

School Inspection in England: Is there room to improve?

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About the Education Policy Institute

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Education can have a transformational effect on the lives of young people. Through our research, we provide insights, commentary and critiques about education policy in England - shedding light on what is working and where further progress needs to be made. Our research and analysis will span a young person's journey from the early years through to higher education and entry to the labour market. Because good mental health is vital to learning, we also have a dedicated mental health team which will consider the challenges, interventions and opportunities for supporting young people's wellbeing.

Our experienced and dedicated team works closely with academics, think tanks, and other research foundations and charities to shape the policy agenda.

This publication includes analysis of the National Pupil Database (NPD):

<https://www.gov.uk/government/collections/national-pupil-database>

The Department for Education is responsible for the collation and management of the NPD and is the Data Controller of NPD data. Any inferences or conclusions derived from the NPD in this publication are the responsibility of the Education Policy Institute and not the Department for Education.

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Foreword

The Education Policy Institute is an independent, impartial and evidence-based research institute which aims to promote high quality education outcomes, regardless of social background.

England's school system enjoys a relatively high degree of school autonomy, but with that autonomy comes high accountability and scrutiny.

One of the most important parts of England's accountability system is its independent and rigorous school inspection – delivered in state funded schools by Ofsted.

Many other countries have looked to the design and operation of Ofsted as a model of good school inspection, and there is some evidence to suggest that Ofsted has helped to deliver an improvement in school performance, not least in schools which it has previously found to be failing.

But Ofsted has itself always been under close scrutiny, and its role and output has often been challenged – given Ofsted's potential impact on teacher and head teacher supply, on parental choices, and on issues such as school workload, this scrutiny is clearly merited. Ofsted has a big impact on England's education system, so its performance needs to be closely studied, in order to deliver more accurate and impactful inspection.

In this report, the Education Policy Institute looks at two important inspection issues – does Ofsted act in a timely manner to identify schools with substantial declines in performance; and does Ofsted grade schools with differing pupil intakes fairly. These issues matter hugely – parents, local authorities, multi academy trusts and policy makers take Ofsted judgements very seriously. If there is an inspection bias of some kind, this could deter teachers and school leaders from working in certain schools, or cause parents to make bad decisions about where their children should be educated.

This report will, I hope, stimulate debate on how Ofsted can continue to contribute to higher standards in England's schools, including a far narrower gap between outcomes for children from advantaged and disadvantaged backgrounds.

Rt. Hon. David Laws

Executive Chairman, Education Policy Institute.

Executive summary

Background

Ofsted plays an important role in providing parents, government and Parliament with information about the quality of schools in England.

The outcomes of Ofsted inspections often have high-stakes implications. Favourable judgements can open up opportunities to become a school sponsor or teaching school, or for school leaders to take up national or local system leadership roles. Unfavourable judgements can lead to intervention, academisation or school closure.

In this report we consider whether, over the nine years to 2014/2015, the inspection system has been responsive to cases where school performance has deteriorated substantially, and fair to schools facing different challenges.

These are important questions, because recent changes to the inspection framework mean that schools judged 'outstanding' can go for many years without being re-inspected, and because when a school is given an unfavourable inspection judgement, this can often have serious repercussions.

Ofsted's response to deterioration in school performance

Our analysis finds that:

- 'Good' or 'outstanding' schools whose academic performance has deteriorated substantially since their latest inspection have waited close-to-average lengths of time to be re-inspected. They have not been overlooked, but nor have they been prioritised for early re-inspection.
- One third of the 64 primary schools whose performance deteriorated substantially following a rating of 'outstanding' were still re-rated as 'outstanding' at their latest inspection. They were only fractionally more likely to be down-graded than schools where no such academic deterioration took place.
- Over two-thirds of the 406 'good' primary schools whose performance deteriorated substantially were not down-graded at their next inspection; 64 per cent remained 'good' and 7 per cent were promoted to 'outstanding'.
- Half of the 47 'good' secondary schools whose performance deteriorated substantially were not down-graded at their next inspection; 38 per cent remained 'good' and 11 per cent were promoted to 'outstanding'.
- Across schools with 'outstanding', 'good' or 'requires improvement' previous inspection judgements whose performance deteriorated substantially, 47 per cent of primaries and 33 per cent of secondaries actually received *improved* Ofsted judgements.
- These are very conservative estimates of the number of schools whose performance deteriorated, identifying only those schools whose value-added progress decreased by an average of 15 percentiles per year, and excluding schools whose results were volatile. They

resulted in totals of 1,221 primary schools and 228 secondary schools identified with substantially deteriorated performance between their last two inspections.

- These findings suggest that Ofsted may not have been as effective at consistent recognition of deterioration in academic performance as it has been in the regularity of school inspections.

Schools with challenging pupil intakes

Our analysis finds that:

- There is a systematic *negative* correlation between school intakes with more disadvantaged children, or more children with low prior attainment, and with favourable Ofsted judgements.
- Secondary schools with up to 5 per cent of pupils eligible for free school meals (FSM) are over three times as likely to be rated 'outstanding' as schools with at least 23 per cent FSM (48 per cent vs. 14 per cent 'outstanding'). Those secondary schools with the most FSM pupils are much more likely to be rated 'inadequate' than those with the fewest (15 per cent vs. 1 per cent).
- The least deprived schools were also most likely to improve their Ofsted judgement and least likely to be down-graded, even after accounting for their previous Ofsted judgement.
- Secondary schools with the fewest pupils with low prior attainment are almost six times as likely to be rated 'outstanding' as schools with the most low prior attainers (47 per cent vs. 8 per cent). At the other end of the scale, schools with the most low prior attainers are much more likely to be rated 'inadequate' than those with the fewest low prior attainers (14 per cent vs. 2 per cent).
- These socio-economic and prior attainment gradients are not simply a fair reflection of value-added progress in schools. Our analysis suggests that while the distribution of 'inadequate' ratings may be fair on this basis, the distribution of 'outstanding' grades may not be.
- Based on performance in value-added progress, we would expect around half as many schools with the lowest rates of disadvantage to be rated 'outstanding' (13 per cent instead of 25 per cent for primaries; 25 per cent instead of 48 per cent for secondaries).
- Similarly, based on a value-added progress measure, we would expect around half as many primary schools with the fewest low prior attainers to be rated 'outstanding' (14 per cent instead of 27 per cent). In secondary schools, we would also expect fewer such schools (30 per cent instead of 47 per cent).
- While it is possible that aspects of school overall effectiveness *not captured* by value-added progress measures may have affected the observed ratings, on the basis of pupil progress alone, we might expect approximately twice as many 'outstanding' judgements among the

most disadvantaged schools, and among schools with the most low prior attainers, as are actually judged 'outstanding' by Ofsted.

Conclusions

These findings raise questions about whether the inspection system is fully equitable to schools with challenging intakes. We have found that the least disadvantaged schools are most likely to be judged 'good' or 'outstanding', and that notable proportions of 'good' and 'outstanding' schools are not down-graded, despite a substantial deterioration in their academic performance.

We have also found that if schools were rated according to levels of pupil progress, we would expect many fewer 'outstanding' schools with very low proportions of pupils eligible for free school meals, or low prior attainment when they join the school.

