Divergent pathways: 
the disadvantage gap, 
accountability and 
the pupil premium

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with Mike Treadaway

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Acknowledgements

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The author is grateful to EPI colleagues:

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Foreword

The Education Policy Institute’s driving purpose is, through independent analysis and research, to promote high quality education outcomes for all, enabling this country to deliver a ‘world-class’ education system. But we are clear that an education system can never be considered to be world-class unless it is also progressive and delivers greater equality of opportunity for its most disadvantaged and vulnerable young people.

Our annual report published earlier this year found that there remains a stubborn gap in the outcomes between disadvantaged pupils and their peers. By age 16, disadvantaged children were, on average, 19 months behind their peers; this is around one-and-a-half academic years. We found that two-fifths of that gap is already present by age 5, indicating that there is a pressing need for intervention even before children start formal schooling.

Equality of outcomes matters. We know that poor children are 43 per cent less likely to go to university, and three times as likely to claim unemployment-related benefits at age 19, and their earnings are estimated to be 28 per cent lower at age 34.

Successive governments have acknowledged this problem. Through changes to school funding arrangements and accountability measures, efforts have been made to encourage and incentivise schools to support their disadvantaged pupils. One of the most radical reforms was the introduction of the pupil premium in 2011, which, for the first time, provides a distinct level of funding for each disadvantaged pupil, coupled with new accountability measures.

This report, which we will update annually, considers whether policies including school funding have had an impact on the size of the gap over successive years and in different contexts. While there are many pieces of research that consider the trend of the gap nationally, this report examines the performance of different types and phases of schools over the past decade.

We are grateful to Sir John Dunford, the former pupil premium champion, for providing us with his expert insight of what good practice looks like in schools that are closing their gap and how that good practice can be spread nationally.

As a result of our findings, we consider what this means for future policies, particularly in relation to the early years, school funding and school and system accountability.

While we will publish this report annually, our work on understanding the causes of the disadvantage gap and identifying ways to close it will continue throughout the year.

Rt Hon David Laws

Executive Chairman, Education Policy Institute.
Executive summary

This report provides an analysis of trends in the disadvantage gap over the last ten years, and considers what more can be done to improve the achievement of children from the poorest families.

As found by our annual report, published earlier this year, the attainment gap for disadvantaged children emerges over the course of childhood, but does not grow at a consistent rate. The gap widens most quickly before age five and between ages eleven and sixteen. We see a substantially slower widening of the gap during the latter years of primary school.

Over the last fifty years, school funding policy has been reformed in two distinct ways. By seeking to ensure, firstly, that funds intended for schools are spent on schools and latterly by schools, and secondly, that funding levels match the greater needs of disadvantaged pupils. The pupil premium sits at the intersection of these two strands: it is allocated to schools on the basis of how many disadvantaged pupils they teach, and to be spent as schools see fit on the condition that they will be held to account for the outcomes of these pupils.

The government has now committed to introducing a new national funding formula in April 2017 which could have significant implications for both the quantum and route of funding targeted at disadvantaged pupils. Further details of the new funding arrangements are due to be published imminently and we consider here how the government should approach these important decisions.

Since 2011, schools have developed approaches to making effective use of the pupil premium. Former National Pupil Premium Champion, Sir John Dunford, argues that schools must properly assess the barriers to learning faced by their own disadvantaged pupils, identify clear objectives and criteria for success, and follow the evidence on what works provided by the Education Endowment Foundation and the National Foundation for Educational Research, among others.

Our findings demonstrate that there is considerable variability between schools with differing pupil intake characteristics when it comes to trends in the progress gap, which measures how far disadvantaged pupils fall further behind their peers during school. Our analysis has uncovered divergent pathways followed by schools with different contexts.

The progress gap is closing fastest in schools with the highest concentration of disadvantaged pupils. At key stage 2, these schools have eliminated the progress gap completely over the last decade. Schools with many disadvantaged pupils whose attainment is close to the expected standard thresholds (used in the floor standards) are also making remarkable inroads. For these schools, we find that at key stage 2 the progress gap has decreased by 68 per cent since 2011; reducing from 2.2 months to 0.7 months.

In contrast, schools with the lowest proportions of disadvantaged pupils have seen the progress gap widen, particularly at key stages 2 and 4. Since 2006, the key stage 2 progress gap in these schools has increased from 1.1 to 2.6 months. This growth has levelled off since 2012, but nonetheless paints a worrying picture of the prioritisation and focus that disadvantaged children are given when they are in the extreme minority.

In order to address the pace of improvement in closing the gap, we recommend that the government sustains and improves the transparency of funding for disadvantaged pupils by:
continuing to provide the pupil premium as a separate and clearly identifiable grant targeted at disadvantage pupils;

by quantifying the deprivation component of the national funding formula for schools, with a strong presumption that disadvantaged pupils will be among the core beneficiaries of this funding alongside pupils with other additional needs; and

by setting the deprivation factor no lower than the current weight given to deprivation by local authorities, at 7 per cent of national funding, and by considering protecting the value of this component against projected cost pressures.

In order to ease the challenge faced by schools in closing the disadvantage gap, and to make greater progress in the early years, we also recommend that policies to increase the educational quality of age 3-4 childcare, and to increase the uptake of the targeted 2-year-old offer, should be prioritised above the implementation of the 30-hour offer. The latter is not available to the most disadvantaged families and amounts to a cash transfer to better-off families.

In order to strengthen accountability for disadvantaged pupils in schools where they represent a small minority of the intake, we recommend increasing the prominence of three-year aggregated measures of progress and attainment in the performance tables, particularly for primary schools where numbers of disadvantaged pupils in a single year group often fail to reach the minimum required for the statistics to be published.

Additionally, we recommend that measures of the progress of disadvantaged pupils should be introduced into the government’s performance statistics for multi-academy trusts to increase the oversight of pupil premium expenditure and ensure that trusts are focused on raising the attainment of all pupils, including those who are disadvantaged.

Finally, we suggest that further work should be carried out beyond these areas to consider more ambitious interventions in the early years, making disadvantage the primary focus of accountability for the first three years of schooling, and re-assessing the resourcing and targeting of support for pupils with special educational needs, mental health difficulties, and toxic family stress.
Introduction

Five years on since the introduction of the pupil premium, it is timely to review the progress that has been made against its aims, to set this within historical context, and to define options for the future.

The pupil premium was a flagship commitment of the Coalition Agreement of May 2010. Introduced in April 2011, it was intended to provide additional funding for disadvantaged pupils to ensure that they benefitted from the same opportunities as pupils from better-off families – to support the work of schools as ‘engines of social mobility’.¹

As detailed in Part 1, this was not the first attempt to target school funding towards deprived children and schools, but it was the most direct and explicit of a series of reforms intended to make school funding more progressive.

The pupil premium is allocated directly to individual schools via a separate grant, ensuring that schools receive the intended funds in full for the distinct purpose of raising disadvantaged pupils’ attainment and closing the gap. It is allocated in respect of individual disadvantaged children and, while schools may spend it as they see fit, they are held to account for the outcomes of this group.

The rationale for differential funding for disadvantaged pupils is rooted in consistent and pervasive gaps in childhood and later-life outcomes for those exposed to economic disadvantage during childhood. Disadvantaged children are less likely to achieve well at school and continue into post-compulsory education; they also have lower average earnings, poorer health and greater chances of involvement in crime than their more affluent peers.²

There are two related but distinct dimensions to the rationale for intervening to disrupt the prevailing picture of life outcomes patterned by economic status:

- From a societal perspective, allowing a significant number of children to fail to reach their educational and economic potential is a waste of human capital on a grand scale, resulting in lower economic growth and increased costs to the tax-payer.
  - According to the OECD Survey of Adult Skills, 28.5 per cent of 16-24 year-olds in England had low literacy and/or numeracy scores (level 1 or below); this compared with 21.8 per cent across the 29 OECD members in the 2013 and 2015 survey rounds.³
  - In the US, where the percentage of young adults with low literacy and/or numeracy was 30.1 per cent, the economic cost of the socio-economic achievement gap between families with incomes above $25,000 a year and those with lower income has been estimated at 3-5 per cent of GDP as at 2008.⁴
- From an individual perspective, people experience greater risks to their wellbeing and lower probabilities of positive life outcomes due to an arbitrary circumstance of their birth.

¹ Department for Education Press Release on 26 July 2010, Government announces pupil premium to raise achievement.
² Department for Children, Schools and Families (DCSF) Schools Analysis and Research Division (2009), Deprivation and education: the evidence on pupils in England, Foundation Stage to Key Stage 4.
⁴ McKinsey & Company, Social Sector Office (2009), The Economic Impact of the Achievement Gap in America’s Schools.
Exposure to early childhood adversity, and the risk of experiencing ‘toxic stress’ that is known to impair the development of cognitive executive functions, is associated with socio-economic status.5

In the UK, research has demonstrated that risk factors including depression, illness, alcohol abuse, domestic violence, worklessness and overcrowding are often experienced in combination with one another, and more frequently by children in low-income households.6

Recently, new research has confirmed that inequality in educational attainment emerges and increases over the course of schooling, lending further urgency to the need for education policies and school practices that address inequality head-on. Among children from the most deprived fifth of families, even children with high initial attainment at age 7 are overtaken by those from the least deprived fifth of families with only average prior ability by age sixteen. These findings have been checked for the influence of regression to the mean effects and found to be robust.7

As revealed in our Annual Report, around two-fifths of the total attainment gap at age sixteen is already present at age five, but a further fifth develops during the course of primary school, and the remaining two-fifths emerges over the course of secondary school.8

Together, these findings suggest that tackling attainment gaps is a task that must be undertaken early, but also sustained throughout the course of schooling.

