

The Features of Effective School Groups: Measuring pupil inclusion and attainment at school-group level

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February 2024

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Research Area:
School Performance,
Admissions,
and Capacity



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Foreword

School governance has changed radically since 2010. The growth of the academies programme has meant that around 49 per cent of primary and secondary schools are now governed by an academy trust, representing 61 per cent of pupils. The remaining schools are still governed either by local authorities, diocese groups or other federations.

Over the past decade or so, there has been significant interest in understanding which governance model is most successful, and organisations including the Department for Education, the Sutton Trust and the Education Policy Institute have all undertaken detailed analysis trying to answer this question.

The research, to date, has reached similar conclusions; that there is little difference on average in the performance between MATs and local authority groups and, in fact, there is more variation within each group than between them. But the research has also tended to focus on narrow metrics of performance, usually just progress and attainment. There has not been an in-depth study of wider indicators of success, such as inclusivity, the health of the workforce and financial efficiency.

These are important indicators because they tell us whether school groups are delivering high academic results while also still representing their local communities, whether they might be “burning out” their teachers or, whether their results might come at a very high financial cost.

This is the first major report from an innovative new study which aims to shed light on two important questions. The first is “How well are school groups performing on wider measures and is there a trade-off between academic attainment, inclusion, workforce and financial health?” The second is “What can we learn about the school groups that are achieving well against a broad range of measures?”.

This report and the accompanying online tool aim to begin to answer the first question, by enabling readers to look at measures of inclusion, alongside progress and attainment. In the coming months, we will add workforce and financial health measures into the tool to allow for an even more rounded comparison.

We will also report further findings from our national survey, Decisions in Education in England Panel (DEEP), that has gathered information from staff leading and working in schools and school groups over the past two years. This will help us to identify some of the common policies and practices that are associated with high performing groups.

This study is intended to be helpful to the entire schools’ sector. It should help the Department for Education and Ofsted to consider how it might reform accountability and spread best practice across the system; school group leaders to benchmark their performance with similar groups and to create networks; and give parents more holistic information about the schools that operate in their local area.

Natalie Perera, CEO, Education Policy Institute

Executive summary

This report is designed to accompany our online [web tool](#), as well as being a standalone piece of research. We explore a series of metrics EPI has developed to evaluate both the inclusion and attainment outcomes of school groups in England. This is the first set of findings from a larger programme of work which aims to produce a more rounded definition of what a ‘good’ school group looks like. School groups in this context cover a variety of different structures that have oversight of more than one school; this includes multi-academy trusts (MATs), local authorities, dioceses, and federations. We will be building on this research throughout 2024 with the development of additional metrics covering finances and workforce.

This work is motivated by the notion that there is no single measure by which a school or school group should or could be judged. It prompts a move away from a historic tendency to focus on attainment as the sole criteria by which to judge the relative performance of schools and school groups. Our metrics are focused in three key domains: school choice and admissions, absence and suspensions, and attainment and progress. Throughout, we present multiple metrics in tandem to allow for a more balanced and nuanced picture. This report illustrates that there are often trade-offs and highlights some of the relative areas of strength and weakness across different group types and sizes.

Our [web tool](#) gives users additional flexibility to interrogate the metrics for an individual school group. Users can identify the relative strengths and weaknesses of a given group e.g., a group may have high attainment outcomes but not be particularly inclusive when considering admissions. It also allows for comparisons with other groups, where potential trade-offs can be explored.

This report finds:

- Across all the metrics presented there is considerably more variation *within* school group types compared to *between* school group types. The average multi-academy trust (MAT) and the average local authority look similar, particularly at secondary phase. However, a given MAT often has quite different outcomes when compared to another MAT.
- Amongst secondary groups, the variation *within* MATs is greater than the variation *within* local authorities. There are, though, some differences between the school group types on average. The median local authority has a lower rate of suspensions, whilst the median MAT has higher progress scores for both disadvantaged and low prior attaining pupils.
- Primary school groups linked to dioceses (MAT and non-MAT) have the lowest median scores on school admissions, implying they are amongst the least inclusive school groups on this dimension. These school groups do, however, have relatively low levels of persistent absence and the highest median overall attainment.
- More generally, the best performing groups on overall attainment tend to receive a lower proportion of applications from disadvantaged pupils when compared to the proportion of disadvantaged pupils living in the local area. This provides indicative evidence that there are barriers for disadvantaged pupils to applying to schools in high-performing groups.

- There are strong negative relationships between rates of persistent absence, suspensions and unexplained exits when correlated with overall attainment. School groups with high levels of overall headline attainment tend to have lower rates of absence and suspension.
- Large MATs (with 10 or more schools in a phase) have, on average, higher rates of persistent absence, suspension, and unexplained exits than smaller MATs and local authorities.
- But these large MATs, on average, also attract and admit disadvantaged pupils at greater relative rates given their local populations. At the same time, they have higher attainment outcomes for low prior attaining and disadvantaged pupils. So, whilst they tend to perform poorly on one dimension of inclusion – absence and suspensions – they perform relatively well on another – school choice and admissions.

Policy recommendations

- **The accountability and inspection system should be reviewed, and consideration should be given to how it can better reflect the different pupil demographics and circumstances of individual schools.** Schools that admit representative proportions of disadvantaged pupils or those with additional needs should not be penalised under any potential new system.
- **The Department for Education should now publish easily accessible metrics for school groups, in line with its approach of "trust quality descriptors".** This would allow users to see the relative strengths and weaknesses of school groups and allow a more informed understanding of their performance and how they reflect their local communities.
- **The school admissions code should be reviewed with a focus on inclusion.** In particular, it should consider why certain types of school groups (such as dioceses) appear to be less likely to reflect their local areas in terms of the number of pupils from low-income backgrounds that they admit.

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Introduction

Most schools in England do not work in isolation. Schools often work as part of wider groups and networks, such as academy trusts, federations, charitable trusts, dioceses, and other schools in the local authority. These different school groupings play an important role in the outcomes of young people in England, particularly the most disadvantaged, and yet little is known about how schools operate in groups effectively.

EPI has been undertaking a large programme of work with the aim of producing a more rounded definition of what a 'good' school group looks like. We are motivated by the notion that there is no single measure by which a school or school group should or could be judged. Previous work has mainly focused on pupil progress and attainment, and judged school improvement based on these pupil outcomes. Whilst helpful, it does not provide a comprehensive way to judge the overall effectiveness of school groups. To develop a more holistic approach, we have developed a series of metrics which when viewed in tandem allow for a more balanced and nuanced picture of the relative strengths and weaknesses of different school groups. We aim to identify the groups which not only enable strong pupil outcomes in terms of progress and attainment but do so whilst also achieving high standards in pupil inclusion, ensuring workforce sustainability, and balancing financial efficiency.

In this report we take a closer look at the metrics we have developed to evaluate the inclusion and attainment outcomes of school groups. This has involved extending existing EPI work in this space, such as our 'unexplained exits' methodology as well as developing new metrics and aggregating Department for Education (DfE) defined metrics to school group level. Taken together, these metrics aim to provide a rounded picture of a school group's progress towards achieving a high standard of pupil inclusion.

This report is accompanied by a web tool. Whilst this report provides much of the context and methodological considerations that sit behind our new metrics, the tool is intended to give users flexibly to interrogate our metrics in much finer detail. This includes comparing groups with each other. The tool is available [here](#).

School groups in England

There have been large increases in academisation over the last decade. Nevertheless, academy trusts are just one way in which schools can be grouped – 51 per cent of schools, teaching 39 per cent of all primary and secondary pupils are outside the academy system.¹

The mixed system in England also encompasses schools in federations, foundation school trusts, and those of religious designation which have important relationships with their diocese. Local authorities are another type of grouping.