We conclude from this that there may indeed be some room for improvements to the school inspections system in future.

Introduction

Ofsted's function is 'to inspect and regulate services that care for children and young people, and services providing education and skills for learners of all ages'.¹ It carries out inspections and visits leading to published reports; it then shares best practice and monitors improvement, with the goal of achieving excellence in education and care.

This report focuses on certain aspects of Ofsted's oversight of education in state-funded schools. In practice, the purposes of the school inspection system are wide-ranging. For example, inspection judgements are used to help determine eligibility for system leadership roles, influence decisions about school closure, academisation and sponsorship, and inform parents about the quality of local schools. There are often competing claims on Ofsted and these are sometimes in tension with one another.

We address two specific questions about the functioning of the school inspection system. Firstly, we examine Ofsted's response to schools whose performance deteriorates, looking at how quickly these are inspected and how consistent the resulting judgements are with the identified deterioration in academic standards. These functions are at the core of Ofsted's role in monitoring, intervening and achieving excellence.

Secondly, we illustrate how the inspection judgements schools receive, and changes in judgement from inspection to inspection, are correlated with their pupil intakes. We consider schools with differing proportions of disadvantaged pupils (eligible for free school meals) and those with differing proportions of pupils with low prior attainment when they joined the school (the lowest quarter nationally).

These outcome patterns are important because of the high stakes consequences of receiving an adverse judgement from Ofsted, which can range from providing external support to assist the school leadership, through to more punitive measures which could have negative impacts on the school's ability to recruit and retain high quality teachers and leaders.

For schools judged as 'good' or 'outstanding', there may be opportunities to incentivise better outcomes and more inclusive schooling if the efforts of schools with more challenging intakes are fairly recognised and if schools with less challenging intakes are equally incentivised to strive for genuine excellence.

Methods

The analysis in this report includes inspections that took place from 2005/06 to 2014/15 (inclusive). School records have been restructured to link all predecessor and successor schools together irrespective of structure and governance changes so, for example, a sponsored academy will be linked to its predecessor school or schools.

We have done this because our aim is to examine the workings of the inspection system including those parts of the system that are apt to disappear from data structured around current school identity, due to closure of schools with poor performance. Similarly we have included schools that

¹ <https://www.gov.uk/government/organisations/ofsted/about>

have closed where they do not have an open successor school. The intention is to understand the effects of the Ofsted inspection process on the full range of school provision, not to understand the quality of current open schools.²

The analyses focus on Ofsted's 'overall effectiveness' judgements. While it is possible that some nuances might emerge if sub-judgements such as 'leadership and management' were analysed, we have not undertaken this analysis here because the sub-judgements are generally highly inter-correlated.

We analyse outcomes for primary schools, secondary schools and infant schools (where data availability permits) separately because each has a distinctive pattern of judgements and the numbers of primary schools tend to dominate any analysis of 'all schools'.

We have not analysed special schools in this report because differences in the type of needs experienced by pupils from school to school make comparisons unreliable, and because the relationship between disadvantage and pupil progress is less clear in special schools, where the special educational needs of pupils are more important than deprivation in influencing learning outcomes. The distribution of inspection outcomes is also very different for special schools, and there may therefore be issues around inspection that are unique to this school type.

We characterise more and less challenging school intakes according to the prevalence of children eligible for free school meals and of those with low prior attainment. While we have not specifically analysed children with special educational needs, low prior attainment is a reasonable proxy for this group, especially given that identification of children with SEN varies enormously and may be endogenous to school performance, and therefore Ofsted judgements.

Further methodological details specific to some analyses appear alongside their results.

² This means that figures in this report may not match similar published numbers.

Part 1: How well does Ofsted identify schools that deteriorate?

In this section, we make a quantitative assessment of Ofsted's response to schools whose performance, in terms of the academic progress of pupils, deteriorates substantially over time. Substantial deterioration is defined as having experienced a decline in the value-added progress (VA) made by pupils equivalent to at least 15 percentiles per year.

This means that if 100 schools were ranked according to VA, a substantially-deteriorating school would fall by at least fifteen places for each year since their latest inspection, or for each year between their previous and latest inspections. This is a conservative definition of deterioration that selects only extreme cases; fewer than one in ten schools decline by this amount in any given year; fewer still fall this far on average over a number of years.

In addition to using a very large average decrease in order to avoid identifying trivial changes that may be particularly likely to be caused by variation in the school's intake, we also apply additional filtering to remove any schools where the deterioration is due to volatility and decreases in VA are subsequently reversed.

This filtering creates two categories of substantially-deteriorated school. Schools in the 'persistent decline' category have a median annual decrease in VA that is equivalent to at least 15 percentiles (as well as a mean decrease of this size). Using a median dampens the effect of very large single-year changes and better reflects changes across several years. Schools in the 'sudden decline' category have a single-year decrease of at least 15 percentiles, at least two years ago, as well as a mean decrease of this size, but do not have a median decrease this large. This selects schools that have declined sharply and not recovered.

When considering analysis of Ofsted inspections over time it is important to remember that the framework for inspection is subject to change – altering both the content of inspections and their frequency. Between September 2005/06 and 2011/12 all state-funded schools were subject to routine inspection, and on average this would be every three years (though schools rated as 'outstanding' were likely to go longer between inspections). The 2012/13 academic year saw significant changes to these arrangements:

- Inspection of schools previously rated as 'satisfactory' (or more recently 'requires improvement') would be undertaken again within two years.
- Inspection of schools previously rated as 'good' would be undertaken on a risk-based approach beginning in the third year after inspection (the inspection must occur within the five years after the previous inspection).
- Schools previously rated as 'outstanding' would be exempt from inspection unless the risk assessment process identified a significant decline in performance.

There were further reforms to the inspection of 'good' schools from September 2015 (meaning that they would have shorter inspections every three years) but these occur after the time period to which our analysis relates.

How long is it since each school was last inspected?

Before considering how many years have elapsed since the latest Ofsted inspection for schools that have since deteriorated, we begin by looking at the average time since their latest inspection for all schools. Due to Ofsted’s risk management approach and prioritisation of weaker schools, those with better judgements typically have longer periods between inspections. The time elapsed since the latest inspection is very similar for primary and secondary schools.

For schools judged ‘outstanding’ at their last full inspection, the time elapsed since that inspection ranges from less than a year to around eight years, with an average of four years. Up to four years have passed since the last inspection for schools judged ‘good’, with an average of two years.

Schools judged ‘requires improvement’ at their last inspection have not been received a section 5 inspection for up to two years, with an average of just over a year. Up to three years have passed since the last section 5 inspection of schools judged ‘inadequate’, with an average of a year.

The pattern of longer waiting times since the latest inspection for some schools judged ‘inadequate’ than those judged ‘requires improvement’ is explained by ‘inspection holidays’ for schools that have become sponsored as a response to poor performance, to give them time to deliver improvements.

Figure 1.1: Primary schools, years since inspection



Figure 1.2: Secondary schools, years since inspection



Selecting schools that have deteriorated for inspection

Having familiarised ourselves with the typical lapse times since the latest inspection for each school, we now consider how many schools have substantially deteriorated since being inspected, and how long ago the inspections for those schools took place.