In this report, we begin by describing the history of funding for disadvantaged pupils aged 5-16 in schools in England in order to compare what went before the pupil premium with the current context, and to consider the future of the school funding system.

In particular, forthcoming government proposals for the weighting of factors including deprivation within the national funding formula for schools will critically affect the degree of ‘additionality’ provided by the pupil premium in future years.

We then review the evidence on trends in attainment gaps, and present new findings for schools with different pupil intake profiles - resulting in differing budgets and incentives. Part 2 reveals divergent pathways observed in the disadvantage gap for schools in different contexts.

Part 3 presents an inside view from a system leader, the former Pupil Premium Champion, Sir John Dunford, who sets out his advice on best practice along with case studies illustrating how schools have used the pupil premium successfully.

Finally, in Part 4, we review the diagnostic analysis set out in Part 2 as a basis for considering the case for further government action to tackle the disadvantage gap. We set out recommendations and options for increasing the traction of funding for disadvantaged pupils on their progress in school.

1. Funding for disadvantaged pupils in schools in England

Attempts to provide extra funding to meet the additional costs of educating pupils from deprived families and neighbourhoods date back to the 1960s, when Educational Priority Areas (EPAs) were introduced. These directed compensatory funding to selected urban areas to improve the school building stock, increase teacher pay, provide additional training and expand nursery provision.\(^9\)

EPAs were phased out in the 1980s, and instead Local Authority funding included ‘Additional Need’ factors in the schools component. However, the schools component of LA funding was itself only notional and LAs did not have to spend the funding allocated for additional need on schools, still less on more deprived schools.\(^{10}\)

Since then, there have been two strands of development in schools funding policy which have affected the degree of compensatory spending in schools: the first strand has focused on increasing the extent to which funding for schools reaches its intended recipients in full; the second has concentrated on the sum of compensatory funding and the precision with which this is targeted at schools and pupils with the greatest need. Figure 1.1 provides a timeline of the key developments under each of these strands.

Ensuring intended funds reach schools

In 1984, the Education (Grants and Awards) Act gave the Education Secretary powers to make specific grants; while the grants were paid to local authorities, they were obliged to use them for specified educational purposes and could not divert them for use elsewhere.

Shortly after this from 1990, spending decisions were largely devolved to schools, with the introduction of delegated schools budgets under Local Management of Schools (LMS). This gave rise to government aims to determine the levels of funding delegated to schools from their local authorities, and under the subsequent Labour administrations, to direct the priorities on which those monies were spent by schools.

The exercise of grant-making powers became a substantial tool for influencing education standards after 1998, when the Standards Fund was introduced as an umbrella structure encompassing a range of funding streams linked to government’s educational objectives, which reached a peak of over 30 separate grants totalling around £1.6 billion per year. Priorities funded through the Standards Fund included school lunches, one-to-one tuition, extended schools, sports and music provision.

In 2006, the Dedicated Schools Grant (DSG) reintroduced separate ring-fenced education funding in order to complete central government’s control of overall school funding levels. The Standards Fund was rationalised the following year, mainstreaming many of the specific grants under a single School Standards Grant. Finally, in 2011, the Coalition government mainstreamed the Standards Fund into the Dedicated Schools Grant, through which the majority of school funding was already routed.


\(^{10}\) West, A. (2009), Redistribution and financing schools in England under Labour: are resources going where needs are greatest? Education Management, Administration and Leadership, 37 (2). pp. 158-179.
Redistributing funding towards disadvantaged pupils

In the right-hand column of Figure 1.1, the main developments in the second strand of school funding policy are outlined, describing government’s attempts to apply proportionally higher levels of funding to schools and pupils with the greatest needs linked to deprivation.

Over the course of the 1990s, concerns grew that, owing to the system of notional rather than compulsory schools components within local authority funding, the use of Additional Need factors and (from 2004) of cost-based notional blocks within schools funding were not resulting in the intended degree of funding redistribution towards deprived schools.\(^{11}\)

From 2002-03, local authorities were obliged to include a deprivation factor within their formulae for distributing funding to schools; however, there was no minimum level of funding to be distributed on this basis and some LAs made little use of the factor.

Indeed, research into allocations of school funding within a small sample of LAs in 2006-07 revealed percentages of funding reaching schools based on deprivation factors of between 2 per cent and 11 per cent.\(^{12}\) Allocations by all LAs in 2015-16 ranged from 1 per cent to 20 per cent, and totalled 7 per cent nationally.\(^{13}\)

This is suggestive of an increase in the use of deprivation factors by LAs over the period between 2007 and 2016, and therefore that national levels of redistribution were likely to be lower than 7 per cent in 2006-07.

Several of the Standards Fund grants were used to target varying combinations of deprivation and low achievement, including those linked to Education Action Zones (EAZs), the Excellence in Cities (EiC) programme, and the Ethnic Minority Achievement Grant (EMAG).

EMAG was alone in this group in surviving the rationalisation of grants in 2007, but eventually ended in 2011 when the whole Standards Fund was mainstreamed. Although the New Labour grants programme was at an end, the same year saw the introduction of a larger and more precisely targeted grant allocated to schools on the basis of the number of deprived pupils on-roll.

The pupil premium was initially targeted at pupils who were currently eligible for free school meals (FSM) in reception through to year 11, and at children in the care of the Local Authority (LAC) for at least six months, and had an annual value of £430 per pupil.

School accountability for the attainment of these children was introduced via new measures in the performance tables to ensure that the results of the grant were visible; however, schools were free to spend the premium as they saw fit. These features of the pupil premium make it a unique approach to redistributive funding internationally.

The Education Endowment Foundation was also established in 2011 with a grant of £125 million to produce and communicate research into the effectiveness of school strategies to raise attainment, in particular for disadvantaged pupils.

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\(^{11}\) DfES and HM Treasury (2005), *Child Poverty: Fair Funding for Schools*.


\(^{13}\) Education Funding Agency (2014, updated 2016), *Dedicated schools grant (DSG) 2015 to 2016*. 
In 2012, eligibility for the pupil premium was expanded to include pupils who had been eligible for free school meals during the last six years and the annual value of the premium was raised to £600, then £900 in 2013. In 2012, the looked-after eligibility criteria were also widened to include children looked after for one day or more, those adopted from care and those who had left care under a range of specific circumstances.

In 2014 higher rates for primary pupils and looked after children were introduced; in 2015 the annual rates were £1,320 for each primary pupil, £935 for each secondary pupil, and £1,900 for each looked after child. The total pupil premium grant, the vast majority of which is allocated in respect of socio-economically disadvantaged children, reached £2.5 billion in 2014 and remained just above this level in 2015.

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<table>
<thead>
<tr>
<th>Year</th>
<th>Ensuring intended funds reach schools</th>
<th>Redistributing towards disadvantaged pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960s-1970s</td>
<td></td>
<td>Education Priority Areas provided additional funding to compensate for disadvantage.</td>
</tr>
<tr>
<td>1980s-2000s</td>
<td></td>
<td>Additional Need factors included in notional schools components of LA funding.</td>
</tr>
<tr>
<td>1984</td>
<td>Education Secretary gained powers to make specific grants for specified educational purposes.</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>Delegated schools budgets introduced.</td>
<td></td>
</tr>
<tr>
<td>1998-2003</td>
<td>Standards Fund umbrella introduced and then expanded to over 30 separate grant streams, several of which targeted disadvantaged areas and schools.</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td>Introduction of a compulsory deprivation factor into LA school funding formulae.</td>
</tr>
<tr>
<td>2004</td>
<td>LA funding reviewed: cost-based spending share divided into notional blocks.</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>Ring-fencing of LA schools block funding: money allocated for schools must be used for schools.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td>Rationalisation including EiC funding (successor to EAZs), but EMAG survives as distinct grant.</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td>EMAG and remaining Standards Fund mainstreamed into the Dedicated Schools Grant.</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td>Pupil premium introduced for FSM pupils and LAC.</td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td>Pupil premium expanded to ever-6 FSM and value of pupil premium increased.</td>
</tr>
<tr>
<td>2015</td>
<td>‘Most unfairly funded LAs’ allocated top-up funding to reach minimum per-pupil levels.</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>Consultation on national funding formula begins and deprivation factor is proposed, but factor weightings are yet to be detailed in stage 2 of the consultation.</td>
<td></td>
</tr>
</tbody>
</table>
Has deprivation funding increased or not?

