wanted to go to university but weren't yet sure of which degree to take and to provide clear advice to those who might not otherwise receive it." Even so, they accepted that this had led to "misinterpretation", not least because "universities, like many employers, value a rounded education" and

"academic versatility can only be a good thing in a world where we will all be living and working longer, and where more of us are likely to change our careers and directions". 106

Now that the Russell Group have dropped the concept of facilitating subjects and given more prominence to creative subjects and other less traditional disciplines such as psychology, this effectively removes one of the key reasons for the list of subjects included within the EBacc.

5. Recommendations

The analysis in this report has revealed a wide variety of changes affecting pupils and schools since the EBacc was implemented in 2010:

GCSE entries and teacher numbers

- Science subjects and both history and geography have generally seen substantial increases in GCSE entries as well as commensurate increases in the number of teachers since 2010.
- Both French and German have fewer GCSE entries and fewer teachers than in 2010, although Spanish has performed better on both counts.
- After initially seeing a slight boost in numbers due to changes made to performance tables, creative arts subjects have all seen a decline in GCSE entries since 2010 and are now falling year-on-year. The number of teachers for these subjects has also dropped, with many subjects experiencing a fall of over 1,000 teachers since 2012.
- Other non-EBacc subjects such as Religious Studies and PE also experienced a small
 increase in GCSE entries as a result of changes to performance tables, but their GCSE
 entries are now falling sharply in many cases and so are the number of qualified
 teachers for these subjects.

EBacc entry and achievement

- After a rise in pupils being entered for the EBacc from 2012 to 2013, this has now stabilised at around 35-40 per cent and shows no signs of improvement.
- Similarly, the proportion of pupils who achieve the EBacc has barely changed since 2013 and stands at approximately 23-25 per cent each year.

Research into the EBacc

- Many schools have changed their curriculum offer to accommodate more EBacc subjects and sometimes redeployed staff to deliver this, but this often resulted in schools withdrawing or restricting other subjects (particularly creative arts courses).
- The EBacc did not typically result in pupils making different decisions about which GCSE subjects to select as more academic pupils gravitated towards EBacc subjects in any case, although the EBacc did seem to encourage pupils to choose an EBacc subject if it was being considered alongside a non-EBacc alternative.

- There remains considerable confusion about what the EBacc is trying to achieve, particularly around whether it helps pupils with university entry. This has led to different schools giving pupils different messages about the EBacc's importance.
- Most parents felt that they already had enough information about a school's performance without needing the EBacc, and some expressed concerns about its narrow academic focus and its impact on non-EBacc subjects.
- Almost all schools are now experiencing significant problems with recruiting enough teachers of EBacc subjects, particularly science and mathematics.
- The EBacc does not appear to have been any great benefit to disadvantaged pupils, and the government's EBacc targets may have resulted in some schools entering pupils for EBacc subjects even when they were not likely to pass the examinations.
- Schools that have seen notable rises in EBacc entry rates appear to have achieved this
 by significantly downgrading non-EBacc subjects to the point where they were
 sometimes being taught after school or as optional activities.

Other factors affecting the EBacc

- The financial pressures on schools may have contributed to the decline of arts provision and non-EBacc subjects more broadly since 2010. Surveys of school leaders found that the vast majority of schools have cut back on the lesson time and resources allocated to arts subjects. Research has also shown that funding has been redistributed towards EBacc subjects at the expense of non-EBacc subjects, which has affected both curriculum time and extra-curricular activities.
- 'Progress 8', another headline performance measure for schools, appears to have driven more pupils towards EBacc subjects in recent years even though the same pupils were not entered for (or achieved) the full complement of EBacc subjects.
- The publication of a list of 'facilitating subjects' for university entry by the Russell Group of universities in 2011, which was intended to highlight A-level subjects that were more beneficial than others when applying for many university degrees, appeared to vindicate ministers' decisions regarding the subjects that were included in the EBacc. However, the lack of research evidence to support the concept of facilitating subjects is notable and it was only a guide for choosing A-level subjects. The Russell Group has now confirmed that they are dropping the concept of 'facilitating subjects' altogether.

RECOMMENDATION 1

The two EBacc performance measures for schools – the percentage of pupils entering the English Baccalaureate and the English Baccalaureate Average Point Score (EBacc APS) – should be withdrawn with immediate effect. The associated targets of 75 per cent of pupils entering the EBacc subjects by 2022, and 90 per cent by 2025, should also be dropped.