For primary schools, a total of 153 schools have declined persistently since their last inspection and a further 25 schools declined suddenly (at least two years ago) since inspection and have not recovered. These are a tiny proportion of all primary schools (1 per cent); the majority of this group has waited 3-4 years since their last inspection, as can be seen in figure 1.3.

Only a very small number of secondary schools have substantially deteriorated since their latest inspection; just 20 such schools, of which 19 declined persistently, were found in the analysis. All but one of these secondary schools has waited 3-4 years since its last inspection.

Figure 1.3: Primary schools with substantial deterioration

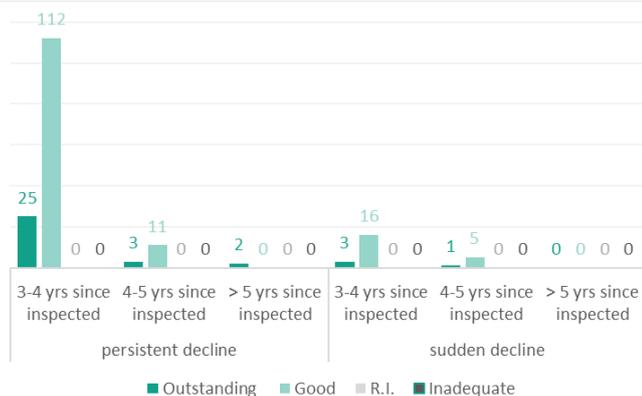
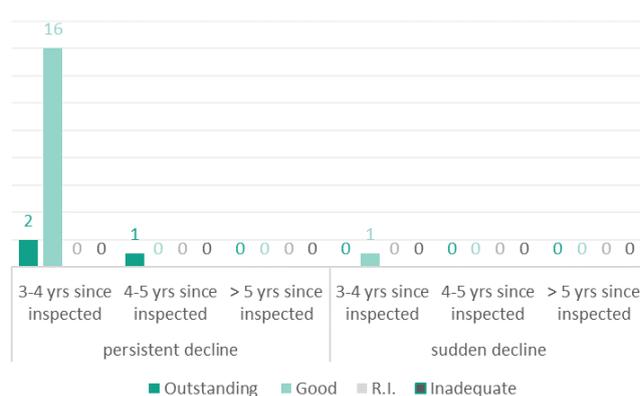


Figure 1.4: Secondary schools with substantial deterioration



However, it is worth noting that since 2012, ‘outstanding’ schools have been exempt from routine re-inspection. In our analysis we only found previously ‘good’ or ‘outstanding’ schools that had deteriorated substantially and not yet been re-inspected; there were no cases of ‘requires improvement’ or ‘inadequate’ schools in this group. This may mean that some of the deteriorating ‘outstanding’ schools could continue without re-inspection in future, and that over time their numbers could increase. This is due to Ofsted’s focus on re-inspecting schools that have already been judged ‘requires improvement’ or below. What we observe is the latest Ofsted judgement dominating more recent statistical information about academic performance in the decision of when to inspect.

Overall, this analysis suggests that Ofsted has been successful in ensuring deteriorating schools do not wait *longer than average* for their next inspection, resulting in almost no cases where schools that deteriorate are left uninspected for over four years, and few wait that long. However, the lapse since the latest inspection for the small number of schools that have deteriorated substantially in the interim is close to the average for all schools with the same previous judgement. This suggests that deteriorating schools are not necessarily pushed to the front of the queue for re-inspection, although they do not fall to the back either.

Recognising deterioration in inspection judgements

Having seen that schools whose academic performance deteriorates substantially are inspected reasonably quickly in most cases, the next question about Ofsted’s response to deterioration is how well those inspections recognise the deterioration in the overall effectiveness judgement.

Figures 1.5 and 1.6 plot the probability of a school receiving a lower inspection judgement than its previous one, i.e. the chances that Ofsted’s judgement of effectiveness will worsen. The probabilities are shown for schools whose VA had declined persistently since the previous inspection, those whose VA had declined suddenly, and those where no substantial decline in pupil progress occurred between the previous and latest inspection.

Overall, secondary schools were more likely to receive a worsened judgement than primary schools, but a similar pattern is seen in both school phases. Predictably, schools with higher previous judgements were more likely to receive a worsened judgement at the next inspection, particularly in the case of schools previously judged ‘outstanding’.

‘Outstanding’ schools can only remain at the same judgement or slip to ‘good’ or lower, given that no higher judgement is possible. Similarly, schools rated ‘requires improvement’ were less likely to

worsen to 'inadequate' in their next inspection because the 'inadequate' rating is generally reserved for serious cases of underperformance.

In total, 1,221 primary schools were identified in the analysis of value-added progress histories as having deteriorated substantially between their previous and latest inspection (64 were previously rated 'outstanding', 406 'good', 688 'requires improvement', and 63 'inadequate'). There were 228 secondary schools that had deteriorated substantially between inspections (13 were previously judged 'outstanding', 47 'good', 146 'requires improvement', and 22 'inadequate').

Figure 1.5: Probability of judgement worsening, Primary

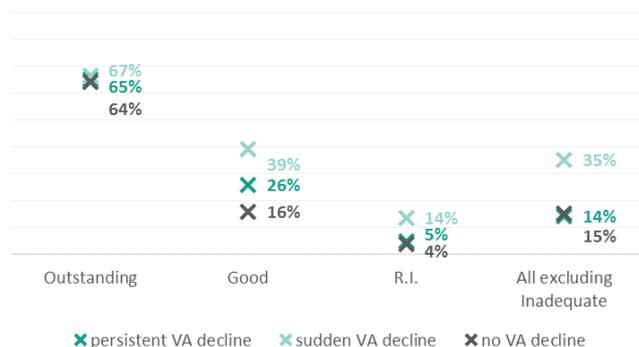
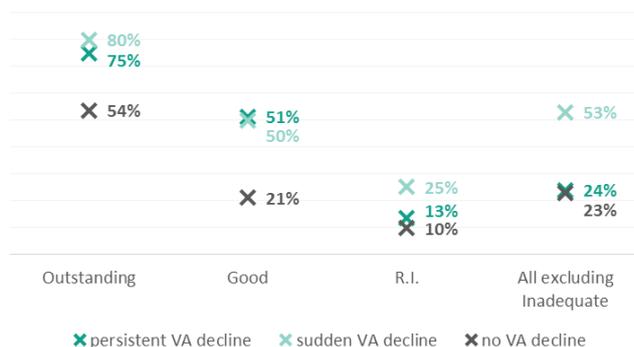


Figure 1.6: Probability of judgement worsening, Secondary



For primary schools previously rated 'outstanding', the probability of a worsened Ofsted judgement at the latest inspection was extremely similar irrespective of whether they were among the 64 whose academic performance had deteriorated substantially. 67 per cent with sudden declines in VA were down-graded, compared to 65 per cent with persistent VA decline, and 64 per cent with no decline in pupil progress. This means that a third of the schools with substantial deterioration nevertheless retained their 'outstanding' judgement.