School groups are set to remain a key feature of the school system and will likely remain central to the government's school improvement strategy. In last year's schools White Paper, the government laid out two key policy directions which aimed to increase academisation.² It stated that all schools in England should be part of a "strong trust" by 2030 and plans were also outlined to give local authorities the powers to establish new multi-academy trusts. Whilst both the target of achieving a fully trust-led system by the end of the decade and the policy of encouraging local authorities to set up their own trusts have subsequently been dropped, the direction of travel is still towards a more academised system.^{3,4}

One of the success criteria given in the White Paper to identify a "strong trust" was that it delivers "high quality and inclusive education". This criterion is not easily condensed into a single measure though, hence our use of multiple metrics to provide a well-rounded picture. In turn, this makes it hard to identify with any degree of certainty whether one school group is overall 'better' than another group. Our accompanying [data tool](#) allows the user to make simultaneous comparisons across our metrics between different groups, highlighting area of relative strength and weakness.

Whilst we also cannot say whether one type of governance is better than another, we do present charts of each metric in this report, split by governance type to provide indication of the similarities and differences on individual metrics. Our [data tool](#) allows any two groups to be compared regardless of their type (e.g., a multi-academy trust can be compared with a local authority); these comparisons may be useful but consideration should be given to the context of the two groups, such as geographic spread, size and pupil demographics.

¹ [Get Information About Schools](#) (October 2023)

² HM Government "[Opportunity for all: strong schools with great teachers for your child](#)", CP 650 (2022)

³ Nick Gibb, [UIN 121149](#), *Answer to written parliamentary question* (February 2023)

⁴ Schools Week, "[DfE ditches two key academy proposals](#)" (February 2023)

Measuring pupil inclusion

To be inclusive, we believe an effective school group should:

- **Have an intake which broadly reflects the characteristics of its local communities**, particularly in terms of disadvantage (eligibility for free school meals), ethnicity, and special educational needs.
- **Support all pupils to pursue a high-quality education within the school once they are admitted.** Good attendance should be supported, and suspensions and managed moves should only occur when it is in the best interest of the pupil and/or the safety of others.
- **Support all pupils to achieve their best.** Disadvantaged pupils and pupils with other characteristics who typically have lower average attainment should be supported effectively in their learning.

Our focus in this report is on quantitative metrics which can be constructed using national administrative data. Table 1 describes the metrics we present in this report. We have split out metrics into three domains to match the three characteristics described above, which we believe define an effective school group:

1. School choice and admissions
2. Attendance and suspensions
3. Pupil achievement

We construct our metrics within phase. So, where possible for each school group we calculate two measures for each metric: one for the primary schools in the group and one for the secondary schools. In some cases, school groups only operate schools in one phase, or the measure is not constructable for a phase (e.g., attainment scores), and so we only construct one measure per metric. Additionally, for some measures the numbers are too small to reliably construct metrics across a large enough fraction of groups, e.g., the number of suspensions in primary settings is very small nationwide.

Challenges and limitations

Data-driven metrics can help inform the system and have the potential to help improve it through highlighting cases of best practice. They can identify in which areas school groups are already strong and flag areas for improvement. However, there are several issues particular to pupil inclusion that can make measurement challenging.

Many important aspects of pupil inclusion are not suited to quantitative measurement and often appropriate or reliable data does not exist. For instance, it is hard to capture behaviour policies, uniform and hair policies, the KS3 curriculum, or safeguarding, in a quantified metric. Other areas of interest do not have readily available data, for example cases of 'off-rolling', by definition, are not explicitly captured in current data. However, we can construct proxy measures that provide insights into these issues.

Furthermore, it is often not clear cut what should be considered a 'good' or 'bad' outcome. While higher attainment is clearly desirable, it is hard to determine what the rate of suspensions or permanent exclusions should be. Permanent exclusions are relatively rare and are likely distorted by

factors beyond a school’s approach to inclusion, so in this case we choose not to report this metric. Individual circumstances will mean some suspensions are necessary, and schools may differ in their ability to reduce suspensions given pupil demographics. Suspensions, though, remain part of our thinking, given very high sustained rates of suspension should be a cause for concern regardless of other contributing factors.

Table 1: List of metrics

		Primary	Secondary
School choice and admissions	Preference score – are the applicants to a groups’ schools representative of the local pupil population (disadvantage, SEND)	✓	✓
	Admissions score – are pupils offered places at a groups’ schools representative of the applicant pool (disadvantage, SEND)	✓	✓
Attendance and suspensions	Persistent absence	✓	✓
	Suspensions		✓
	Repeated suspensions		✓
	Unexplained exits		✓
Pupil attainment and progress	KS2 attainment	✓	
	KS2 attainment of disadvantaged pupils	✓	
	KS4 attainment		✓
	Progress of disadvantaged pupils, compared with disadvantaged pupils nationally		✓
	Progress of low (bottom 25%) prior attainers, compared with low attainers nationally		✓
	Sustained destinations post-16, adjusted for average post-16 destinations locally		✓

Methodological considerations

Contending with small numbers

By its nature, quantitative analysis about pupil inclusion often involves dealing with small numbers, which can introduce substantial uncertainty in results. For example, most primary schools have very small numbers of repeated suspensions per year. Equally our proposed metrics for pupil achievement are at risk of being influenced by small numbers, because the pupil groups we focus on are typically in the minority in school cohorts.

A benefit of this project's focus on *school groups* is that our metrics look across pupil cohorts in multiple schools, thus increasing the number of pupils included in our analysis. Nevertheless, many school groups included in this study only include two schools per phase, and/or have small numbers of pupils. Therefore, we pool data from across three school years (2016/17 – 2018/19) when constructing all our metrics. When pooling this data, all-through schools are treated as secondary schools.

This has a number of benefits. Results will be less sensitive to small pupil numbers or to characteristics specific to individual pupil cohorts. Results will reflect a more stable view of typical life in the school group, as opposed to a single cross-sectional snapshot which may represent an exceptional year.

We additionally restrict our sample to only include schools in the group which were part of the group for at least the three years prior. This again ensures stability and that the group has had sufficient time to exert its possible influence over the school.

After pooling data across schools and years, some small numbers will still remain. Suppression of small numbers is necessary to protect the identity of data subjects and to ensure our results are robust. Suppression has been implemented in line with Office for National Statistics rules, suppressing counts that are five or fewer.

Placing results in context of the national distribution

In some of the charts that follow, we use the raw metrics, as calculated, to illustrate the full distribution.

We intend for these metrics, though, to be useful benchmarking tools, which school leaders and other stakeholders can use to compare the results of school groups with others to identify areas of high performance and areas for improvement. Therefore, in our accompanying data tool we convert all our metrics to national percentiles, split by phase, allowing users to understand whether a school group is in the top or bottom 1-100 per cent of other school groups on that metric.

To enable users of our data tool to make meaningful comparisons, it also contains functionality to compare up to three school groups at a time, across the full suite of metrics. This is accompanied by contextual information, for example, the fraction of pupils eligible for free school meals.

Changes in response to our consultation

In 2022 we consulted on a set of proposed metrics. This has resulted in the following changes to our final set of inclusion and attainment metrics.

School selection

Special and alternative provision schools have been excluded from this analysis due to low pupil counts and inadequate data across multiple metrics. We are continuing to consider how we can best include these schools in future work.

Contextualisation

Adjusting all our metrics for context adds a layer of complexity in communicating results. Some of our metrics already provide a degree of metric specific contextualisation, for example our school choice, progress, and destinations measures. Our accompanying data tool provides the characteristic makeup of school groups and allows school leaders and other stakeholders to compare up to three groups.