With successive changes to the control of school funding and the use of specific grants in addition to mainstream revenue funding, it is difficult to unpick what the precise trend in the level of redistributive funding has been.

However, it is possible to reach a broad conclusion that deprivation funding has increased as a proportion of schools funding, although it remains a modest component of overall funding.

Looking at the intended allocations by central government across both funding routes, we see that at the height of the Standards Fund in the early 2000s, the Labour government allocated 10 per cent of mainstream revenue funding to LAs according to notional deprivation or additional need factors, but that less than 7 per cent is likely to have reached schools on the basis of deprivation in 2006-07.

Added to this, some non-trivial proportion of the total of £1.6 billion in specific grants was allocated on the basis of deprivation, amounting to somewhere short of 5 per cent of school funding. In total across mainstream revenue funding and specific grants, this gives an upper bound of around 12 per cent for 2004-05, or 10 per cent for 2006-07 when the Standards Fund totalled £0.9 billion.\(^{15}\)

The true proportion will have been lower than these figures because using the total size of the Standards Fund overestimates the funds allocated based on deprivation. If, for the sake of argument, half of the funds were allocated on this basis, then the true figure would have been around 9.5 per cent in 2004-05 and around 8.5 per cent in 2006-07.

After the expansion of the pupil premium in 2012, we can be confident that school funding became more redistributive due to the size of the pupil premium grant exceeding the total size of the Standards Fund at its height.

In 2015-16, the pupil premium accounted for 7 per cent of school funding, and a further 7 per cent was allocated by LAs to schools via deprivation factors in their formulae. As a result, the total deprivation slice of school funding has reached 15 per cent.\(^{16}\)

An alternative way of assessing the extent of redistribution in the school funding system is to consider the average level of per-pupil funding in the most and least deprived schools. This incorporates the net result of funding decisions at all levels, including historical spending by local authorities.

Recent Institute for Fiscal Studies (IFS) research confirms that the most disadvantaged schools have increased their funding levels relative to the least disadvantaged schools.\(^{17}\) The IFS calculates that, since the late 1990s, the difference in per pupil schools funding between the most and least deprived schools has risen from 10 per cent to 25-30 per cent. This is consistent with our conclusion that a larger share of overall funding has been distributed on the basis of deprivation since the mid-2000s.

It should be noted that the analysis in this report excludes wider spending on children’s services which may also indirectly influence school attainment for disadvantaged pupils.

\(^{15}\) Standards Fund totals are in 2004-05 and 2006-07 prices.

\(^{16}\) Percentages do not appear to sum correctly due to rounding.

\(^{17}\) Belfield, C. and Sibieta, L. (2016), School spending focused more on poorest schools over past 20 years; even more radical reforms over next decade. Institute for Fiscal Studies press release.
Where next?

The 2015-16 school funding allocations included top-up funding to ensure that a minimum level of per-pupil funding would be received by the ‘most unfairly funded local authorities’.\(^{18}\)

The concept of unfairly funded LAs stems from the fact that since 2006-07, allocations have been based on historical school spending by LAs in 2005-06. Insofar as these ever represented a true picture of relative needs, derived from the cost-based allocations of 2004 and decisions made by individual LAs, this is now over ten years out of date.

This topping up of current allocations is a precursor to the government’s intention to introduce a national funding formula (NFF) for schools, allocated directly by the Department for Education (DfE) to schools, and based largely on pupil factors (including deprivation) calculated from individual school data.

The first stage of the government consultation on implementing these changes proposes that the new ‘hard formula’ will be introduced by 2019-20, following two years of interim ‘soft formulae’ where local authorities will retain the ability to adjust the allocations made by DfE.

The second stage of the consultation (forthcoming) will detail the government’s proposals on how the formula will define and weight its component factors, and therefore how much of school funding will be allocated based on deprivation in future years.

The first stage of the consultation has set out plans to retain the pupil premium as a separate grant until the end of the current parliament, but to treat the deprivation factor in the national formula as a broad proxy for levels of additional need in each school, and therefore not as earmarked for spending on disadvantaged pupils.

A contrasting approach is taken for looked-after children, for whom it is proposed that the pupil premium allocations will be increased but there will be no factor in the national formula. This results in a stronger signal to schools that all funding in respect of looked after children should be treated as earmarked, whereas only the pupil premium component (currently half of deprivation funding) should be treated as such for economically disadvantaged pupils.

The government argues that not all children with additional needs are disadvantaged, and that the size of the disadvantaged group in most schools makes their needs more visible to schools without earmarking general revenue funding for their benefit. However, the National Audit Office concluded that the government should consider how to increase accountability for core (Dedicated Schools Grant) funding in its report on funding for disadvantaged pupils in 2014.\(^{19}\)

It should be noted that schools are not currently constrained to spend pupil premium funding exclusively on the disadvantaged pupils in respect of whom it is allocated; many schools are known to use the premium to benefit other needy pupils in addition to those who are disadvantaged and a precise match between eligibility and benefit is not required. Indeed, many strategies for raising the

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\(^{18}\) This is DfE’s description of the local authorities it believes have lost out substantially under the current system.

attainment of disadvantaged pupils found to be effective in trials conducted by the Education Endowment Foundation are universal in approach rather than targeted at subsets of children.\textsuperscript{20}

Importantly for any attempts to protect the real-terms level of deprivation funding reaching schools via the Dedicated Schools Grant, analysis of school budget pressures produced by the IFS and updated recently by EPI estimates that schools face unfunded cost pressures building to 7.5 per cent by 2019-20.\textsuperscript{21}

These cost pressures arise, despite the governments protection of per pupil spending in cash terms, because of changes to staff costs linked to new pension and national insurance rules as well as general inflation.

While these pressures apply to school funding generally, and are not specific to funding allocated via deprivation, we cannot consider that the current level of such funding is protected in the national funding formula if the 7 per cent currently targeted based on deprivation is simply adopted into the new funding formula.

If the government decided to neutralise the effect of the cost pressures on the cash level of funding allocated via deprivation factors, it would need either to increase the total schools funding pot, or to increase the weight given to deprivation above 7 per cent. Figure 1.2 sets out how the level of deprivation funding in the NFF could be protected.

\textsuperscript{20} https://educationendowmentfoundation.org.uk/evaluation/projects/
### Figure 1.2: Neutralising cost pressures for the deprivation component of the national funding formula

<table>
<thead>
<tr>
<th></th>
<th>2017/18</th>
<th>2018/19</th>
<th>2019/20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected deprivation component (after pupil number increases) assuming 7% of total funds</td>
<td>£2.8bn</td>
<td>£2.9bn</td>
<td>£2.9bn</td>
</tr>
<tr>
<td>Estimated cost pressure</td>
<td>4.3%</td>
<td>5.3%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Neutrisation approach:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional funds required (retaining 7% deprivation weight)</td>
<td>£160m</td>
<td>£237m</td>
<td>£352m</td>
</tr>
<tr>
<td>Deprivation weight required (retaining current funding pot)</td>
<td>7.3%</td>
<td>7.4%</td>
<td>7.6%</td>
</tr>
</tbody>
</table>
2. The disadvantage gap: anatomy and trends

In this part of the report, three sets of analysis are presented describing the challenge that schools face in closing the disadvantage gap.

Firstly, we revisit findings from our annual report which describe how the attainment gap develops to reach an accumulated size of nineteen months by the end of secondary school; this is the anatomy of the disadvantage gap. Secondly we review recent trends in the gap, and find a mixed picture of improvement qualified by points of concern. Thirdly, we introduce new analysis of how trends in the gap have differed between schools with different pupil profiles, facing different incentives and levels of pupil premium funding.

The anatomy of the disadvantage gap

Trends in the gap at each individual key stage can tell us whether results for later cohorts of pupils are better than for previous cohorts; this will be examined in detail in the two subsequent sections. Before we explore these, we first describe the development of the gap for an individual cohort: how and when the gap grows over the course of childhood and schooling.

Looking at the growth of the gap as children pass through the stages of schooling helps us to identify when disadvantaged pupils are falling further behind, i.e. when their academic progress is lagging most in comparison with non-disadvantaged pupils.

To measure this, we use the progress gap measure introduced in our report, ‘Education in England: progress and goals’, in which the gap is expressed as the number of months of additional academic development experienced by non-disadvantaged pupils, compared with the progress made by disadvantaged pupils.

Throughout this report we focus on progress gaps rather than accumulated attainment gaps. We take this approach because our aim is to understand what has happened to the gap within defined periods of time in order to identify when and where additional efforts are most needed to improve outcomes for disadvantaged pupils. Our analytical focus may be thought of as diagnostic.

Figure 2.1 depicts the growth of the disadvantage gap broken down into age-related educational stages. Proportions are reported in place of exact percentages in this analysis because we had to estimate the split between the early years and key stage 1 from trends in the time series. However, this should not concern us too much because the difference in the progress gap between key stages 1 and 2 is too pronounced to result from this uncertainty.