For previously 'outstanding' secondary schools there was more of a difference between those that had deteriorated and those that hadn't, and numbers in the deteriorated group were very small.

For schools previously rated 'good', just one third of the 406 primary schools with substantial deterioration in their pupil progress by their latest inspection received a lower Ofsted judgement (39 per cent of those with sudden VA declines and just 26 per cent of those with persistent VA decline).

The 688 previously 'requires improvement' primaries with substantial deterioration in their pupil progress were very unlikely to face a down-graded judgement of 'inadequate' (14 per cent of those with sudden VA declines and 5 per cent of those with persistent VA declines).

Around half of the 47 secondary schools previously rated as 'good' whose value-added performance subsequently deteriorated substantially received a worsened Ofsted judgement; the other half were not down-graded from 'good' despite the deterioration.

Secondaries previously rated 'requires improvement' were a little more likely than primaries to be down-graded to 'inadequate', but the odds were still in favour of the 146 substantially-deteriorated schools escaping a downgrade (only 25 per cent of those with sudden VA declines slipped to 'inadequate' and just 13 per cent of those with persistent VA declines).

Overall, the analysis found fairly large numbers of schools whose Ofsted overall effectiveness judgements did not change consistently with substantial deterioration in the academic progress made by their pupils relative to other schools. A total of 962 primary schools and 152 secondary schools fitted this pattern. **In fact, 47 per cent of deteriorating primaries and 33 per cent of deteriorating secondaries actually *improved* their Ofsted judgement despite large decreases in their value-added progress measures between their previous and latest inspections.**

These findings suggest that Ofsted has not been as effective at consistent recognition of deteriorated academic performance as it has been at ensuring schools are inspected regularly.

Part 2: Is it easier for some schools to be judged ‘good’ or ‘outstanding’ than others?

In this section, we turn to the relationship between the mix of pupils who attend a school and the inspection judgements it receives. Firstly, we consider schools with differing proportions of disadvantaged pupils (eligible for free school meals) and secondly, we examine those with differing proportions of pupils with low prior attainment when they joined the school (the lowest quarter nationally).

Ofsted judgements for schools with lower or higher levels of socio-economic disadvantage

Figures 2.1 to 2.3 chart the Ofsted inspection judgement distribution for infant schools, junior and all-through primary schools, and secondary schools, according to the quintile they fall into based on the percentage of pupils eligible for free school meals.

There is a clear and systematic negative correlation between school intakes with more disadvantaged children, and more favourable Ofsted judgements. This relationship is strongest in secondary schools and weakest in junior and all-through primary schools.

Secondary schools with up to 5 per cent of pupils eligible for free school meals (FSM) are over three times as likely to be rated ‘outstanding’ as schools with at least 23 per cent FSM (48 per cent ‘outstanding’ vs. 14 per cent). At the other end of the scale, schools with the most FSM pupils are much more likely to be rated ‘inadequate’ than those with the fewest FSM pupils (15 per cent vs. 1 per cent).

Infant schools are the most likely to be rated ‘outstanding’ across the board, with over 51 per cent of schools with up to 4 per cent FSM receiving the highest rating possible. There is still a clear gradient, with just 16 per cent of schools with at least 30 per cent FSM rated ‘outstanding’.

Primary schools have the weakest relationship between disadvantaged intakes and Ofsted judgements, but schools with at least 30 per cent FSM are still less than half as likely as those with up to 4 per cent FSM to be judged ‘outstanding’ (11 per cent vs. 25 per cent) and five times as likely to be rated ‘inadequate’ (5 per cent vs. 1 per cent).

Turning to changes in Ofsted judgements between the previous and latest inspections, schools with the fewest FSM pupils are most likely to improve from ‘good’ to ‘outstanding’. The least deprived primary and junior schools are twice as likely as their most deprived counterparts to cross this threshold, and for secondary schools the least deprived are three times as likely as schools in all other FSM bands to do so.

In primary, junior and secondary schools, the least deprived schools were also most likely to improve from ‘requires improvement’, and the most deprived schools were least likely to do so (87 per cent vs. 74 per cent in primary and junior schools; 75 per cent vs. 55 per cent in secondary schools). In secondary schools, the ‘inadequate’/‘requires improvement’ boundary also followed a disadvantage gradient, with 100 per cent of the least deprived ‘inadequate’ schools improving compared with 81 per cent of the most deprived ‘inadequate’ schools.

A reverse pattern is observed for the probability that schools will receive a worsened Ofsted judgement compared with their previous rating; the most deprived schools are systematically more likely to be down-graded than the least disadvantaged schools, even after accounting for their more unfavourable distribution of previous Ofsted judgements.

Primary and junior schools with the most FSM pupils were more likely to be down-graded from 'requires improvement' to 'inadequate' than those with the fewest FSM pupils (6 per cent vs. 1 per cent); in secondary schools this was also more likely (17 per cent vs. 7 per cent).

The risk of slipping from 'good' was twice as likely for primary and junior schools with the most FSM pupils (22 per cent vs. 9 per cent), and five times as likely for secondary schools (34 per cent vs. 6 per cent).

The pattern we have described, whereby schools with the fewest disadvantaged pupils are rated more highly, and those with the most disadvantaged pupils are more likely to be judged 'requires improvement' or 'inadequate' matters for several reasons. It means that schools and school leaders with very few disadvantaged children are the most likely to become system leaders, providing training and advice to other schools, and that these system leaders are likely to be unevenly distributed geographically. It means that disadvantaged schools are more likely to struggle with recruitment and retention of high quality teachers and leaders. It encourages parents to believe that disadvantaged schools would offer a poor education to their child.

The latter point is worth expanding on. If parents prioritise schools with the fewest disadvantaged children when applying for school places, in the belief that these offer the best education, then those families who are themselves disadvantaged in particular could often be misled. This is because progress gaps for disadvantaged children are wider and increasing in schools with the fewest disadvantaged children, meaning that disadvantaged children who attend these schools are being left further behind.³

Is the socio-economic gradient in Ofsted grades explained by value-added progress levels?

Figures 2.4 and 2.5 present the distribution of Ofsted judgements for schools with different proportions of children eligible for free school meals as they would appear, if they were determined by the school's mean absolute level of value-added progress between their previous inspection and their latest inspection. We have divided schools into categories of the same size as the Ofsted inspection judgements based on their mean VA scores to provide a comparison with actual Ofsted grades.

We do not suggest that Ofsted judgements should actually be determined in this way. Rather, we are using this as a proxy to test whether the pattern of judgements seen in figures 2.2 and 2.3 is explained by differences in standards; it is a plausibility test for the negative association between intakes with the most FSM pupils and less favourable Ofsted judgements.

³ Hutchinson, J. and Dunford, J. (2016), *Divergent pathways: the disadvantage gap, accountability and the pupil premium*. Education Policy Institute.

This analysis suggests that the distribution of ‘inadequate’ ratings may be fair on this basis, but that the distribution of ‘outstanding’ and grades may not be. ‘Good’ and ‘requires improvement’ grades look broadly as expected.