School choice and admissions

Our final metrics to measure school choice and admissions have been developed as odds ratios, as opposed to a series of regression models. These ratios provide a single score for each school that can be intuitively understood as measuring the likelihood of a pupil of a certain characteristic applying to or being admitted to a school compared to another pupil in the local area without that characteristic.

Attendance and suspensions

In response to our consultation, it was raised that our 'unexplained exits' methodology doesn't allow within MAT moves to be an explanation. We acknowledge that this may be a shortcoming, but we note that similarly we do not count moves within other groups of schools, such as moves to different maintained schools within a local authority. However, we are not able to identify precise reasons why a move has occurred and so whilst it might be in the best interest of the child, an intra-group move may still represent a school moving pupils around the system. However, any move to a special school is removed from our count of exits.

It was also suggested that medical illness should be excluded from our measure of persistent absence. After careful consideration we have decided not to adjust our measure. Whilst we acknowledge it may be preferable to discount these absences, the practice of recording medical absence varies drastically from school to school, e.g., whether they require a doctor's note. In addition, 40 per cent of persistent absences are for 'unknown' reasons. It is therefore difficult to differentiate the precise reasons for absences.

Pupil attainment and progress

For our headline attainment metrics, we are no longer using cutoff measures, such as the percent of pupils meeting an expected standard. Instead, we are now using continuous, and familiar, metrics that capture broad attainment at both KS2 and KS4 – scaled scores and Attainment 8.

Our sustained destinations measure now looks at post-16 rather than post-18 destinations as these can be more clearly tied back to the secondary school a pupil attended. We have also adjusted the metric for average destinations locally to mitigate against some of the factors that are likely beyond a school's control.

Understanding our metrics

Comparing group types: Box plots

To understand how individual groups can be compared across a range of metrics, we must first understand how each metric is distributed across groups, and crucially within different group types. For any given metric, the distribution of scores can vary significantly by group type, as well as by phase of education.

To demonstrate these inter- and intra-type differences, we present a box plot for each metric. These figures contain a box plot for each group type showing the median, first and third quartiles, and the whiskers extend to 1.5 times the interquartile range.⁵ School groups beyond the end of the whiskers are deemed as 'outliers'. The points around these boxes depict the numeric distribution of group scores; the more points, the higher proportion of groups in each type achieved the corresponding score on the scale. From this we can see the variation among group types, as well as the underlying group counts behind the plots – if group types have small counts, we cannot be as confident that the metric tells us something about the effects of that group type, rather than the effects of the small number of groups themselves.

Note on odds ratios: Two of our metrics, preference scores and admissions scores, are represented by odds ratios. Box plots using these metrics are presented on logarithmic scales to better reflect the symmetry of scores below and above 1. For example, a score of 2 reflects the odds in question being doubled, while a score of 0.5 reflects the same odds being halved.

Comparing individual groups: Radar plots

The metrics we have constructed are wide-ranging and scores are driven by a variety of factors. It is important to recognise that, within these metrics, school groups will have areas of strength and areas for improvement.

In our data tool we therefore provide visualisations of the metrics for individual school groups using radar plots. Radar plots are a way of visualising performance on multiple metrics simultaneously.

Axes are national deciles from 1 to 10 with each metric scaled so that the higher figure represents the better outcome. For example, higher rates of persistent absence will be closer to the centre of the plot, while higher attainment outcomes will be closer to the edge of the plot. In simple terms, the further towards the outer edge of the plot, the better the outcome.

For example:

1. The highest national decile for primary basic attainment indicates all (or nearly all) pupils achieving the expected standard in reading, writing and maths.
2. The highest national percentile for persistent absence represents very few pupils being absent persistently.

⁵ The interquartile range is the distance between the first and third quartiles.

School choice and admissions

In our 2022 publication on pupil inclusion methodology⁶, we discussed the longstanding phenomenon in schools in England of social segregation: the clustering of children from poorer backgrounds within certain schools.

This is a matter for concern because the school a child attends has an impact on their future outcomes. Burgess, Greaves and Vignoles (2020) note that, while estimates vary, about 10-20 per cent of the difference in pupils' academic outcomes is explained by the school attended.⁷ Social selection can also be a self-reinforcing cycle: schools with more advantaged pupil intakes tend to be advantaged in other ways. For example, these schools may attract and retain higher quality staff, have higher Ofsted grades, and achieve better test scores, thereby potentially further altering their intakes and perpetuating educational inequalities.

The drivers behind this social segregation are very complex: they relate to parental choice, the mix of schools available in a local area, the local housing market, and school admissions policies⁸.

The school choice system in England involves parents and carers submitting an ordered list of their school preferences. For use in the case of oversubscription, schools also publish admissions criteria which will apply if places available do not meet demand. It is mandatory that these admissions policies are published prior to families submitting preferences.

These criteria must fall within the parameters set out in the School Admissions Code.⁹ By law, if a school is named on an EHCP (education, health and care plan) the pupil must be admitted. Typical rules used to allocate places in the case of oversubscription include siblings of current pupils, children of staff, and prior attendance at a 'feeder school'. The ultimate tiebreaker is typically the distance between a pupil's home address and the school.

Our previous 2019 review of the existing research found:

1. School preferences submitted do not necessarily reflect parents' true preference for a school due to barriers such as onerous application form requirements for prospective pupils. Such barriers may lead parents to select preferences strategically or result in parents and pupils being ill-informed on the school's admissions criteria.
2. Families of different characteristics may behave differently in terms of the number of preferences they submit and their relative preference for good and outstanding schools.
3. Pupils of different characteristics have different likelihoods of being offered a school place once they have applied to the school.

⁶ Bobbie Mills, "[Measuring pupil inclusion in school groups](#)", *Education Policy Institute* (2022)

⁷ Simon Burgess, Ellen Greaves, and Anna Vignoles, "[School Places: A Fair Choice? School Choice, Inequality and options for Reform of School Admissions in England](#)", *Sutton Trust* (2020)

⁸ Stephen Gorard and John Fitz, "Investigating the Determinants of Segregation between Schools," *Research Papers in Education* 15, no. 2 (January 1, 2000): 115–32.

⁹ Department for Education, "[School Admissions Code](#)" (2021)

Our metrics

Our measures of pupil inclusion in school choice and admissions attempt to take into account both how pupils with different characteristics apply to schools and their likelihood of being accepted after applying.

We link data on family's first preference school to pupil-level data from the National Pupil Database (NPD) and school-level data from Get Information About Schools (GIAS). We then construct two separate types of measures: 'preference scores' and 'admissions scores'. These compare the odds of a pupil with a certain characteristic, in comparison to another local pupil who does not share that characteristic, of applying to and then being admitted to a school in a certain school group. We focus on pupils who are eligible for free school meals (disadvantaged) and those with an identified special educational need.

In each instance, we compare a school group's *actual* number of preferences received and actual intake with those pupils who could have *potentially* applied and been admitted.

Preference scores

A group's preference score is a measure of how likely a local pupil with a certain characteristic is to apply to a school in the group compared to a local pupil who does not share that characteristic. We first define a 'local area' around each school.

To do this, we find the radius around the school in which 90 per cent of pupils attending the school live. Any Lower Layer Super Output Areas (LSOA) within this radius are included in the 'local area', and as such any pupils who live in these LSOAs according to the census following their application will make up the local area population¹⁰.

Then for each school group and each given characteristic (e.g., disadvantage) we calculate the odds ratio (*OR*) using all families within the local area's surrounding the school in the group. An odds ratio of less than 1 indicates that a given group receives fewer applications from pupils with the characteristic of interest than would be expected given its locations; a score above 1 indicates the group receives more; and around 1 indicates the group's received applications are broadly in line with its localities.