The following three facts follow from the information in this chart:

- **The gap does not grow at a consistent rate.** The gap at age sixteen can be broken into fifths: two were already present by age five, one developed during the course of primary school and two developed during secondary school.
- **The component of the gap that emerges during primary school is half the size of the early years and secondary components,** despite primary education lasting two years longer than

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22 This estimation is necessary because early years foundation stage assessment data do not go back far enough to calculate the early years gap for the latest age 16 cohort in 2015.
pre-16 secondary education, or than the maximum length of time between birth and starting school.

- **Two-thirds of the primary school component develops during reception and key stage 1;** only one-third of the primary progress gap emerges during key stage 2, despite this stage being four years in length compared with less than three years between the early years foundation stage assessment and the end of key stage 1.

![Figure 2.1: Approximate components of the gap at age 16](image)

**Changes in the gap over time show mixed national trends**

We now turn to changes in the gap for a given key stage from year to year, indicating improvement or otherwise in the size of the progress gap.

Care is required in interpreting these trends. While we note what has happened to trends before and after the introduction of the pupil premium, we must be absolutely clear that this cannot tell us whether the pupil premium works or not.

To determine the effectiveness of the policy we would need to know what would have happened to the progress gaps if the pupil premium had not been introduced: the counter-factual. It is not possible to establish the counter-factual for the pupil premium by examining trends. Rather, these trends tell us the result of the totality of changes over a given period, including those influenced by other aspects of schools policy.

For example, the exclusion of second and subsequent entries in a given subject from school attainment statistics, or the raising of the school floor standards, could have caused changes to the progress gap that we cannot distinguish from effects of the pupil premium, as both have happened
since its introduction. Wider government policies and societal or economic changes may also have confounded the effects of schools policy.

Figure 2.2 charts the disadvantage gap trend for each key stage: for the early years the accumulated attainment gap at age 5 is presented because we have no prior assessments to calculate progress from; in a sense this represents the progress gap from conception to age 5, although inter-generational gaps in parental health and education mean that the causal chain underpinning disadvantage gaps is likely to begin even earlier. For the remaining three stages, progress gaps are reported.

At each stage, the trends are mapped against year of birth so that we may see how mixed trends have influenced outcomes for the same cohorts, where the availability of data allows. For example, children born in 2007/08 experienced a smaller attainment gap at age 5 than those born in 2003/04 birth cohort (by half a month). By contrast, between ages five and seven disadvantaged children fell further behind by exactly the same number of months for these two sets of children as there had been no improvement in key stage 1 during the four years intervening.

There was an even starker contrast between the experiences of the 1998/99 birth cohort relative to the 1996/97 cohort during key stage 2, compared with keys stages 3 and 4. The progress gap decreased by half a month in the course of the two years intervening between these cohorts at key stage 2, but when they reached secondary school the progress gap at this stage widened by just over one month between the two cohorts.

There is some uncertainty around the role that the introduction of first entry rules at GCSE may have played in the recent trend at key stage 4. The timing of the policy change, in which only the first entry in each subject counts towards performance measures for core subjects, means that both 2014 and 2015 results may be influenced by this change.

While individual pupils may still receive improved grades if they re-sit a GCSE and achieve higher marks, school and national results no longer reflect this. These changes are consistent with a widening of the progress and attainment gaps because prior to their introduction it was known that pupils with lower than expected prior attainment at key stage two achieved slightly better GCSE results in English and maths if they entered more than once. However, it is uncertain whether this effect accounts for all of the upturn in the key stage 4 progress gap in the last two years.

The trends in disadvantaged progress gaps can be summarised as follows:

- **The disadvantage gap in early years foundation stage assessments has decreased by 22 per cent (1.2 months) since 2007.** However, given the substantial remaining gap, tackling early years disadvantage remains critically important. The early years pupil premium was introduced in 2014, but is paid at a much lower rate than the primary pupil premium, even after accounting for differences in hours of provision.

- **The progress gap at key stage 1 shows little change since 2009.** Given that earlier attainment influences later attainment more than any other factor, this is therefore a stage for which it would be prudent to examine why current policies appear to have no traction and what might be done about this.

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23 Department for Education (2013), *Multiple Entry to GCSEs.* Memorandum to the Education Select Committee.
The progress gap at key stage 2 reduced by 44 per cent (1.1 months) between 2006 and 2010. The reduction has slowed since 2011 having reached just over one month in size – the smallest of the progress gaps. This raises the question: have we reached a ‘floor’ at key stage 2 or could the progress gap be eliminated altogether?

At key stage 4, the progress gap decreased in each year between 2006 and 2013, by a total of 28 per cent (2.5 months), but it had re-opened to 2008 levels by 2015. As discussed above, it is uncertain the extent to which the recent upturn in the progress gap reflects a real deterioration as opposed to lower reported grades and behaviour changes since the first entry policy was introduced.
Figure 2.2: Trends in the gap over time, organised by birth cohort

Early years attainment gap

Gap in months

Birth Cohort

(EY) pupil premium
prior to (EY) pupil premium

2.3 2.3 2.1 2.0 1.9 1.7

EY-KS1 progress gap

Gap in months

Birth Cohort

2.3 2.3 2.1 2.0 1.9 1.7 2.1

KS1-2 progress gap

Gap in months

Birth Cohort

2.5 2.0 1.9 1.8 1.4 1.2 1.1 1.3 1.2

KS2-4 progress gap

Gap in months

Birth Cohort

8.9 8.5 8.0 7.9 7.2 6.8 6.6 6.4 6.8 7.5
Beneath the surface: progress gaps in schools with different pupil profiles

In this section we examine the trends in progress gaps at key stages 1, 2 and 4 for groups of schools with different pupil profiles. Specifically, we look at the following groups of schools:

a. Schools with the highest percentages of disadvantaged pupils;\footnote{More than 45 per cent of pupils disadvantaged for primary schools; more than 37 per cent for secondaries.}
b. Schools with the lowest percentages of disadvantaged pupils;\footnote{Fewer than 8 per cent of pupils disadvantaged for primary schools; fewer than 10 per cent for secondaries.}
c. Schools with the highest percentages of pupils who are both disadvantaged and have English as an additional language;\footnote{More than 21 per cent of pupils disadvantaged and EAL for primary schools; more than 10 per cent for secondaries.}
d. Schools with the highest percentages of pupils who are both disadvantaged and ‘borderline attainers’ close to the expected level for the key stage across English and maths.\footnote{More than 19 per cent of pupils disadvantaged and borderline attainers; more than 7 per cent for secondary schools; borderline attainers in primary school are defined as those with level 3 in both reading and maths, or level 3 in one and level 4 in the other; borderline attainers in secondary schools are those with grade D in English and maths, or grade D in one and grade C in the other.}

We hypothesise that these groups, which represent between a fifth and a quarter of schools in each case, may have differing progress gap levels and trends because they face different accountability incentives or have different pupil premium budgets proportional to overall funding levels.\footnote{Schools may belong to more than one of these groups and are included in both where this is the case.}

For example, schools with high rates of disadvantage (a.) will have larger pupil premium budgets that may enable them to purchase qualitatively or quantitatively different packages of support for disadvantaged pupils. They may also come under greater scrutiny from governors or Ofsted about their pupil premium spending decisions.

Additionally, the most deprived schools have a longer history of facing accountability for the attainment of this group because accountability existed, implicitly but with much higher stakes, before closing the gap indicators were introduced to the performance tables in 2011.

What we mean by this is that failing to promote the attainment of disadvantaged pupils would make it impossible to remain above the floor standard for heavily deprived schools, hence they have not had the option of disregarding the disadvantage gap prior to the introduction of the pupil premium, and this could have influenced their performance both before and after 2011.

Our second group, schools with the lowest percentages of disadvantaged pupils (b.), includes some schools which could in theory still get away with failing to address the disadvantage gap. If a school has fewer than 6 pupils in its end of key stage cohort within this group, no statistics for their attainment can be published as this might compromise the confidentiality of individual children.

In 2013, the DfE began publishing three year rolling average measures of attainment for disadvantaged pupils to improve this situation. However, these measures remain buried in the data download files of the performance tables and not visible on the website and it is questionable what impact they can have had under these circumstances.
There still remains a significant number of primary schools which fail to accumulate enough disadvantaged pupils to trigger any published results even on the three-year basis. Overall, however, large numbers of disadvantaged pupils are spread thinly across schools where they are in the extreme minority. Fairness aside, it is not prudent to de-prioritise these disadvantaged pupils in just because it is more challenging for policies to reach them.

Our third group, schools with the highest percentages of pupils who are both disadvantaged and have English as an additional language (c.), represents a similar context to the most deprived schools, but with the nuance that there is a clearly identifiable barrier to learning for many of the disadvantaged pupils, which suggests a clear focus for interventions in terms of language development.