The evidence presented in this report demonstrates that the introduction of the EBacc and the removal of many low-quality qualifications from performance tables coincided with substantial changes in the curriculum offer in schools. It is not acceptable for pupils to be entered for sub-standard qualifications in their crucial GCSE years. Furthermore, there is nothing wrong in principle with any government seeking to reverse a decline in entries for certain subjects if they are thought to be valuable. The introduction of the EBacc appeared to nudge pupils and schools towards the subjects it includes, but this effect faded rapidly after 2012 and the proportion of pupils entering and achieving the EBacc has subsequently flatlined. Furthermore, it is possible that some, if not all, of the changes seen in entries for EBacc subjects in the years immediately after its introduction were actually driven by the removal of low-quality qualifications from performance tables. In any case, since 2016 it has been Progress 8 that seems to have driven more pupils towards EBacc subjects. On that basis, the two separate EBacc performance measures no longer serve any useful purpose.

In addition, what is now being recorded across almost every non-EBacc subject is concerning in terms of GCSE entries and teacher numbers. On every main measure analysed in this report, creative arts and other non-EBacc subjects have declined, and this decline has often accelerated over the past few years. Both Progress 8 and the EBacc will have contributed to this decline in terms of encouraging schools to prioritise EBacc subjects over other options. Consequently, it seems unnecessary to have two headline measures of school performance pulling in the same direction when one would suffice – particularly when schools are already under financial pressure and arts subjects tend to be more expensive to deliver than other courses (often due to small class sizes). It is fair to conclude that removing the EBacc performance measures will not automatically undo the fall in arts provision since 2010, but it would mean that a more productive conversation about the impact of Progress 8 could then take place (see Recommendation 2).

Furthermore, the lack of clarity around the purpose of the EBacc continues to this day, and research has shown that parents are largely uninterested in what the EBacc measures say about a school. The absence of a solid research-based argument for the group of subjects included in the EBacc raises further questions about its value to pupils and the wider school system. The fact that the Russell Group has put a greater emphasis on creative arts and other non-traditional subjects as part of their new 'Informed Choices' website is yet another powerful argument against the use of the EBacc as a school performance measure.

RECOMMENDATION 2

Following the removal of the EBacc performance measures, the Department for Education should refer instead to 'core' and 'additional' subjects in the context of GCSEs.

The removal of the EBacc will require the DfE to change their use of language when describing the different groups of GCSE subjects. At present, Progress 8 includes a double-weighted element ('bucket') for mathematics and English (provided that a pupil has taken GCSEs in both English Literature and English Language) as well as a bucket that can include the three highest point scores from any EBacc subjects. It is recommended that the DfE cease referring to science, history, geography and languages as 'EBacc subjects' and instead simply label them as 'core' subjects along with English and mathematics. 'Additional' subjects would then be counted towards the third and final bucket for calculating Progress 8. The aim of this recommendation is to defuse some of the tension creating by separating 'EBacc' (i.e. valued) and non-EBacc (i.e. not valued) subjects.

RECOMMENDATION 3

Consideration should be given to reforming the 'Progress 8' performance measure if policymakers want to put a greater emphasis on 'additional' subjects including arts provision.

If this government or a future government wishes to reverse the recent decline in arts provision, removing the EBacc is only likely to be part of the answer. Progress 8 will still encourage schools to prioritise the 'core' subjects. When this is combined with the effect of their weakening financial position, schools will still be left with difficult choices around the provision of creative arts and other 'additional' subjects.

Should schools receive an increase in funding, either through the government's planned 'spending review' in late 2019 or through another mechanism, this might help to address some of the difficulties facing school leaders when seeking to promote arts subjects in the curriculum. Even so, if a better funding settlement is not deemed sufficient to improve the prospects of arts subjects, there are three options available to policymakers in terms of using Progress 8 to bring about further change:

1. COMBINE BUCKETS 2 AND 3 IN PROGRESS 8

The simplest change to Progress 8 that could boost the provision of non-EBacc subjects would be to combine the second and third 'bucket' in the Progress 8 calculation so that there is no longer any distinction between them. In this scenario, a school's Progress 8

score would therefore include the double-weighted performance of pupils in English and mathematics plus their progress scores across <u>any six</u> other subjects. This would remove the need to label subjects as 'core' and 'additional' after the EBacc performance measures have been withdrawn.