For example, to calculate our odds ratio with respect to disadvantage we compare the odds that disadvantaged pupils' families in the local area apply to a given school with the odds that non-disadvantaged pupils' families in the local area apply to a given school. Given the following numbers of pupils:

	Disadvantaged	Non-disadvantaged
Applied	35	20
Did not apply	50	40

The odds ratio is calculated as:

¹⁰ LSOAs are a commonly available small area identifier used in the Census. They typically have an average population of 1500 people or 650 households.

$$OR = \frac{\frac{\text{Number of disadvantaged pupils who applied}}{\text{Number of non-disadvantaged pupils who applied}}}{\frac{\text{Number of disadvantaged pupils who did not apply}}{\text{Number of non-disadvantaged pupils who did not apply}}} = \frac{35/50}{20/40} = 1.4$$

In this example, the *OR* is calculated as 1.4, so the odds of a disadvantaged pupil applying for the school are 40 per cent higher than the odds of a non-disadvantaged pupil applying. If a group has an odds ratio that is well below 1, it means that, for whatever reason, parents and carers of pupils with a given characteristic appear to be put off from applying to that school.

This metric is constructed for both primary and secondary groups.

Admissions scores

A group's admissions score is a measure of how likely a pupil with a certain characteristic is to be admitted to a school in the group compared to a pupil who does not share that characteristic, given that both pupils have already submitted a first preference to attend the school. Again, we calculate the odds ratio based on pupils in the local area. For example, the following calculation is used to find

$$\text{the disadvantage admissions score: } OR = \frac{\frac{\text{Number of disadvantaged pupils who were admitted after applying}}{\text{Number of non-disadvantaged pupils who were admitted after applying}}}{\frac{\text{Number of disadvantaged pupils who were not admitted after applying}}{\text{Number of non-disadvantaged pupils who were not admitted after applying}}}$$

A score of less than 1 therefore indicates that a given group admits fewer pupils with the characteristic of interest than would be expected given its locations; a score above 1 indicates the group admits more; and around 1 indicates the group's admissions are broadly in line with the 1st preference applications it receives. We hypothesise that school groups with scores significantly below 1 potentially have admissions criteria for oversubscription that discriminate against families with certain characteristics.

Again, this metric is constructed for both primary and secondary groups.

Figure 1.1: Preference and admissions scores by group type, primary

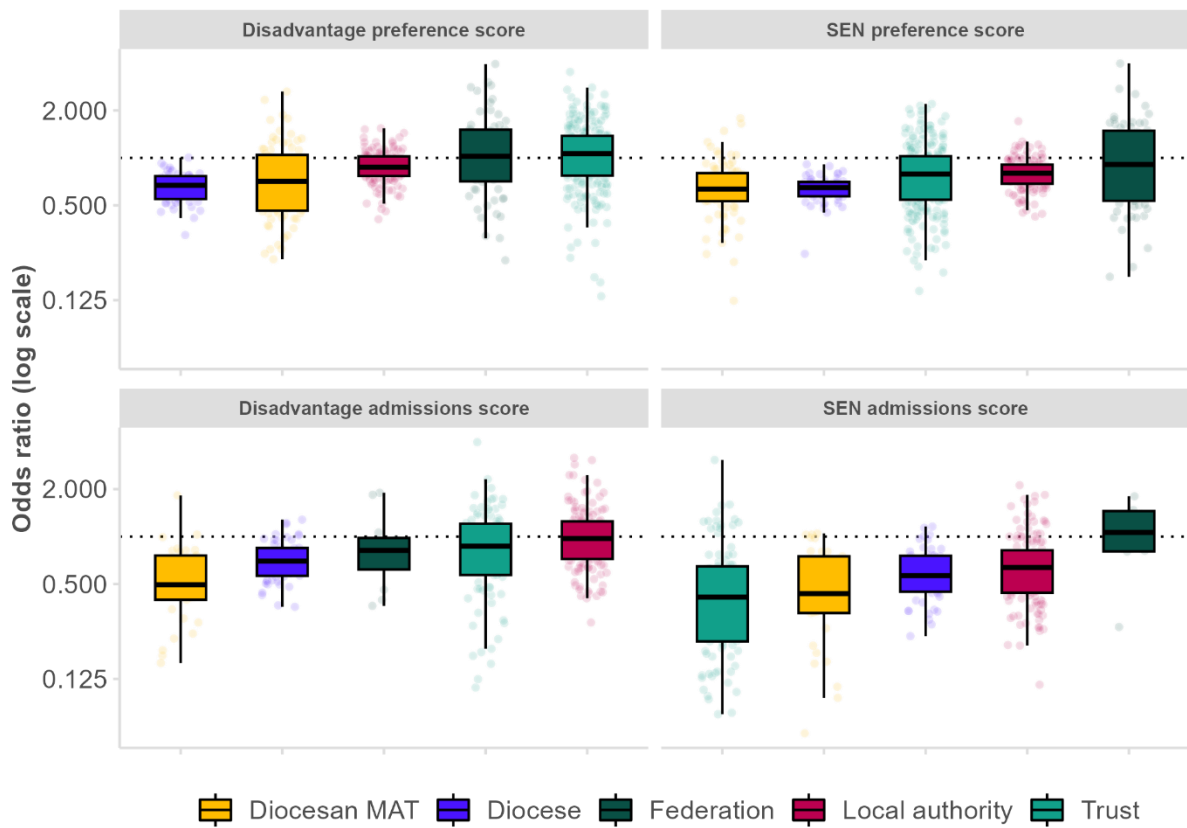
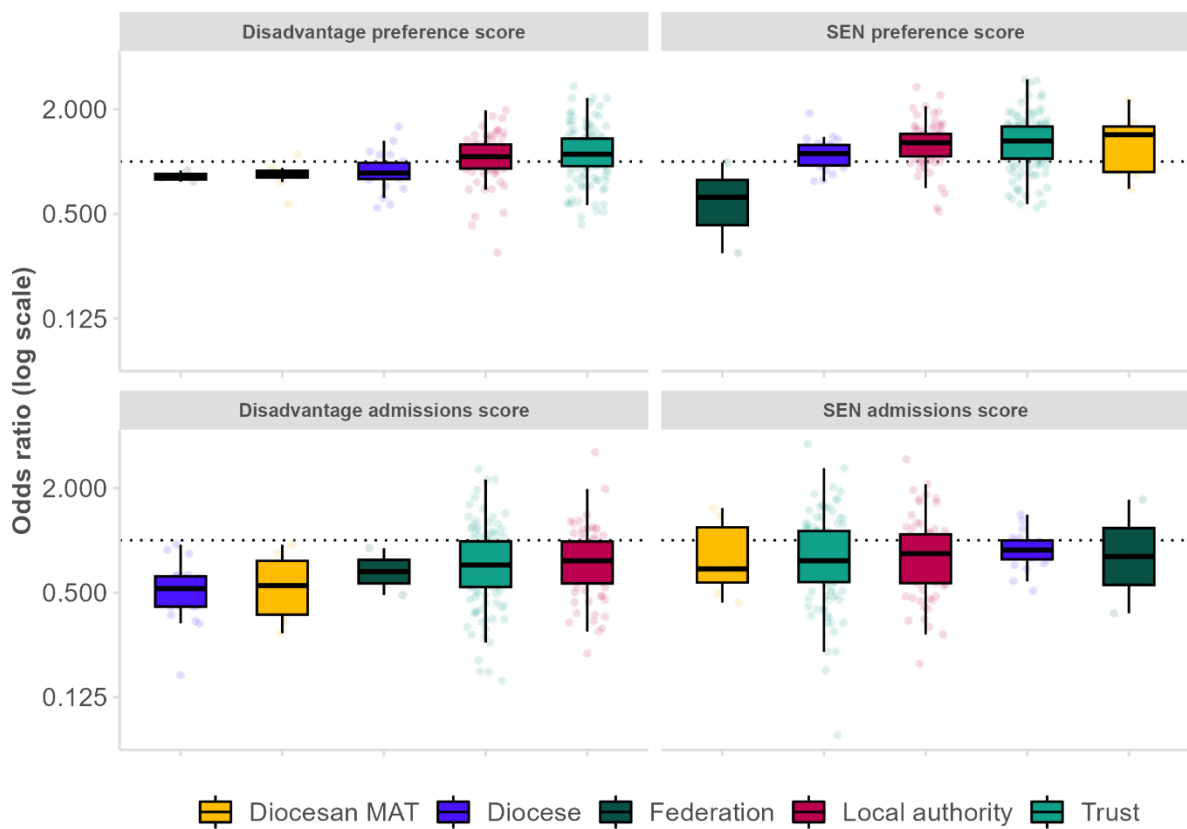