Based on value-added progress, we would expect around half as many primary and junior schools with the lowest rates of FSM (up to 4 per cent) to be rated ‘outstanding’ as actually have been (13 per cent vs. 25 per cent). We would also expect fewer schools with 5 to 9 per cent FSM in ‘outstanding’, and around the same number of those with 10 to 17 per cent FSM.

With the caveat that these schools may not have been ‘outstanding’ in aspects other than academic achievement, and therefore we can’t be sure that this is the case, **based on pupil progress we would expect more primary schools with 18 to 29 per cent FSM to be rated ‘outstanding’ and twice as many with at least 30 per cent FSM (22 per cent vs. 11 per cent).**

In secondary schools, the distribution of value-added progress performance also suggests that there should be around half as many ‘outstanding’ schools with the fewest FSM pupils (for schools with up to 5 per cent FSM pupils, 25 per cent vs. 48 per cent). We would also expect more ‘outstanding’ schools with at least 23 per cent of pupils eligible for free school meals (25 per cent vs. 14 per cent).

Latest Ofsted judgements for schools, by percentage of pupils eligible for free school meals

Figure 2.1: Infant schools

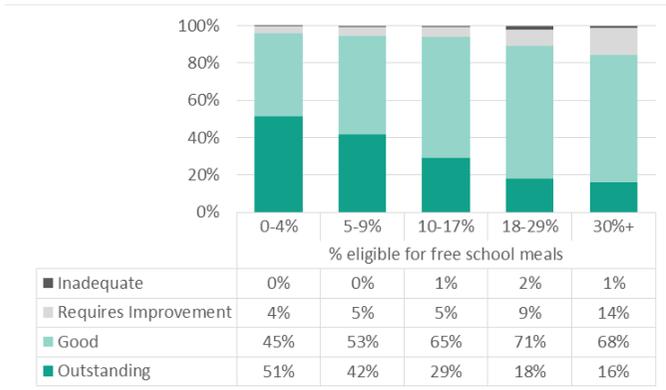


Figure 2.2: Primary & junior schools

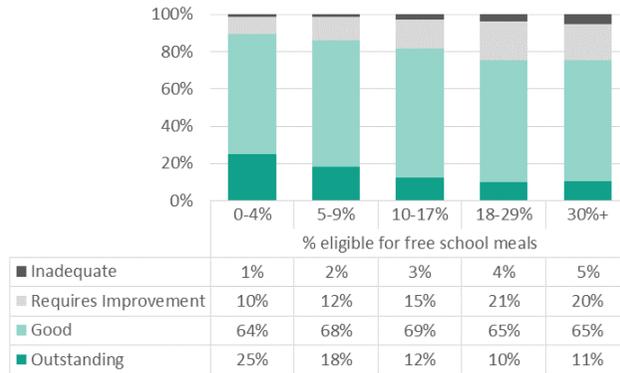
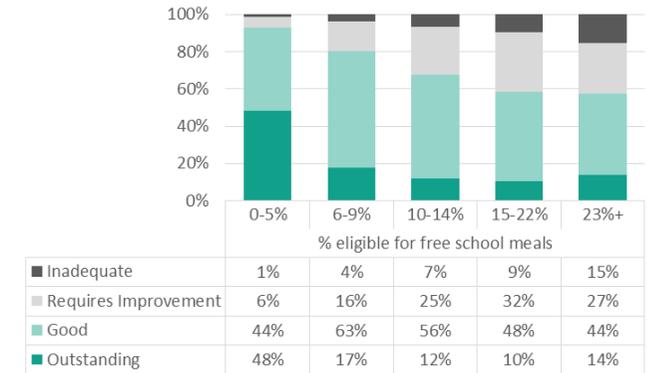


Figure 2.3: Secondary schools



Mean value-added category for years between last two inspections, by percentage of pupils eligible for free school meals

VA unavailable for infant schools

Figure 2.4: Primary and junior schools

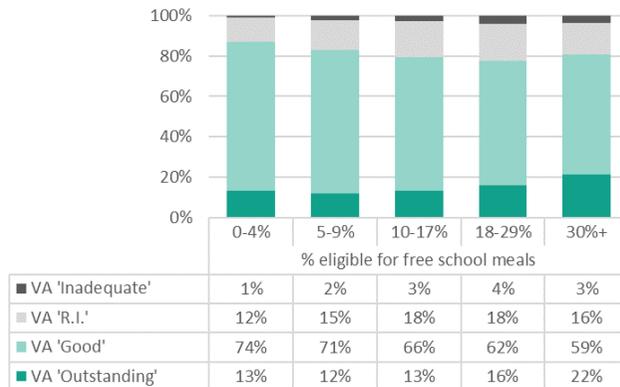
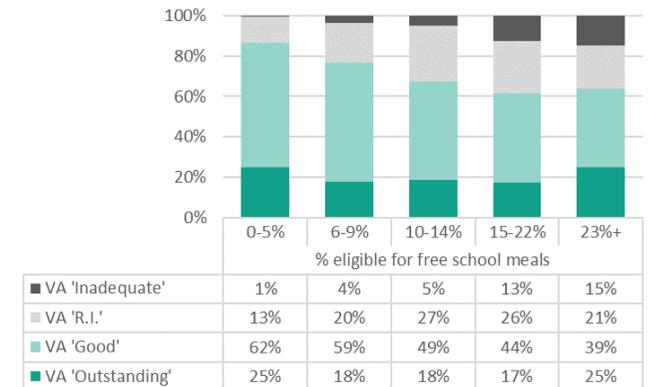


Figure 2.5: Secondary schools



Probability of Ofsted judgement improving at latest inspection, by percentage of pupils eligible for free school meals and previous judgement

Figure 2.6: Infant schools



Figure 2.7: Primary and junior schools

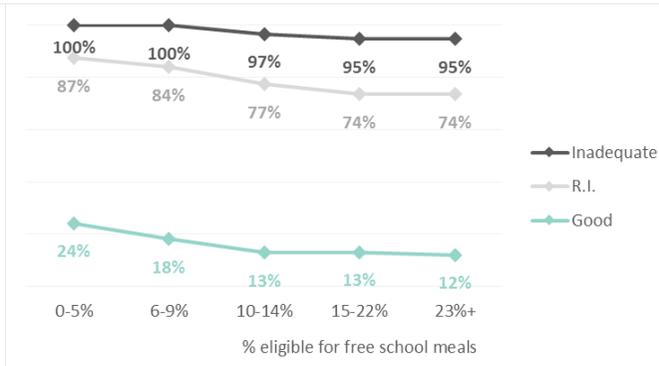
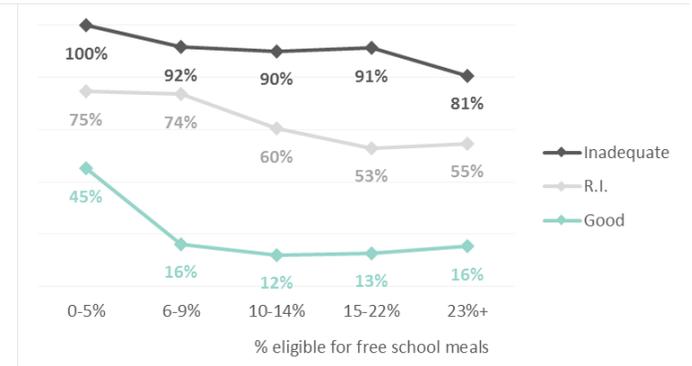