EAL represents an additional challenge for schools in enabling pupils to access the curriculum while they are learning English, and the UK evidence base for effective practice in this area was assessed as weak by the Education Endowment Foundation in 2015.29

On the other hand, there is a long history of practice to draw from in England’s diverse urban areas as a legacy of the Ethnic Minority Achievement Grant (EMAG). An analysis of local authority EMAG action plans published in 2002 reported the use of mentoring, bilingual classroom support, supplementary schools, attendance support, and parental and community liaison among the strategies then in place.30

As we focus our analysis on the progress gap in this report, it is also relevant that pupils with EAL (including those who are disadvantaged) typically have more scope to make progress than white British children because their starting attainment when assessed in the English language is often (though not always) low.31

Research also shows that disadvantaged ethnic minority children typically experience a greater degree of parental engagement with their education than disadvantaged white British children do. This is a factor which is protective of long-term educational outcomes and contributes to the above-average progress made by children with EAL.32

Our analysis of the progress gap is for all disadvantaged pupils within schools that have the highest percentages of disadvantaged EAL pupils, not just those who have EAL. This means that we are examining the trends for schools with this context, rather than examining the progress of EAL pupils in particular.

We are interested in whether schools whose disadvantaged pupils (or at least for many of them) share an obvious barrier to learning with comparatively well-understood patterns of remedial action,

31 The EAL data collected by DfE do not currently measure the level of English proficiency; the only information captured is whether English is the mother tongue, and thus the EAL label applies to fluent bilingual children as well as those new to English. DfE has recently announced plans to collect more nuanced data to better capture stages of proficiency.
are better able to mobilise the funding provided by the pupil premium to produce increased pupil progress for disadvantaged pupils.

If this were the case, it might provide a useful insight to unlock additional value from the pupil premium. Organising research and guidance on interventions around specific barriers to learning might encourage schools to assess and diagnose these for individual disadvantaged pupils and select interventions and packages of support on a more individual and targeted basis. Logically, we would expect this to be an effective approach for schools and recent research provides some support for this.33

Our final group, schools with the highest percentages of pupils who are both disadvantaged and have borderline attainment (d.), is tested because these schools face the sharpest accountability incentives based on existing threshold attainment floor standards. This is the group of schools least able to rely on non-disadvantaged pupils’ attainment in order to escape the attentions of Ofsted and the Department for Education.

This group is therefore a weathervane for the potential of accountability-driven approaches to closing the gap. By chance the existing floor standards, although not designed to close the gap specifically, happen to incentivise these schools to do so more than others. If the progress gap is smaller for these schools and has improved more than for other schools then this suggests that strengthening accountability for disadvantaged pupils’ progress would be an option worth considering.

Findings from the school profiling progress gap analysis

The following twelve charts illustrate trends in the progress gaps for each of the groups of schools described above at key stages 1, 2 and 4. The key findings drawing across these are summarised following the charts.

**Reading the progress gap charts**

Each row of charts represents disadvantaged pupils in a different subset of schools as described above.

In each chart the green area represents the size of the difference in progress between all disadvantaged pupils in the specified group of schools, and the national average, which is represented by the black line. The grey area represents the difference between all non-disadvantaged pupils nationally and the national average. The bright green line represents the progress made by the most persistently disadvantaged pupils relative to the national average.

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**Progress gaps in the most disadvantaged schools (a.)**

![Chart showing progress gaps for schools with >45% disadvantaged pupils]

**Progress gaps in the least disadvantaged schools (b.)**

![Chart showing progress gaps for schools with <8% disadvantaged pupils]

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Progress gaps in schools with the most disadvantaged EAL pupils (c.)

Progress gaps in schools with the most disadvantaged borderline attainers (d.)
By comparing the progress gap charts above, it is evident that the size of the gap and the trends over time vary widely between schools, depending on their intake and context. For example, in primary schools with the fewest disadvantaged pupils, during key stage 2 the progress gap has widened by 130 per cent (1.5 months) since 2006; this growth stopped in 2012 and the gap has not changed since then.

This contrasts sharply with schools with the most disadvantaged EAL pupils, where disadvantaged pupils make more progress than average during key stage 2, progressing 1 month more than non-disadvantaged pupils, and this advantage increased ten-fold (by 2.2 months) between 2006 and 2010, remaining five times as large as in 2006 despite decreasing after 2010.

We draw the following three findings from the progress gap trends analysis for schools with different intake profiles:

- **Schools with the most disadvantaged pupils have seen the disadvantage gap decrease over the longer term (at key stage 2 it has closed from 2.1 months to zero), whereas schools with the fewest disadvantaged pupils have seen the progress gap widen (at key stage 2 it has widened 1.1 to 2.6 months).**

  During key stage 2 and secondary school, this growth of the gap in the least disadvantaged schools appears to have levelled off since 2012. Increases have been less marked during key stage 1, but the progress gap has slightly increased since 2009, the first year for which we have progress data for this age group.

  Persistently disadvantaged pupils have fallen even further behind in the least disadvantaged schools. By contrast, during key stage 2 they have made progress that is close to the national average or higher in the most disadvantaged schools since 2010. Many of these highly disadvantaged schools are located in London, which has seen remarkable improvements for disadvantaged pupils over the last ten years.

- **Improvements in progress for disadvantaged pupils in schools with concentrations of disadvantaged EAL pupils have lost momentum since around 2012 (at key stage 1 the gap has re-opened from 0.5 to 1.1 months), although so far progress for disadvantaged pupils remains above the national average during key stage 2 and secondary school.**

  The progress gap has widened slightly since 2012 at key stage 1, following at least three years of decreases. This may suggest that the redirection of EMAG funding into the mainstream schools budget is beginning to diminish the support available within the schools most affected by language needs and disadvantage. It suggests caution against complacency in adequately funding this group of pupils within the proposed national funding formula.

- **Primary schools whose intakes contain the most disadvantaged pupils with borderline attainment have shown the strongest improvement in reducing the progress gap over the last five years (at key stage 2 it has decreased by 68 per cent from 2.2 to 0.7 months).**

  This trend coincides with the introduction of the pupil premium at key stage 1, but it is not clear that it does at key stage 2. This is difficult to determine due to data anomalies in 2010 when there was a partial boycott of key stage 2 tests which interrupted the trend.

  It is also difficult to interpret the trend at key stage 4, due to the widening of the progress gap since 2013; as discussed earlier, it is impossible to assess at this stage whether this is a
temporary response to the introduction of first entry rules at GCSE, or whether it marks the beginning of a new trend.

The trend at key stage 4 is similar to that for schools with the most disadvantaged pupils irrespective of whether they have borderline attainment. This could mean that floor standards for all pupils were already driving improvements in these schools.

We would expect to see new improvements in the secondary progress gap after Progress 8 is introduced as the new basis for the floor standard in 2016, as schools will face increased incentives to raise the attainment of pupils with attainment that is well below or well above the current expected standards thresholds.

Discussion of trends in the progress gap

There does not appear to be a general turning point in 2011, but the most promising developments coinciding with the introduction of the pupil premium are the slowing of the growth of the gap at key stages 2 and 4 in schools with the fewest disadvantaged pupils. The beginning of a decreasing trend in the gap at key stage 1 in schools with the most disadvantaged borderline attainers is also promising.

Analysis of trends cannot establish causal links, but the pattern of trends is consistent with the hypothesis that schools with more deprivation funding are able to decrease progress gaps faster than those with less deprivation funding. It is also consistent with an additional accountability effect, although it is not possible to rule out the possibility that greater experience in teaching disadvantaged children, or some other factor, is contributing to both trends.

The most concerning findings are the increases in the progress gaps in the least disadvantaged schools and for the most persistently disadvantaged pupils, and the uncertain trend in secondary schools. More needs to be done to tackle these gaps, and to reverse the general trend in the least disadvantaged schools. Careful thought should also be given to ensuring that schools with many disadvantaged children with English as an additional language do not lose out as school budgets contract in cash terms over the next few years.34

We return to these findings and offer options and recommendations for policy responses at a national level in Part 4 of the report. In the next part we turn to what we know about how schools can best plan and deliver support for disadvantaged pupils and make effective use of the funding they receive through the pupil premium and more generally.

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3. Implementing the pupil premium: a system leader’s view


Many schools have made excellent use of the pupil premium, closing the gap between the attainment of disadvantaged children and others and even, in some cases, having a ‘reverse gap’ with the disadvantaged outperforming their peers.

As we saw in the previous part of the report, this is visible at national level. Schools teaching the highest proportions of disadvantaged children with borderline attainment have made particularly strong progress in closing the gap. Primary schools with the most disadvantaged children with English as an additional language have reversed the average progress gap at key stage 2 so that their disadvantaged pupils make more progress than non-disadvantaged pupils nationally.

These schools focus not only on closing the gap, but on raising attainment for all while aiming to raise attainment for the disadvantaged faster. Thus the winner of the 2015 Pupil Premium national award for secondary schools, the Ark Charter Academy in Portsmouth, achieved 82 per cent and 83 per cent of disadvantaged learners and others respectively gaining 5 A*-C GCSE grades including English and mathematics in 2014. In 2016, the secondary school winner, La Retraite Roman Catholic Girls’ School in Lambeth, secured 83 per cent for disadvantaged learners and 85 per cent for others in its 2015 GCSE 5 A*-C GCSE results.

An important principle of the pupil premium policy is that schools have a high degree of autonomy in how they spend the money. They are held to account not for how they spend it, but for the impact that they make with it. It is not surprising, therefore, that there is a wide variety of practice, with no single approach being replicable in all schools.