Figure 1.2: Preference and admissions scores by group type, secondary



Attendance and suspensions

Permanent exclusions and suspensions are a contentious subject and there is no consensus on the 'right' level that should occur. A major review of school exclusions was published in May 2019. The Timpson Review concluded that 'there is too much variation in exclusion practice' and that 'there is more we can do to ensure that every exclusion is lawful, reasonable and fair: and that permanent exclusion is always a last resort.'¹¹

Permanent exclusions and suspensions are sanctioned tools for headteachers to use, but there is little transparency around how moves between schools are used in England, including how alternative provision is arranged for those who are excluded. There is evidence to suggest that exclusion often does not work in the best long-term interests of pupils.¹² Pupils who are suspended achieve much lower educational outcomes than their peers, on average. Only 18 per cent of children who received multiple suspensions went on to achieve good passes in English and maths GCSEs in 2015/16.¹³

Pupils with certain characteristics are also more likely than others to be excluded from school, particularly boys, those who live in disadvantaged areas, and those with special educational needs. For example, after controlling for a range of factors including gender, socio-economic status and special educational needs, young people of Black Caribbean ethnicity are 1.7 times more likely to be permanently excluded than young people of White British ethnicity.¹⁴

Of additional concern is that some school moves occur beyond the framework of formal exclusion. In 2019, EPI developed a method for identifying 'unexplained pupil exits', and found that, nationally, as many as 1 in 10 pupils in the 2017 cohort experienced exits at some point during their time at secondary school that cannot be accounted for.¹⁵ By their nature, it is unknown what drives each of these unexplained exits (as far as we can tell by the data they are not family-driven), and therefore it is impossible to know which are in the best interest of the pupil. Nevertheless, a significant proportion of all pupils experiencing an unexplained exit fail to return to the school system ever again: as many as 4 in 10 (24,000) pupils experiencing an unexplained exit in the 2017 cohort did not return at all.

Absence, and particularly persistent absence, can be an indicator of issues at school or at home which may be going unaddressed. Persistent absence is when a pupil is absent for ten per cent or more of their possible sessions. Pupils might be persistently absent for a range of reasons and school attendance policies should include identifying and addressing these underlying issues. Not only does

¹¹ Edward Timpson, "[Timpson Review of School Exclusion](#)", *Department for Education*, CP 92 (2019), 3.

¹² Madia et al. "Long-Term Labour Market and Economic Consequences of School Exclusions in England: Evidence from Two Counterfactual Approaches". *British Journal of Educational Psychology* 92, 3 (2022): 801–16. <https://doi.org/10.1111/bjep.12487>;

Obsuth et al. "The Impact of School Exclusion in Childhood on Health and Well-Being Outcomes in Adulthood: Estimating Causal Effects Using Inverse Probability of Treatment Weighting". *British Journal of Educational Psychology*, (2023): 1–14. <https://doi.org/10.1111/bjep.12656>.

¹³ Timpson, 7–8.

¹⁴ Timpson, 34.

¹⁵ Jo Hutchinson and Whitney Crenna-Jennings, "[Unexplained Pupil Exits from Schools](#)", *Education Policy Institute* (2019)

absence disrupt learning, but a prolonged or concentrated period of absence can make returning to school more difficult.

Concerns around absence have grown post-pandemic, as rates of absence have increased significantly across all pupil characteristics since before the pandemic.¹⁶ Disadvantaged pupils and those with special educational needs and/or disabilities are particularly likely to be persistently absent: in the latest annual attendance figures from the Department of Education (2021/22), pupils who were eligible for Free School Meals (FSM) in last six years had a persistent absence rate of 36.5 per cent, compared with a rate of 16.8 per cent amongst their peers.¹⁷ Therefore, it is important to consider the demographic composition of the pupils at a schools when considering levels of absence and suspensions. Schools that have higher numbers of disadvantaged pupils will typically have higher levels of both absence and suspensions - though pupil demographics should not be used to justify particularly high levels.

We believe a school group that is inclusive supports all pupils to pursue a quality education within the school once they are admitted, and so would typically have low rates of absence, suspension, and unexplained exits. However, decisions should be taken in the best interest of the pupil and the safety of others, so the optimal level across these domains may not be zero.

¹⁶ Emily Hunt, "[Examining post-pandemic absences in England](#)", *Education Policy Institute* (2023)

¹⁷ Department for Education, "[Pupil absence in schools in England](#)", National Statistics

Our metrics

Persistent absence

Our metric for persistent absence follows the DfE definition. A pupil is defined as persistently absent in a given school year if they miss 10 per cent or more of their available school sessions. Our metric is constructed by averaging the annual rate of persistent absence across the schools in a group.

This metric is constructed for both primary and secondary groups.