2. COMBINE BUCKETS 2 AND 3 BUT INCREASE THE WEIGHTING OF SUBJECTS CURRENTLY IN BUCKET 2 ('Core' / EBacc)

Should policymakers wish to maintain the concept of 'core' subjects but still put more emphasis on non-EBacc subjects, another option is to maintain the distinction between 'core' and 'additional' subjects but to achieve this through different subject weightings rather than having different 'buckets'. For example, English and maths could retain their double-weighting but all 'core' subjects could be given a weighting of '1.5' and all 'additional' subjects could be given a weighting of '1'. At the same time, buckets 2 and 3 would be combined (as in Option 1 above). The result of this would be that, unlike Option 1, schools would still be incentivised to enter pupils for 'core' subjects but a school could seek to produce good Progress 8 scores by entering pupils for up to six 'additional' subjects if it is in pupils' best interests.

3. REDUCE BUCKET 2 ('Core' / EBacc) FROM THREE TO TWO SUBJECTS

An alternative model for maintaining a separation between 'core' and 'additional' subjects (as seen in Option 2) would be to reduce the size of the second 'bucket' that is currently reserved for EBacc subjects from three subjects down to two. This would mean that Progress 8 would consist of double-weighted English and maths, any two EBacc / 'core' subjects and any four 'additional' subjects. This minor but tangible shift away from 'core' subjects would give schools more space in the curriculum for 'additional' subjects, which should in turn reduce the incentive on schools to put more resources into providing EBacc subjects.

Each of these options have merit and this report does not express a preference for any of them, as ultimately the priorities of policymakers will determine which of these options are suitable for their wider agenda on subject choices at GCSE and the school curriculum.

Conclusion

"Looking forward fifteen or twenty years to what our future economy could be like, in every scenario the Creative Industries are of central importance to the UK's productivity and global success. We have two great assets: the English language and our national capacity for creativity. But the skills and business models of this sector and of the wider creative economy are those which many experts judge to be of increasing importance: blended technical and creative skills; collaborative interdisciplinary working; entrepreneurialism and enterprise. Not only are the Creative Industries themselves likely to grow as a proportion of our economy, other industries rely on creative disciplines – such as Design and Advertising – to thrive. The cultural and creative sectors are the engine of the UK's international image and soft power." 107

These remarks – taken from Sir Peter Bazalgette's review of the Creative Industries on behalf of the Department for Culture, Media and Sport – were unequivocal about the importance of this sector to the UK economy. The government's subsequent 'Industrial Strategy', which Sir Peter's review fed into directly, went a step further. In her foreword, the Prime Minister Theresa May declared that the Strategy "will help young people develop the skills they need to do the high-paid, high-skilled jobs of the future [and] it backs our country for the long term: creating the conditions where successful businesses can emerge and grow". She added that the Strategy "identifies the industries that are of strategic value to our economy and works to create a partnership between government and industry to nurture them [...in order to] help propel Britain to global leadership of the industries of the future." 109

In this context, it seems strange that for the last nine years, the government has pursued a method of holding schools to account that works in precisely the opposite direction. This report does not seek to detract from the importance of offering all pupils a broad and balanced curriculum. It is plainly apparent that in the years running up to the 2010 General Election, some subjects – particularly humanities and languages – had seen their popularity dwindle for various reasons. There is nothing inherently wrong with a new government aiming to address this issue by encouraging schools to enter pupils for subjects that had suffered a decline in the preceding years and there is no doubt that the EBacc was a well-intentioned initiative. However, this logic has now been turned on its head because since the EBacc was introduced, science, history and geography have thrived while many other subjects – most visibly in the creative industries – have seen their numbers collapse. The risk is that if non-EBacc subjects continue shrinking, the pipeline of talent within the Creative Industries and other crucial sectors could be restricted or, worse still, simply cut off.

It would be wrong to suggest that removing the EBacc will lead to an immediate upsurge in the number of pupils taking GCSEs in arts subjects. That said, the advent of Progress 8 in 2016 has provided the government with a perfectly sufficient tool for promoting their view of the subjects that schools should be delivering – effectively negating the need for the EBacc within the accountability system. Financial pressures are continuing to hamper the ability of school leaders to provide a broad and balanced curriculum, which is why this too remains a cause for concern. Given that so many subjects that sit outside of the EBacc have been struggling for so long, it is now time for a new approach to school performance measures that stops fighting the battles of 2010 and instead focuses on what needs to happen in 2019 and beyond. For this reason, the continued use and prominence of the EBacc in school performance tables is therefore, as the title of this report says, a step 'baccward'.

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