Addressing barriers to learning

The starting point for schools that are spending the pupil premium most effectively is an analysis of the barriers to learning for their disadvantaged pupils. A fairly typical list of barriers to learning, drawn up at a pupil premium conference in the south west in 2015, highlighted the following:

- Limited language, restricted vocabulary;
- Poor attendance;
- Mobility – many moves between schools;
- Issues within the family;
- Medical issues, often undiagnosed;
- Lack of sleep;
- Poor nutrition;
- Poverty;
- Lack of family engagement with learning;
- Education not valued in local community;
- Low aspirations;
- Low expectations;
- Narrow range of opportunities outside school;
- Lack of role models, especially male role models;
- Lack of self-confidence and self-esteem;
- Poor social skills;
• Other skills gaps;
• Inadequate support from teachers and teaching assistants.

It is vitally important to recognise, however, that not all children eligible for the pupil premium have all, or even some, of these barriers. Some have very supportive families, who do their very best for their children, but whose limited resources mean that their children have a narrower range of experiences pre-school and outside school than their better-off peers.

It is also essential to remember that there is no such thing as a typical pupil premium child. Every one of these children is an individual with specific background and needs, and schools must consider these for each individual child in order to target support most successfully.

The items on the above list that are most frequently cited by teachers and school leaders are low aspirations and low expectations. A central plank of any successful school’s pupil premium policy is a culture of high aspirations and expectations, and a recognition that these arise within families, within the young people themselves and, most damaging of all, among school staff. Each of these three types of low aspiration and low expectation needs to be addressed. Raising aspirations and expectations, however, must be matched by parallel policies to raise attainment if success is to be achieved and disadvantaged learners are to reach their potential.

**Recommended strategies for making the most of the pupil premium**

When the pupil premium was introduced in 2011, schools did not generally carry out an analysis of barriers to learning, and the result was that the pupil premium was spent on maintaining or enhancing existing provision in some schools, such as additional teaching assistants for one-to-one tuition and subsidising school trips, without much impact on the progress and attainment of the targeted pupils. 35

Within a year, however, Ofsted was reporting that there was greatly increased evidence of good practice and it produced a useful report listing successful, and less successful, approaches to the use of the pupil premium. 36

Ofsted’s report on the pupil premium in July 2014 stated that ‘overall, school leaders are spending pupil premium funding more effectively, tracking the progress of eligible pupils more closely and reporting outcomes more precisely than before. There are encouraging signs from inspection that the concerted efforts of good leaders and teachers are helping to increase outcomes for pupils eligible for the pupil premium. However, it will take time to establish whether this increased focus will lead to a narrowing in the attainment gap between those eligible for the pupil premium and other pupils’. 37

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36 Ofsted (2013), *The pupil premium: how schools are spending the funding successfully to maximise achievement*.


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More recently, the National Foundation for Education Research (NFER) conducted research into what constitutes effective use of the pupil premium as demonstrated by schools that have improved their results. It identified seven ‘building blocks of success’:

- Promote an ethos of attainment for all pupils, rather than stereotyping disadvantaged pupils as a group with less potential to succeed;
- Have an individualised approach to addressing barriers to learning and emotional support, at an early stage, rather than providing access to generic support and focusing on pupils nearing their end-of-key-stage assessments;
- Focus on high quality teaching first rather than on bolt-on strategies and activities outside school hours;
- Focus on outcomes for individual pupils rather than on providing strategies;
- Deploy the best staff to support disadvantaged pupils; develop skills and roles of teachers and teaching assistants rather than using additional staff who do not know the pupils well;
- Make decisions based on data and respond to evidence, using frequent, rather than one-off assessment and decision points;
- Have clear, responsive leadership: setting ever higher aspirations and devolving responsibility for raising attainment to all staff, rather than accepting low aspirations and variable performance.

Further suggestions for good practice gathered from national and regional conferences and events to share experiences in implementing the pupil premium are presented below:

- Excellent collection, analysis and use of data relating to individual pupils and groups takes place frequently;
- An unerring focus on the quality of teaching;
- The main barriers to learning for disadvantaged pupils are identified;
- Progress of every disadvantaged pupil is monitored frequently;
- When a pupil’s progress slows, interventions are put in place rapidly;
- Every effort is made to engage parents and carers in the education and progress of their child;
- Evidence (especially the EEF Toolkit) is used to decide on which strategies are likely to be most effective in overcoming the barriers to learning;
- Staff (teachers and support staff) are trained in depth on the chosen strategies;
- 100 per cent buy-in from all staff to the importance of the pupil premium agenda is regarded as essential, with all staff conveying positive and aspirational messages to disadvantaged pupils;
- Performance management is used to reinforce the importance of pupil premium effectiveness;
- Effectiveness of teaching assistants is evaluated and, if necessary, improved through training and more effective deployment;
- Governors are trained on the pupil premium.

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Clear identification of success criteria

In addition to a thorough analysis of barriers to learning, credible pupil premium plans rely on a very clear assessment of what a school is aiming to achieve with the pupil premium, in the form of challenging success criteria for each strategy or combination of strategies. Examples of objectives set by schools that have taken part in intelligence-sharing events include the following:

- Raising attainment;
- Closing the gap between the attainment of disadvantaged pupils in the school and non-disadvantaged pupils nationally, as well as closing the within-school gap;
- Accelerating progress;
- Improving attendance;
- Improving behaviour;
- Reducing exclusions;
- Improving the engagement of parents and carers with the educational progress of their children;
- Increasing the range of skills and personal qualities of the disadvantaged pupils;
- Extending opportunities;
- Easing the transition between separate phases of schooling;
- Supporting disadvantaged pupils to move on to good destinations (for secondary schools).

Not all schools choose to pursue all of these desired outcomes; some schools have other desired outcomes. The choice depends on the barriers to learning experienced by their particular pupils.

For each these desired outcomes, the schools set themselves success criteria. For example, increasing attainment by $w$ per cent next year and $x$ per cent the year after; closing the gap with national non-disadvantaged attainment to $y$ per cent; improving attendance of this group to $z$ per cent and, for the final outcome on this list, reducing to zero the number of disadvantaged pupils who become NEET (not in education, employment or training) in the year after leaving school.

Using evidence to decide what to do

One of the positive by-products of the pupil premium policy has been an increasing reliance by schools on evidence before deciding school policy. Historically, schools have not been as good as, say, the medical profession, at using up-to-date evidence of what works. A 2013 review by Ben Goldacre for the Department for Education called for greater use of randomised control trials, the accepted standard for medical evidence, by teachers and schools.\(^\text{39}\)

However, the emergence of the Education Endowment Foundation (EEF) Teaching and Learning Toolkit,\(^\text{40}\) based on an analysis by Durham University of over 10,000 pieces of research and augmented on a rolling basis by new evidence from the EEF’s own randomised control trials, has marked a turning point in the use of evidence by schools. Surveys by NFER for the Sutton Trust have reported that 5 per cent of all teachers (classroom and leaders) used the toolkit in 2012,\(^\text{41}\) rising to

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\(^{39}\) Goldacre, B. (2013), *Building Evidence into Education*. Department for Education.

\(^{40}\) https://educationendowmentfoundation.org.uk/evidence/teaching-learning-toolkit/

\(^{41}\) Sutton Trust (2012), NFER Teacher Voice Omnibus 2012 Survey *The use of the Pupil Premium*. 

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14 per cent in 2013,\textsuperscript{42} and 27 per cent by 2016.\textsuperscript{43} Among senior leaders in secondary schools, use of the toolkit rose from 48 per cent in 2015 to six in ten in 2016.\textsuperscript{44}

Many of the effective strategies reported in the EEF toolkit focus on raising the quality of teaching and classroom practice, which is consistent with the Sutton Trust research finding that disadvantaged pupils suffer disproportionately from poor quality teaching, but benefit disproportionately from high quality teaching.\textsuperscript{45}

Thematic evidence briefings from the EEF are also beginning to tackle questions of how schools can make the most effective use of common strategies that have lower effectiveness on average, but where potential exists to improve practice. The first thematic review addressed the widespread use of teaching assistants by schools despite evidence of low effectiveness.\textsuperscript{46}

**Evaluating the impact of pupil premium policies in schools**

Successful schools keep their pupil premium policies under constant review, dropping strategies when they are not showing sufficient impact and adopting other evidence-based policies in their place.

Where a school’s disadvantaged learners are doing badly, Ofsted can recommend a Pupil Premium Review and the Teaching Schools Council has drawn up a template for conducting these reviews. This has been written in a way that means that the same process can be used for school self-review of pupil premium policies and impact.

Schools can also compare their performance using the Education Endowment Foundation’s Families of Schools database, in which the performance on a range of measures of every school in England can be compared with that of the 50 schools that are most similar to it. The performance of each family of schools is represented by a bar chart, through which any school in the family can be compared with any other. Schools are identified, so that a school wishing to contact the most successful schools in their family can easily do so.