Figure 2.8: Secondary schools



Probability of Ofsted judgement worsening at latest inspection, by percentage of pupils eligible for free school meals and previous judgement

Figure 2.9: Infant schools

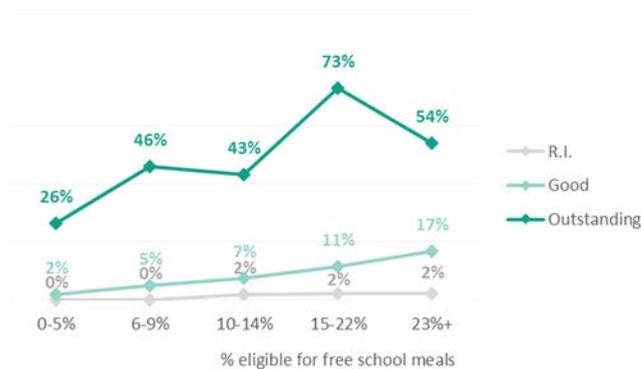


Figure 2.10: Primary and junior schools

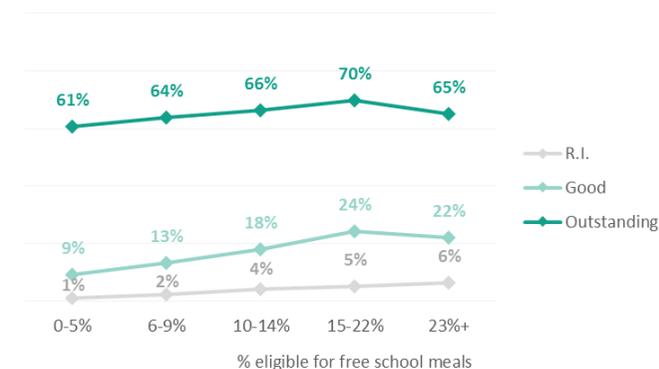
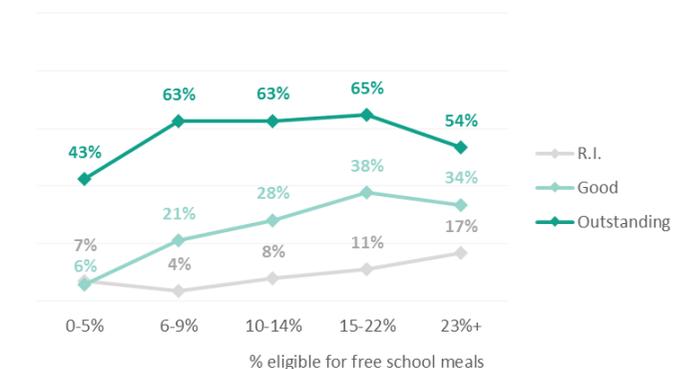


Figure 2.11: Secondary schools



Probability of Ofsted judgement changing in schools with increased / decreased percentage of pupils eligible for free school meals, by previous judgement

Figure 2.12: Infant schools

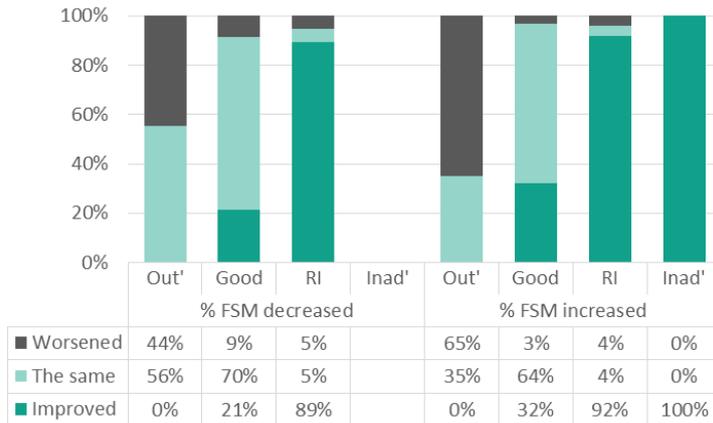
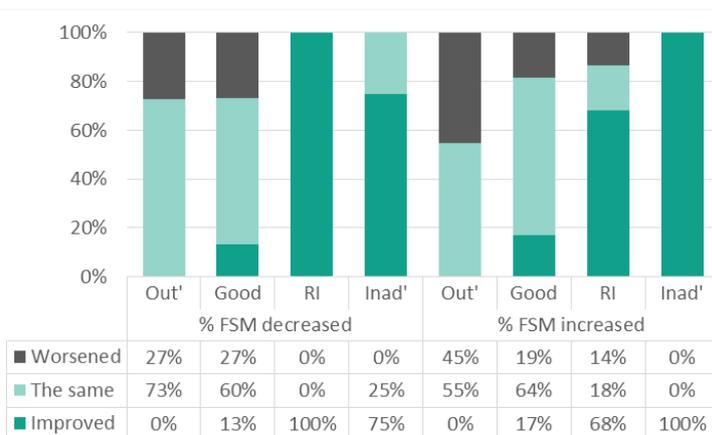


Figure 2.13: Primary and junior schools



Figure 2.14: Secondary schools



Schools serving pupils with low prior attainment

In this section we examine the relationship between schools with the largest proportions of pupils with low prior attainment at the beginning of primary or secondary school, and Ofsted judgements. These are often, but not always, the same schools as those with very disadvantaged intakes, but also include mainstream schools with the largest proportions of pupils with special educational needs.

In the analysis below, we define low prior attainers as those pupils in the lowest quarter of attainment, based on age 7 teacher assessments in English, maths and speaking for primary prior attainment, and on age 11 national curriculum tests in English and maths for secondary prior attainment.

Echoing the pattern observed for socio-economic disadvantage, there is a clear and systematic negative correlation between school intakes with more children who have low attainment when they join the school, and favourable Ofsted judgements. This relationship is strongest in secondary schools and weaker in primary schools.

Secondary schools with the fewest pupils with low prior attainment are more likely to be rated 'outstanding' than schools with the most low prior attainers (47 per cent vs. 8 per cent). At the other end of the scale, schools with the most low prior attainers are also more likely to be rated 'inadequate' than those with the fewest low prior attainers (14 per cent vs. 2 per cent).

Primary schools have a weaker relationship between low prior attainment and Ofsted judgements, but schools with the fewest low prior attainers are still three times as likely to be judged 'outstanding' (27 per cent vs. 8 per cent), and half as likely to be rated 'inadequate' (2 per cent vs. 5 per cent), compared with schools with the highest proportions of low prior attainers.

Turning to changes in Ofsted judgements from the previous inspection to the latest inspection, schools with the fewest low attaining entrants are most likely to improve their rating. Primary schools with the fewest low attaining entrants are twice as likely to climb from 'good' to 'outstanding', and secondary schools with the fewest low prior attainers are four times as likely to do so.