Figure 2.1: Persistent absence rate by group type, primary

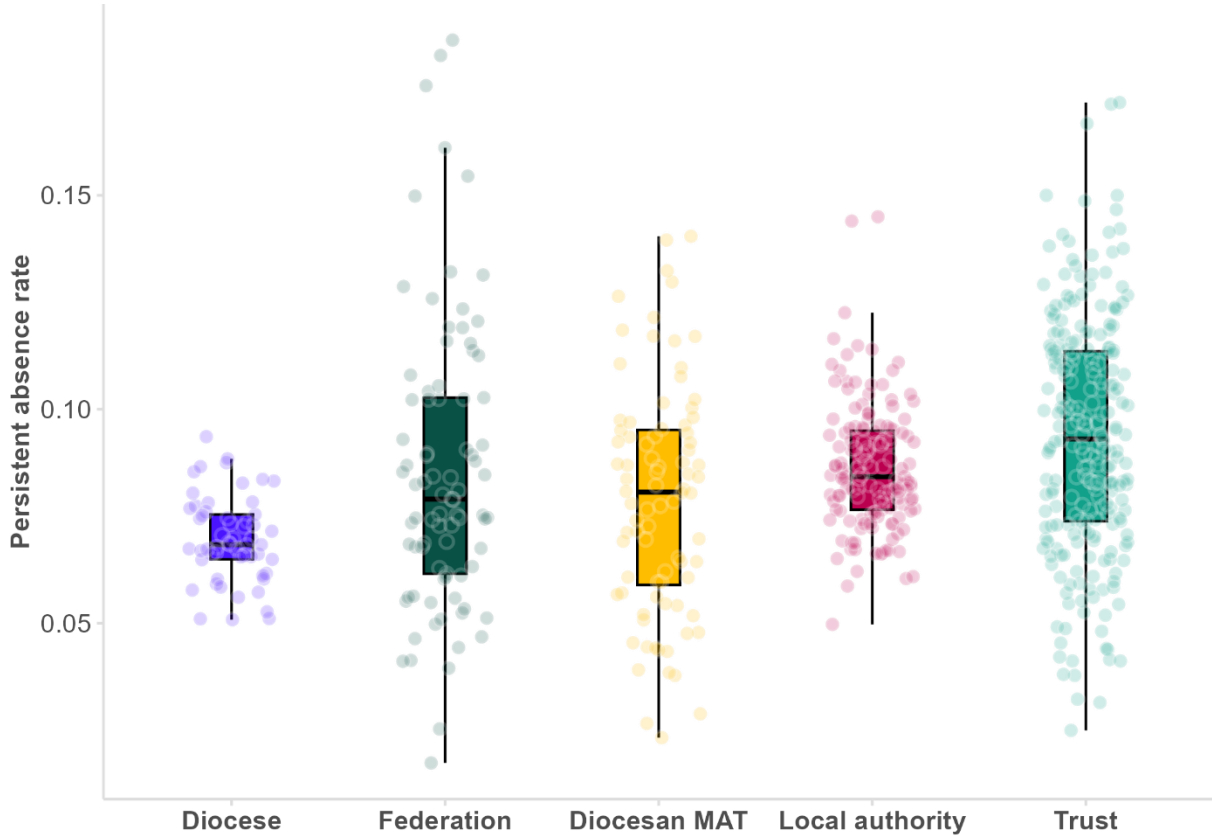
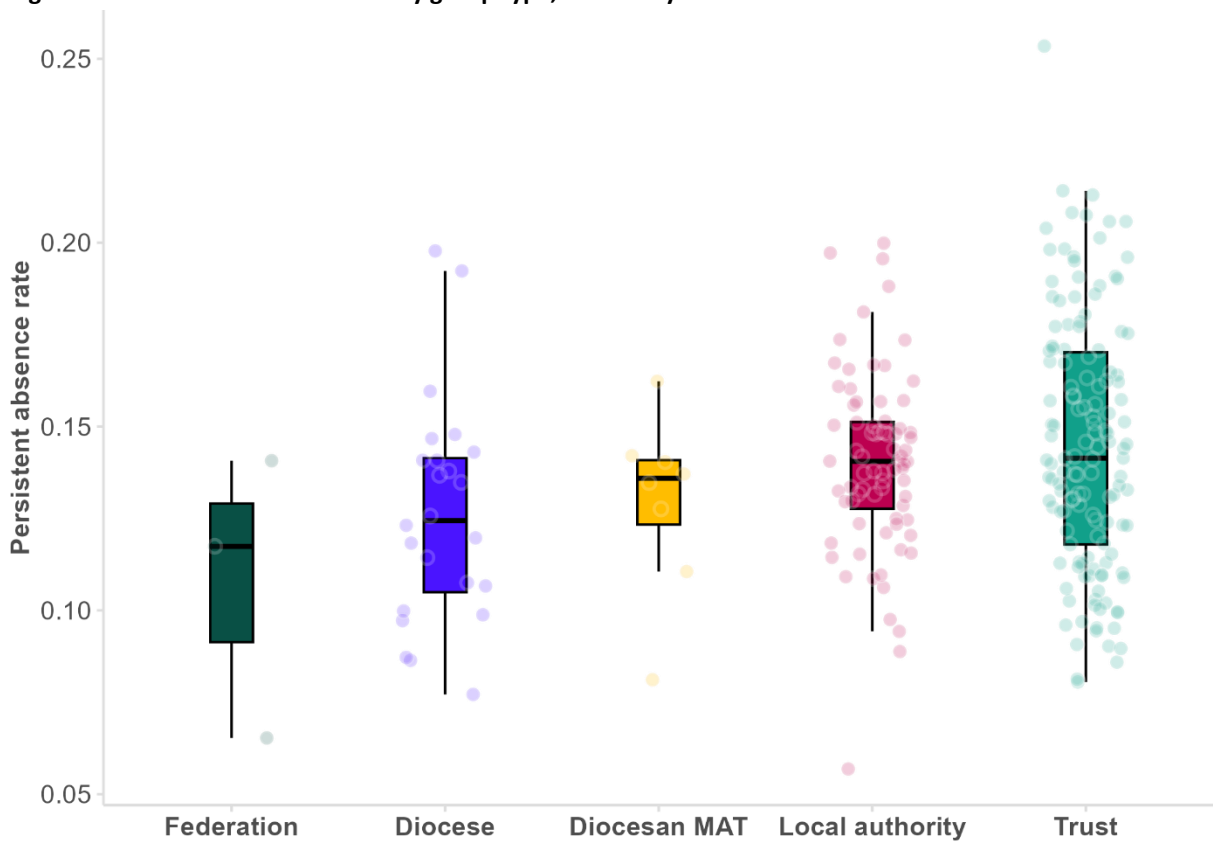


Figure 2.2: Persistent absence rate by group type, secondary



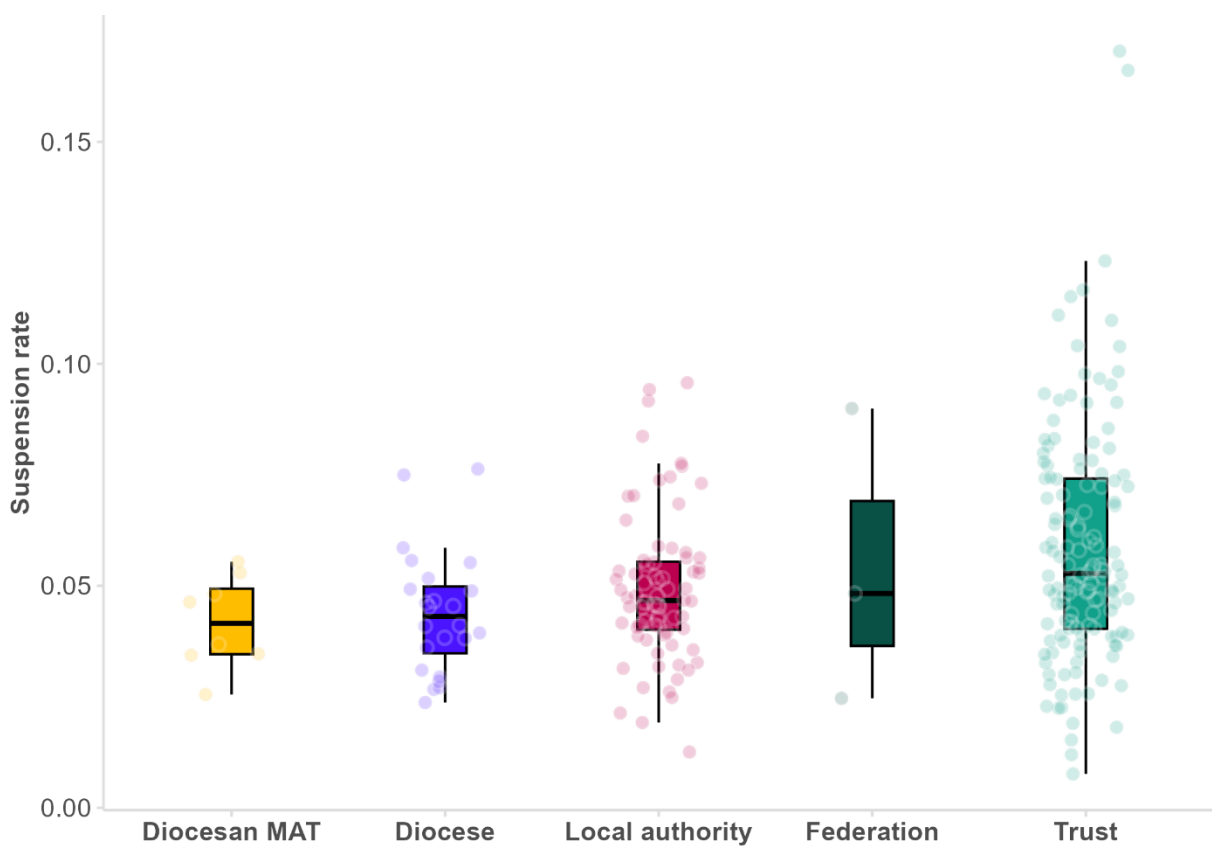
Suspensions

A suspension (previously known as a ‘fixed term exclusion’) is an exclusion for a set period of time. This type of exclusion can involve part of the school day, and a pupil may be excluded up to a maximum of 45 school days across one or more fixed periods in a single academic year.¹⁸

Our metric is the rate of suspensions at group level. This is calculated by totalling the number of pupil enrolments with at least one suspension and dividing by the number of sole-registered (pupils only registered at a given school) and dual-registered pupils (pupils registered at the school and a pupil referral unit, special school, or hospital school) on roll at the spring school census (undertaken every January).