**Sharing expertise**

Apart from the EEF Toolkit, the other source of information on successful pupil premium practice in schools is to be found within the school system itself in England. Every school must have a pupil premium section on its website, including information about the strategies implemented and their impact.\textsuperscript{47} It is therefore easy for schools to find out what is being done with pupil premium funding in successful schools and to contact them for further information.

The most successful schools have been highlighted through the annual pupil premium awards, which started in 2013 and were increased in value very considerably in 2015 before reverting to a non-monetary award in 2016. National and regional winners and runners-up are listed on the Awards

\textsuperscript{42} Sutton Trust (2013), NFER Teacher Voice Omnibus 2012 Survey Spending Priorities for the Pupil Premium.

\textsuperscript{43} Sutton Trust (2016), NFER Teacher Voice Omnibus 2012 Survey Pupil Premium Polling Questions.

\textsuperscript{44} Sutton Trust (2016), NFER Teacher Voice Omnibus 2012 Survey Pupil Premium Polling.

\textsuperscript{45} Sutton Trust (2011), Improving the impact of teachers on pupil achievement in the UK – interim findings.


\textsuperscript{47} The School Information (England) (Amendment) Regulations 2012.
website. All winning schools are under an obligation to support pupil premium work in other schools, so any school may approach them by email, telephone or visit to learn from their success in raising the attainment of disadvantaged students.

Below is a selection of case studies from schools that have won pupil premium awards.

**Ark Charter Academy, Portsmouth: key stage 4 national winner, 2015 Pupil premium awards**

Charter Academy in Portsmouth is in one of the poorest wards in the country. Sixty-two per cent of the school’s pupils attract the pupil premium, more than double the national average. In 2014, 83 per cent of pupil premium pupils achieved 5 or more GCSEs at A*-C grades, including English and maths – double the national average for pupil premium pupils and 18 percentage points higher than the national average for non-pupil premium pupils. The figures were lower in 2015, but Charter remained at the top of its family of 50 schools nationally in the Education Endowment Foundation families of schools database.

The school responded to the barriers to learning faced by their disadvantaged pupils by providing them with a strong curriculum focused on English and maths. There is a longer school day in order to ensure that there is sufficient time for these subjects, including extra study groups on maths and literacy for some learners. This approach is supported by evidence in the EEF toolkit on the impact of small group tuition and extended school hours that provide stimulating additional academic support. Pupil success is regularly celebrated and successful pupils held up as role models to other pupils, to raise aspirations.

Pupil premium funding is also used beyond the classroom to provide pupils with a wider experience of life. This includes: sailing and boxing; subsidised trips to universities and theatrical performances; and a breakfast club. The school has recently built a theatre to help develop pupils’ oral language skills and self-confidence. Steps have been taken to engage families in their child’s learning, such as adult education classes and a parent council.

Attendance was a major issue in the school and so some pupil premium funding has been spent on a range of strategies to improve attendance. Former Royal Navy personnel are employed as pastoral support workers to conduct home visits and they also support teachers in the classroom, providing pupils with role models and a sense of discipline. Year leaders have been appointed who previously worked in social services. For pupils struggling in mainstream schooling, the school uses an alternative centre that provides for their needs, based on good practice alternative provision approaches that allows them to re-enter mainstream schooling when they are ready.

The school meticulously assesses pupil performance, including weekly meetings about key stage 4 pupils, to make sure they are on track to achieve. They use this data to determine whether interventions are working and whether pupils need additional support, making the action being taken with struggling pupils a core responsibility for all teachers.

The school has taken part in an EEF trial on maths mastery and is an active member of their school network. Staff are encouraged to visit other schools in the network to learn from their practices and to share their own expertise. The school also works collaboratively with local schools to benchmark their performance and to share best practice and learn from them in return.
Parkfield Community School, Birmingham: key stage 2 national winner, 2015 Pupil premium awards

Parkfield tracks performance gaps on disadvantage, ethnicity, cultural background and gender, regularly measuring the progress of all pupils, and of groups, and putting in place strategies where they are required. In 2014, 82 per cent of the school’s disadvantaged pupils achieved the expected standard in key stage 2 tests at age 11. Seventy-eight per cent achieved at a level above the expected standard (level 4b+), compared with the national average for disadvantaged pupils of 53 per cent. In 2015, these figures improved further, with 92 per cent of disadvantaged pupils in reading, 94 per cent in writing and 91 per cent in maths attaining the expected level. Small group and one-to-one tuition have been used extensively as interventions for pupils falling behind.

The school takes a systematic approach to identifying the challenges their pupils face, and the impact that these challenges have on their learning, focusing both on academic achievement and wider work such as encouraging aspiration and parental engagement. The school has a clear understanding of the specific barriers faced by each pupil, many of which are linked to their cultural context. As a school located within a predominantly immigrant community, Parkfield recognises that many of its parents have English as a second language, or otherwise have language difficulties, and so are less able to support their child’s learning. The school has taken the initiative to offer parents learning opportunities and engage them in their child’s learning, with consequent improved support at home, contributing to the high attainment of some disadvantaged pupils.

To solve a serious punctuality issue, the school launched a walking bus to enable pupils to arrive at school on time. This has been very popular, and data demonstrates a fall in time lost to lateness. Analysis of pupil premium pupil performance in mathematics showed those pupils without a computer at home were falling behind and finding it difficult to complete homework. A maths breakfast club for pupil premium pupils without a computer at home has resulted in significantly increased attainment and a closing of the gap.

Evidence shows that extending school time, when used to deliver additional academic support that is stimulating, can be an effective approach. The school is recognised as a local maths leader, having established a ‘Maths Academy’ to work with other schools in the region to provide maths education to pupils, and continuing professional development to enhance teacher confidence in teaching maths. It has also focused firmly on long-term planning, with the majority of its approaches to closing the gap firmly embedded into the work of the school.

Pakeman Primary School, Islington: key stage 2 national winner, 2013 Pupil premium awards

Pakeman Primary School is a one-and-a-half form entry school in Islington, receiving pupil premium for 66 per cent of pupils. The school has high aspirations and ambitions for all its children, with a strong ethos of belief that ‘it is not about where you come from but your passion and thirst for knowledge, and your dedication and commitment to learning that make the difference between success and failure’.

Pakeman finds that one of the biggest barriers for children can be poverty of expectation, so it is determined to create a climate that does not limit a child’s potential in any way. Its school motto is ‘Excellence for All and Excellence from All’, reflecting the high expectations of the
whole school community. Eighty-five per cent of pupil premium-eligible children attain at least level 4 in reading, writing and maths at the age of 11. Through targeted interventions the school is working to eliminate barriers to learning and progress. For children who start school with low attainment, the school’s aim is to ensure that they make accelerated progress in order to reach age-related expectations as soon as possible. Data is analysed thoroughly, and all interventions are rigorously monitored for impact.

‘All staff are keen to go the ‘extra mile’, and the school deploys its resources well, particularly to provide extra support and intervention for pupils and families who may face significant difficulties and barriers to learning. As a result, any gaps between groups are closing rapidly.’

Common barriers for pupil premium-eligible children can include less support at home, weak language and communication skills, lack of confidence, more frequent behaviour difficulties, and attendance and punctuality issues. There may also be complex family situations that prevent children from flourishing. The challenges are varied and there is no ‘one size fits all’.

With 84 per cent of PP funding targeted at improving learning, the pupil premium is deployed across many interventions:

- Development of the school library to raise the profile of reading in the school and to support improved attainment in reading;
- Introduction of non-class-based team leaders across each phase, developing greater consistency in practice and expectations through addressing within-school variances and resulting in consistently good quality of teaching and increased percentages of outstanding teaching;
- Improved support for higher ability pupils through extension of interventions provided and a collaborative maths project with local primary and secondary schools;
- Increased engagement with parents, resulting in winning a Leading Parent Partnership Award in 2013;
- Successful implementation of a whole-school behaviour scheme – ‘It’s good to be green’ – leading to excellent behaviour across the school, both inside and outside the classroom;
- Introduction of Assertive Mentoring (including termly mentoring sessions for each child) so children are able to talk confidently about where they are and knowing their next steps for improvement;
- Increased number of children taking a lead in the school through development of new posts of responsibility;
- Art therapists, based at the school, providing support with social, emotional and behavioural issues.

Pakeman is relentless in its drive for improvement and often invites the local authority to conduct school reviews on specific areas for improvement. It belongs to a cluster of schools providing support and challenge for each other. Pakeman staff have been providing support for other schools through visits to local authorities, courses and individual school reviews. Their reviews have been included in the latest guidance developed by the Teaching Schools Council.

**Goffs School, Cheshunt, Hertfordshire: key stage 4 national runner-up, 2014 PP Awards**

Goffs School is a fully mixed comprehensive school in Cheshunt, Hertfordshire, and has 21 per cent of its pupils who are eligible for the pupil premium. The school works hard to ensure that all of its pupil premium students achieve excellent qualifications and are fully prepared for the next stage of their educational journey. For example, in 2015, all of the pupil premium students in year 11 successfully secured either their place in sixth form or the college course that they had chosen to take; 60 per cent of these students attained 5 GCSE A*-C grades with English and maths, with a gap of 15 percentage points between them and other students. In the Education Endowment Foundation families of schools database, Goffs is the best of its family of 50 schools on the 5A*-C including English and maths measure.