Schools with the fewest low prior attainers were also more likely than those with the most to improve from 'requires improvement' (84 per cent vs. 71 per cent among primaries; 79 per cent vs. 54 per cent among secondaries). The same was true of improving from 'inadequate' (100 per cent vs. 93 per cent among primaries; 100 per cent vs. 83 per cent among secondaries).

A reverse pattern is observed for the probability that schools will receive a worsened Ofsted judgement compared with their previous rating; the schools with most low prior attainers are systematically more likely to be down-graded than those with the fewest, even after accounting for previous Ofsted judgements.

Compared with those with the fewest low prior attainers, schools with the most low prior attainers were three to four times as likely to drop from 'requires improvement' to 'inadequate' (7 per cent vs. 2 per cent among primaries; 16 per cent vs. 4 per cent among secondaries). Primary schools with the most low prior attainers were also twice as likely to slip from 'good' (25 per cent vs. 11 per cent); secondaries with the most low prior attainers were four times as likely to do so (35 per cent vs. 8 per cent).

Among primary schools, there was a similar pattern for down-grading 'outstanding' schools (74 per cent of those with the most low prior attainers vs. 57 per cent of those with the fewest). As can be seen in figure 2.22, secondary schools had a more complex, inverted 'u' shaped probability of being down-graded from 'outstanding'. Those with 0 to 10 per cent low prior attainers had a 39 per cent chance of slipping, those with 16 to 19 per cent low prior attainers had a 71 per cent chance, and those with at least 28 per cent low prior attainers had a 52 per cent chance of being down-graded.

Is the prior attainment gradient in Ofsted grades explained by value-added progress levels?

As with the socio-economic gradient, we have tested whether the pattern of judgements for schools with few or many low-prior-attaining children is explained by differences in performance. Figures 2.17 and 2.18 present the distribution of Ofsted judgements for schools with different proportions of low prior attainers as they would appear, if they were determined by the school's mean absolute level of value-added progress between their previous inspection and their latest inspection. Again, we do not suggest that Ofsted judgements should actually be determined in this way, but are proposing this as a plausibility test for the outcomes observed in figures 2.15 and 2.16.

As was the case with disadvantage, the distribution of value-added progress by school prior attainment suggests that we should expect around half as many primary schools with the fewest (up to 12 per cent) low prior attainers to be rated 'outstanding' as actually have been (14 per cent vs. 27 per cent). We would also expect fewer schools with 13 to 19 per cent low prior attainers in 'outstanding', and around the same number of those with 20 to 26 per cent low prior attainers.

With the caveat that these schools may not have been 'outstanding' in *all* respects, and therefore we can't be sure that this is the case, based on pupil progress we would expect more primary schools with 27 to 34 per cent low prior attainers to be rated 'outstanding', and over twice as many with at least 35 per cent low prior attainers (21 per cent vs. 8 per cent).

In secondary schools, the distribution of value-added progress performance also suggests that there should be fewer 'outstanding' schools with the fewest low prior attainers (for schools with up to 12 per cent low prior attainers, 30 per cent vs. 47 per cent).

Subject to the caveat above, we might also expect around twice as many 'outstanding' schools with at least 20 per cent low prior attainers among their pupils.

Latest Ofsted judgements for schools, by percentage of low prior attainers

Figure 2.15: Primary and junior schools

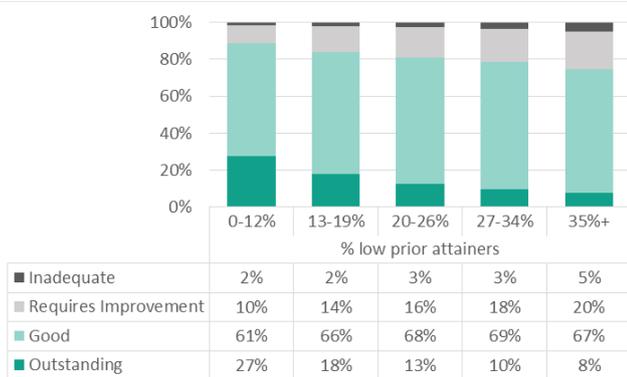
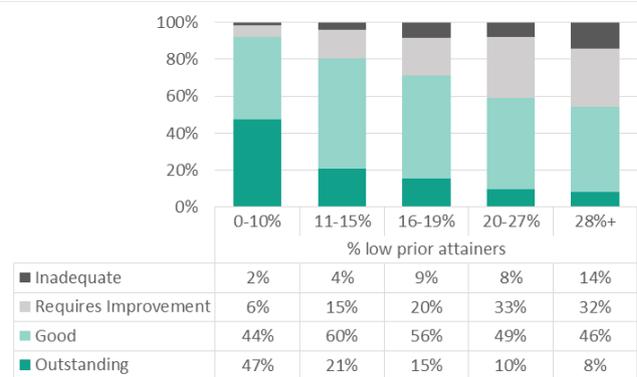


Figure 2.16: Secondary schools



Mean value-added category for years between last two inspections, by percentage of low prior attainers

Figure 2.17: Primary and junior schools

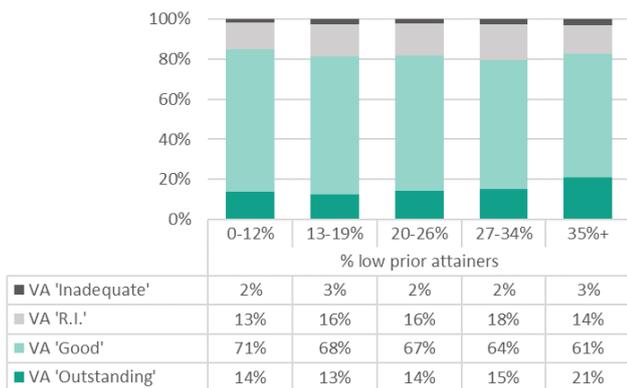
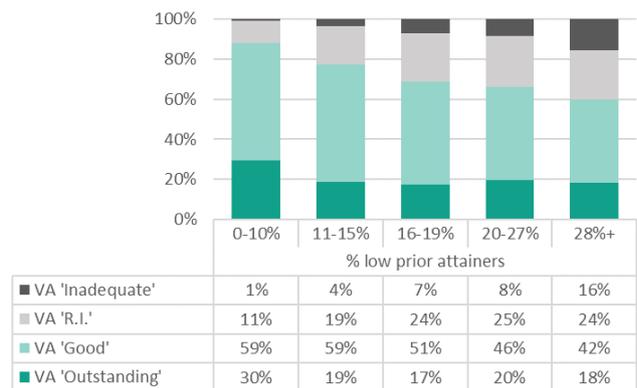


Figure 2.18: Secondary schools



Probability of Ofsted judgement improving, by percentage of low prior attainers and previous judgement