This metric is presented for secondary groups only as very few primary age pupils are given suspensions.

Figure 2.3: Rate of suspensions by group type, secondary



¹⁸ Department for Education, “[A guide to exclusion statistics](#)”, (2017)

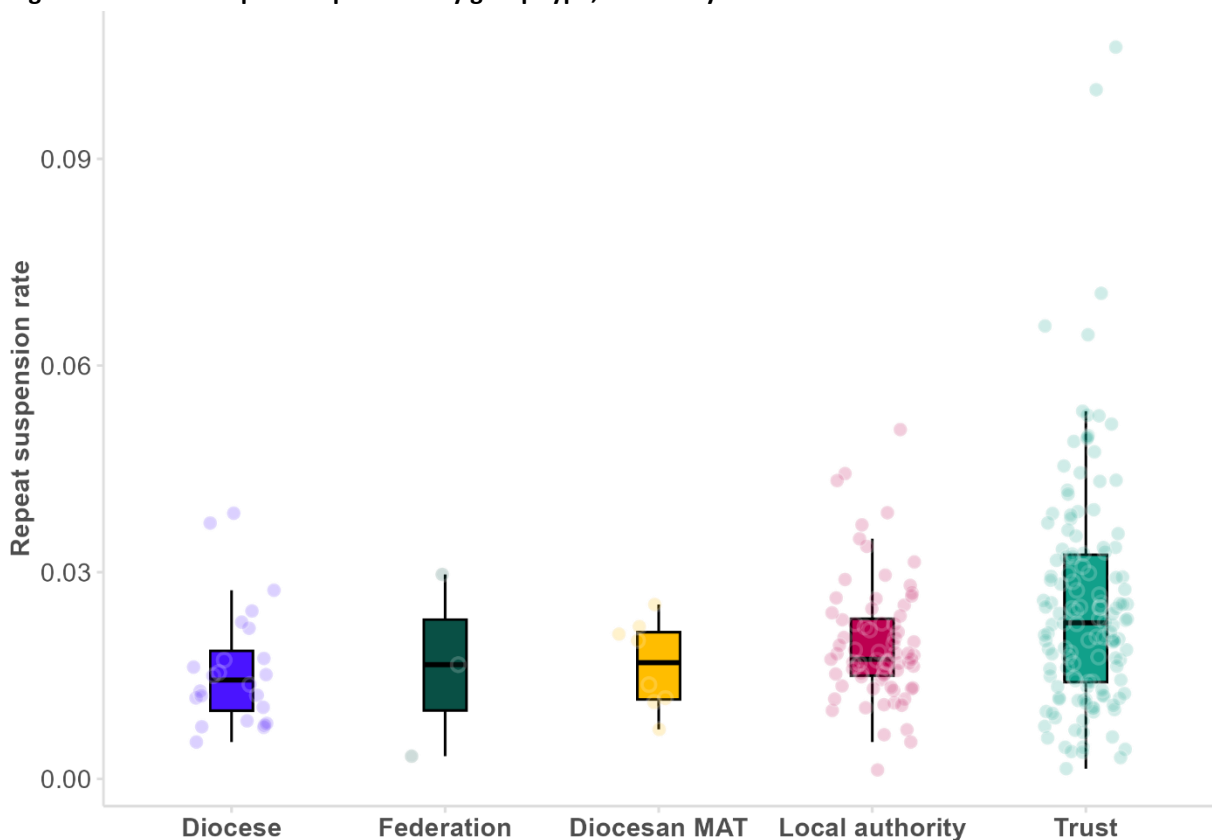
Repeated suspensions

Similarly to our suspensions rate metric, this metric measures the number of pupils in a group who experience *repeated* suspensions, that is more than one suspension in a single academic year.

Our metric of interest is the rate of repeated suspensions at group level. We calculate this by totalling the number of pupil enrolments with repeated suspensions and dividing by the number of pupils (sole- and dual-main registered) on roll at the spring school census.

Again, this metric is presented for secondary groups only as very few primary age pupils are given suspensions.