The school carefully tracks each student who has pupil premium, including the funding that is allocated to that student. By doing this over time, the school can ensure that it is investing the money in strategies that clearly have an impact on the students. They use the work of the Education Endowment Foundation as a research basis for many of their interventions, investing in a range of strategies, including engagement strategies and targeted individual support both within school and through external organisations. To support this, the school created a pupil premium team who work together to identify gaps in learning and put appropriate interventions in place.

Having been the 2014 Pupil Premium Award national runners up and been nominated as regional finalists in 2015, the school has worked hard with other schools and organisations to promote the work of pupil premium funding and to support them with ideas as to how this can be best spent.
4. Finding consistent pathways to gap closure

Conclusions

Through the pupil premium awards and a series of regional and national conferences beginning in 2013, the schools sector has gathered to share many inspiring accounts of individual schools’ journeys developing increasingly planned and strategic approaches to implementing the pupil premium.

The National Audit Office has reported an increase in headteachers focusing on improving outcomes for disadvantaged pupils through targeted support from 57 per cent before the pupil premium was introduced to 94 per cent in 2015. In 2014, Ofsted reported headline improvements in the effective use of the pupil premium by schools.49

Our own analysis – which isolates progress in closing the disadvantage gap during specific stages of education – has confirmed that there have been concentrated improvements in particular subsets of schools. The most disadvantaged schools have seen the gap decrease faster than average over the longer term; in primary schools with more than 45 per cent of pupils disadvantaged, the key stage 2 progress gap has closed from 2.1 months to zero since 2006.

More recently, in the last five years, in primary schools with more than 19 per cent of pupils both disadvantaged and with attainment near the expected standards threshold for 2015, the gap at key stage 2 has decreased from 2.2 to 0.7 months; this is a reduction of 68 per cent. Yet our analysis also concludes that nationally, we have not yet seen the decisive shift in gap trends that is needed. The picture is a complex one, with contrasting trends in different groups of schools and at different key stages.

Reducing educational inequality is every teacher’s responsibility, and our analysis has highlighted that there is much yet to do. The need for more effective action is most acute in the least deprived schools where disadvantaged pupils are in the minority and where the gap has widened since 2006; in the early years and the first three years of primary school, where progress in closing the gap has been slow; and for the most persistently disadvantaged pupils – especially those in the minority within their schools – these children are doubly disadvantaged by long-term poverty and a lack of effective accountability for their outcomes.

Secondary schools continue to be the stage of education where progress gaps are largest and disadvantaged pupils fall further behind other children by a significant margin – 7.5 months in 2015. Undoubtedly there are wider challenges posed by the increased influence of neighbourhood environments and risks as children reach adolescence, and secondary schools have a difficult job to do trying to turn the tide on educational gaps which reflect wider economic inequalities impacting on all aspects of children’s lives.

Since there is more to do, we must continue to ask whether schools have sufficient funding, adequate opportunities to hire good quality teachers, accountability incentives that support fair outcomes at all stages of education and with sufficient priority, time and resources to focus on

teachers’ professional development, as well as access to vital support services from educational psychologists, SEN specialists, speech and language therapists and other trained educational support professionals.

Beyond this, we must question whether disadvantaged children are receiving universally high quality early years education to tackle the gap at age five, and whether disadvantaged families are receiving sufficient parenting support. Both are needed to ensure that children experience an early environment that permits normal child development and protects them from toxic levels of stress that damage this development. Tackling the disadvantage gap is a task that must start early and be sustained throughout the school years.

Recommendations

**School funding**

- The pupil premium should continue to be a separate grant with a clear purpose of improving outcomes for disadvantaged children. This model of funding is consistent with research findings, and should be supported and developed over the long-term. Socio-economic gaps have been apparent for as long as educational outcomes have been measured; we have set out challenging but realisable goals to eliminate the progress component of the gap, preventing it from growing between the ages of five and sixteen, by 2030.

- The deprivation factor within the new national funding formula should be clearly identified and quantified for schools, and while its expenditure should not be limited to supporting economically disadvantaged pupils, there should be a strong presumption that disadvantaged pupils will be among the core beneficiaries, and that schools will be expected to articulate how this funding is used to benefit pupils with additional needs in particular.

- The deprivation factor within the new national funding formula should be set at a level not lower than the current weight given to deprivation by local authorities, which was 7 per cent of total funding in 2015-16. Consideration should be given to protecting the value of this component against the cost pressures schools are projected to undergo until at least 2020.

**Early years**

- Increasing the educational quality of age 3-4 provision and the uptake of the 2-year-old offer should be prioritised above implementation of the 30-hour offer, which amounts to a cash transfer to better-off families and is not available to most disadvantaged families. Our recent report highlights significant risks to the quality and availability of childcare for disadvantaged children as a result of increasing free provision for the better-off.

- Government should set out a clear plan for how it will implement baseline assessments, taking due account of the problems experienced with a multiple provider system, to ensure

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that consistent assessments of children’s development on entry to school, including non-cognitive development, are available at the earliest opportunity. Without these assessments it will not be possible to calculate progress gaps from reception to year 2, as early years foundation stage profile assessments are set to become non-statutory.

**Accountability**

- Three-year aggregated measures of progress and attainment for disadvantaged pupils should be published in a prominent position on the performance tables, particularly for primary schools whose smaller size means that many have suppressed single-year measures. Mean rank difference measures or standardised scores should be used to enable these measures to bridge the assessment changes currently underway.

- In addition, a measure of progress for disadvantaged pupils should be included in the ‘headline’ performance measures which schools will be required to present in a standard format on their websites, in addition to the indicators for outcomes for all pupils which were announced in the government response to the secondary accountability consultation.

- Measures of the progress and attainment of disadvantaged pupils should be included in the government’s performance statistics for multi-academy trusts in order to increase further the effective oversight of pupil premium use for pupils in primary schools and schools with few disadvantaged pupils. Equivalent measures should be published for local authority schools at local authority level.

**School-to-school support**

- School governors should increase their scrutiny of performance for disadvantaged pupils and ensure that peer support is called in where needed, from schools with a strong track record. NCTL provides a directory of system leaders designated as suitable to provide peer reviews of pupil premium spending; this currently contains 409 primary schools, 40 of which have disadvantage rates below 8 per cent; and 197 secondary schools, 36 of which have disadvantage rates below 10 per cent. Government should encourage governors to take on this role, monitor demand for school-to-school support, and assist system leaders in the development of strategies and resources for closing the gap.

**Wider possibilities**

Creating a wider momentum in closing the gap may require broader measures that extend and reach outside of the areas of recommendation above. We set out below some further options that our reading of the evidence suggests would merit consideration as part of a wider package of development for the pupil premium policy.

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• Government should explore the possibility of increasing the value of the pupil premium for those pupils who are most persistently disadvantaged (based on the number of times they have been recorded as eligible for free school meals as a percentage of possible instances). Our annual report demonstrated that the attainment gap at key stage 4 is widening for these pupils,\textsuperscript{56} and the progress gap is larger in almost all cases in our analysis of trends for different groups of schools.

• Pilots could be established to test the effect of increasing the value of the early years pupil premium, ear-marked for spending on a selection of the most promising interventions from the EEF’s toolkit, and evaluated by randomised control trial. The importance of adequate investment in the early years is underlined by the persistence of a substantial gap at age five, and by international evidence that public investments in education prior to age three can lead to lasting increases in cognitive ability, as measured by IQ, which leads to larger effects from subsequent investments in schooling.\textsuperscript{57}

• Baseline assessments could be repeated at the end of year 2 and used to report on the development of disadvantaged pupils relative to other pupils. This would introduce accountability for progress made during the first three years of school, where progress in closing the gap is slow, with faster gap closure as a primary objective of the re-assessments.

• Because around eight in ten former-FSM students do not enter level 3 qualifications, they are missing from key stage 5 destinations statistics and we are blind to their fate.\textsuperscript{58} We therefore consider that further thought be given to whether the key stage 5 destinations measures should be revised to include post-16 learners entered in level 2 qualifications as well as those entered to level 3 qualifications.

• Disadvantaged children are disproportionately likely to experience special educational needs,\textsuperscript{59} mental health difficulties, and toxic stress, each of which is associated with lower educational outcomes. This suggests that the quantity and quality of support for these additional needs, such as the availability to schools of educational psychologists, may be a limiting factor on improving the attainment of an especially vulnerable subset of disadvantaged children. Better evidence on how effectively existing SEN support is targeted, and the sufficiency of that support, could inform a more integrated approach to tackling disadvantage and special educational needs.


\textsuperscript{57} Heckman, J. (2016), The economics and econometrics of human development and social mobility. CEMMAP and CPP.

\textsuperscript{58} Department for Education (2016), Destinations of key stage 4 and key stage 5 pupils: 2014. SFR05/2016.

\textsuperscript{59} Pupils eligible for free school meals are twice as likely as those not eligible for free school meals to have special educational needs: Department for Education (2015), Special educational needs in England: January 2015. SFR25/2015.