Figure 2.19: Primary and junior schools

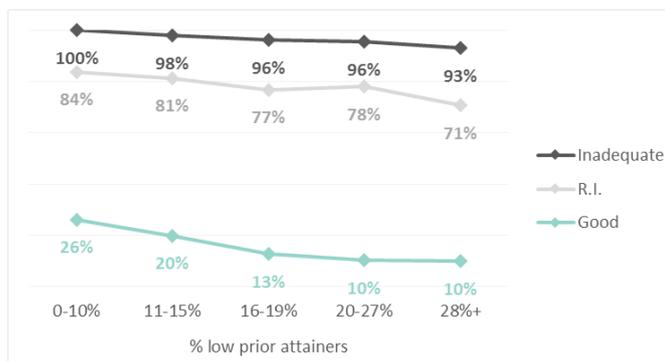
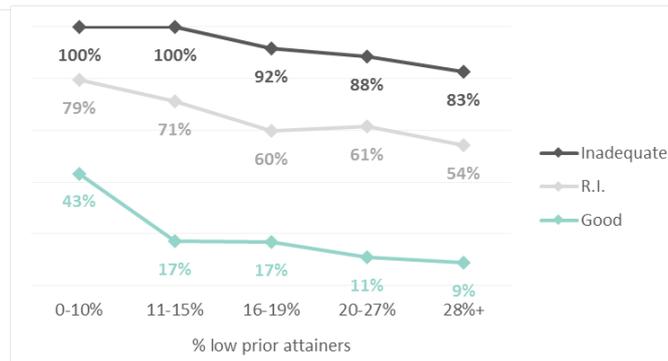


Figure 2.20: Secondary schools



Probability of Ofsted judgement worsening, by percentage of low prior attainers and previous judgement

Figure 2.21: Primary and junior schools

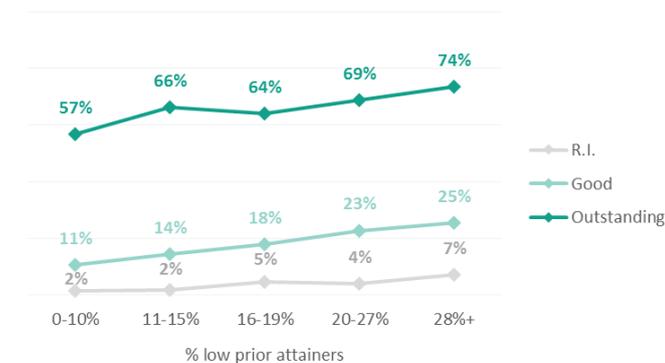
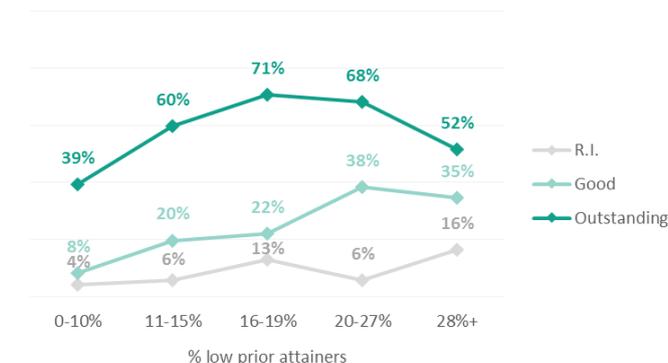


Figure 2.22: Secondary schools



Probability of Ofsted judgement changing at latest inspection in schools with increased / decreased percentage of low prior attainers, by previous judgement

Figure 2.23: Primary and junior schools

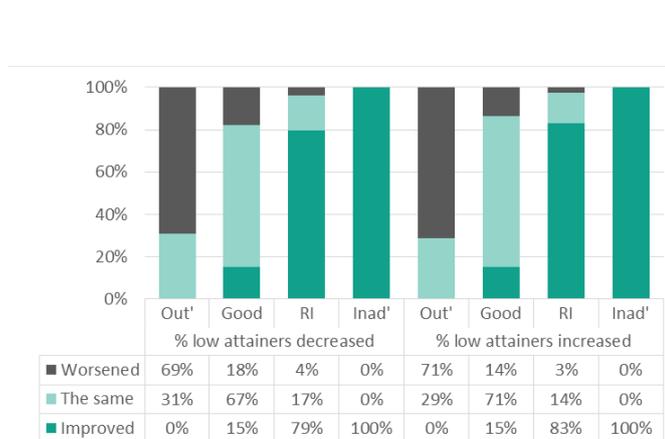
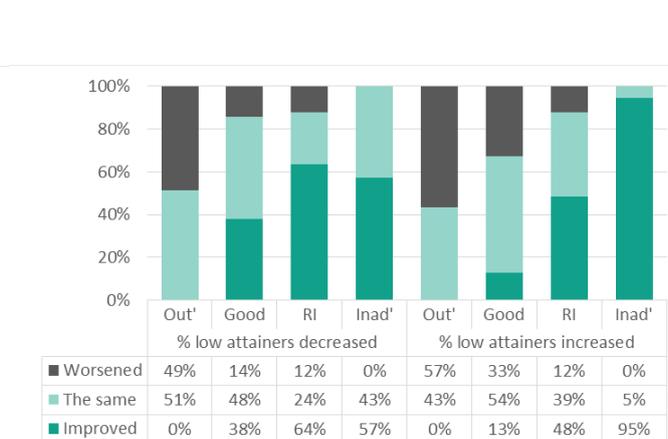


Figure 2.24: Secondary schools



Conclusion

In this report we consider whether, over the nine years to 2014/2015, the inspection system has been responsive to deterioration in school performance and to the wider challenges that some schools face.

These are important questions because recent changes to the inspection framework mean that schools judged 'outstanding' can go for many years without being re-inspected, and because unfavourable inspection judgements can have serious repercussions for schools and their communities.

Considering the findings of parts 1 and 2 together suggests that the inspection system may not be fully equitable to schools with challenging intakes. We have found that the least disadvantaged schools are most likely to be judged 'good' or 'outstanding', and that notable proportions of 'good' and 'outstanding' schools are not down-graded following a substantial deterioration in their academic performance.

While there are plausible reasons to expect lower standards in some schools with challenging intakes, including higher rates of teacher turnover and fewer experienced teachers⁴, these may not be the full explanation for the steep disadvantage and prior attainment gradients. We have also found that if schools were rated according to levels of pupil progress, we would expect many fewer 'outstanding' schools with very low proportions of pupils eligible for free school meals, or low prior attainment when they join the school.

If this analysis is correct in its implications, it is also likely that there would be more 'outstanding' schools in disadvantaged areas, which could provide more system leaders in these areas, and would reward and recognise able school leaders who take on the most challenging schools.

⁴ Allen, R., Mian, E. and Sims, S. (2016), *Social inequalities in access to teachers*. Social Market Foundation.

Annex: Data sources

A range of data sources have been used in this publication. Any inferences or conclusions derived from these data sources are the responsibility of the Education Policy Institute and not the data owner.

Edubase

The Department for Education's register of educational establishments in England and Wales.

<http://www.education.gov.uk/edubase/home.xhtml>

National Pupil Database

The Department for Education's database of attainment and characteristics for pupils at state-funded schools in England.

<https://www.gov.uk/government/collections/national-pupil-database>

Ofsted inspection judgements

Schools management information data: inspection outcomes from 2005 to 2015.

<https://www.gov.uk/government/statistical-data-sets/monthly-management-information-ofsteds-school-inspections-outcomes>