Figure 2.4: Rate of repeat suspensions by group type, secondary

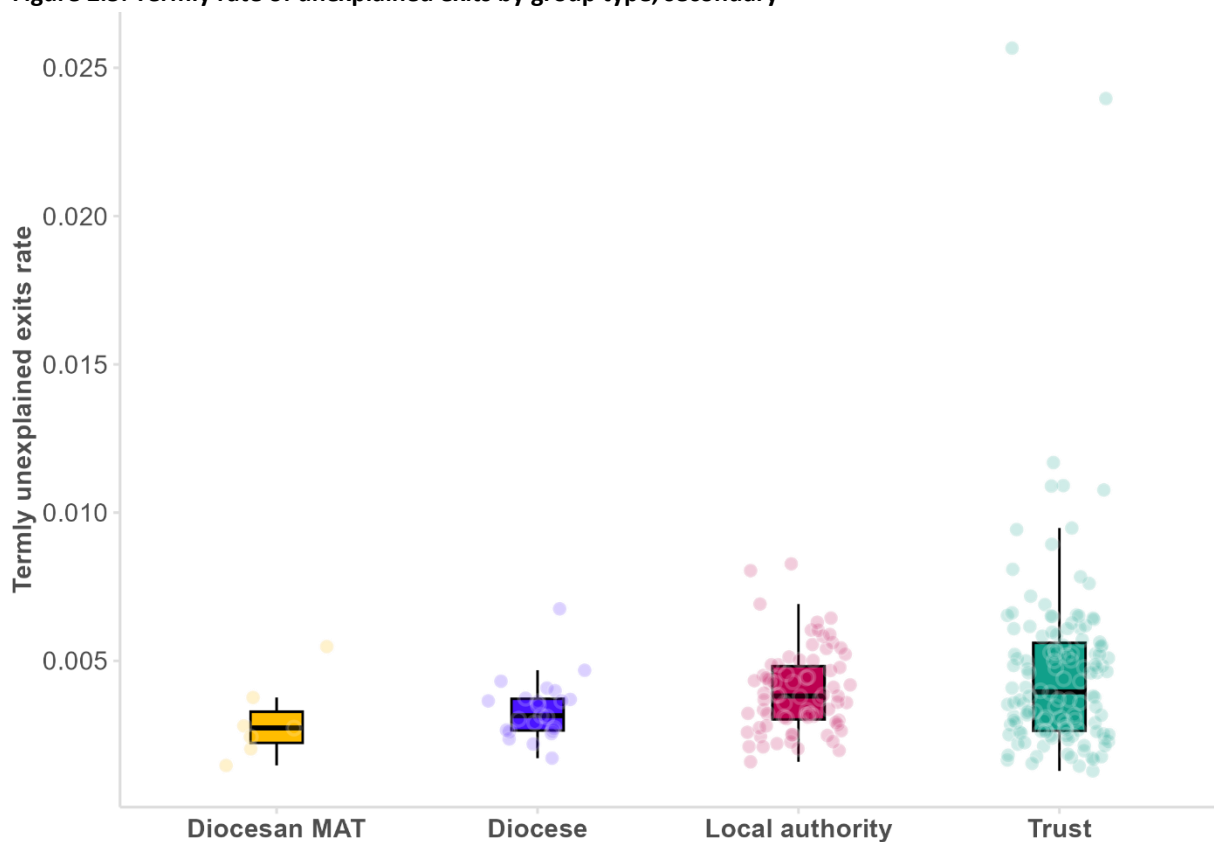


Unexplained exits

To measure unexplained pupil exits from school groups, we use consecutive school census' (which are collected three times a year, every term) to track pupils through their secondary school journey. First, we identify pupils who move schools, then we exclude pupils who we can identify as having likely moved schools for family-driven reasons, these can include: a move of home address, a move to a special school, a change in looked after or adoption status. The full methodology is outlined in our 2019 publication, 'Unexplained Pupil Exits from Schools'.¹⁹

Our final metric is the termly rate of unexplained exits. We construct this rate for secondary schools only. Data on unexplained exits for foundation trusts has been excluded from this analysis due to low pupil counts.

Figure 2.5: Termly rate of unexplained exits by group type, secondary



¹⁹ Jo Hutchinson and Whitney Crenna-Jennings, "Unexplained Pupil Exits from Schools", Education Policy Institute (2019)

Pupil achievement

Pupil attainment measures are perhaps the most studied and reported across studies that attempt to measure the effectiveness of schools. Pupils sit key stage 2 (KS2) assessments at the end of primary school, aged 11, and GCSEs (and equivalents) at the end of secondary school, aged 16. These are externally marked assessments that provide a consistent measure of attainment across cohorts of pupils.

Whilst average attainment scores across schools and groups can be informative, it is established that there is greater variation in levels of progress and attainment among pupils *within* the same school than there is in average attainment *between* different schools. That is to say, typically, some pupils in a cohort achieve very well, whilst others in the same cohort in the same school do not.

In particular, we know there is a disadvantage gap. The attainment of disadvantaged pupils (those eligible for free school meals at some point in the last six years) is on average lower than that of their more advantaged peers. In 2022, the disadvantage gap was 10.3 months at the end of primary school, widening to 18.8 months by the end of secondary school.²⁰

We believe school groups should support all children and young people, regardless of social background, to achieve high quality education outcomes. That means the most inclusive school groups will address this disadvantage gap between pupils.

Our metrics

Using publicly available data from the DfE's 'Compare the performance of schools and colleges in England' service²¹, we construct a range of attainment and progress metrics at the school group level. We also consider post-16 destinations as a measure of how well a school group supports its pupils to progress following the completion of key stage 4.

²⁰ Education Policy Institute, "[Annual Report 2023](#)" (2023)

²¹ Available at: <https://www.gov.uk/school-performance-tables>

Key stage 2 scaled scores

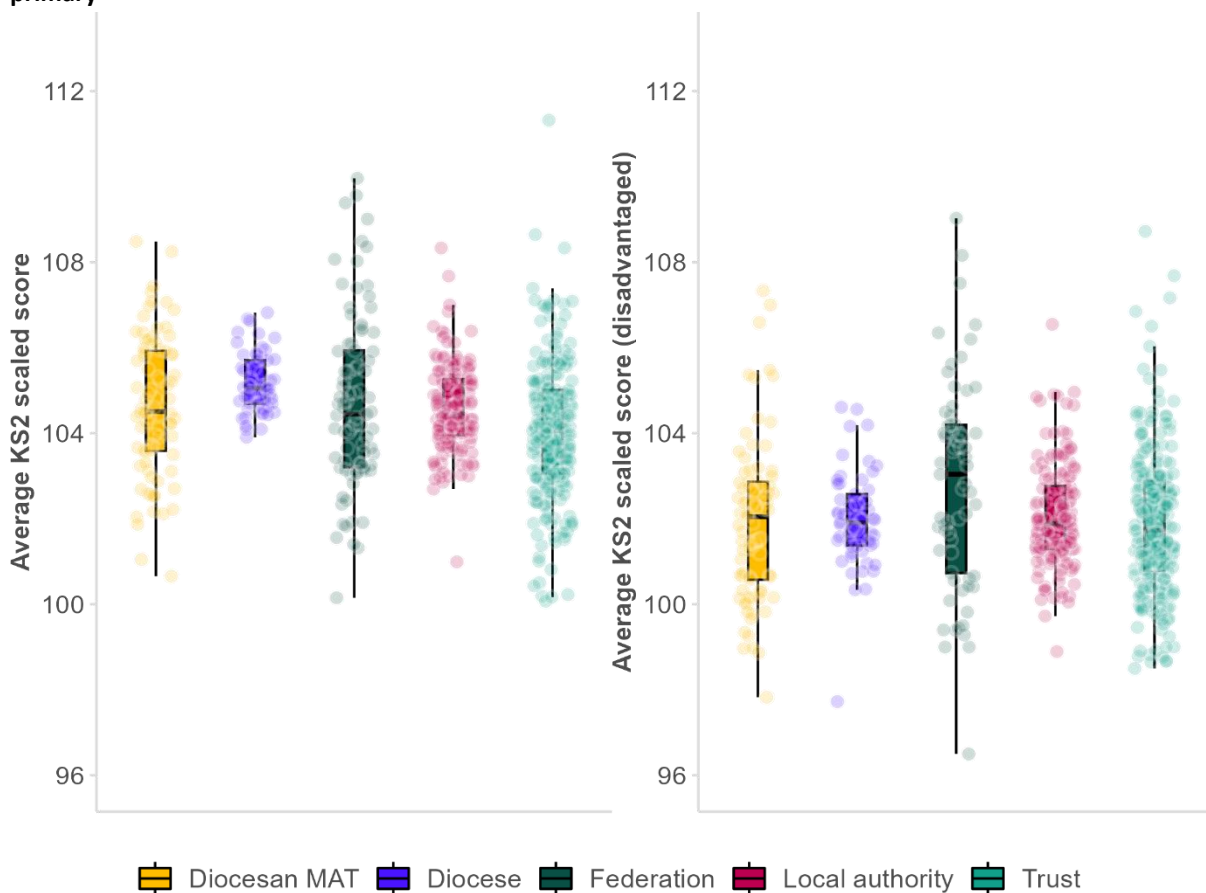
At the end primary school pupils take a series of assessments, including in mathematics and reading. The Department for Education reports the results of these tests as “scaled scores” to allow for accurate comparisons across years.

The lowest scaled score that can be awarded to pupils is 80, while the highest scaled score is 120. Pupils scoring at least 100 are said to have met the ‘expected standard’ on the test. Pupils need a minimum raw score (i.e., a certain number of marks) before they can be awarded the lowest scaled score – following DfE methodology, pupils who do not achieve this are considered to have not demonstrated sufficient understanding of the curriculum and are not included in our metrics.

We construct two metrics. The average scaled score across maths and reading for all pupils at each school, and the average scaled score across the same two assessments for disadvantaged pupils at each school. Disadvantaged pupils are defined as those that attract the pupil premium.²² Both these metrics are then aggregated to the school group.

These metrics are presented for primary groups only.

Figure 3.1: Average KS2 scaled score for all pupils (left) and disadvantaged pupils (right) by group type, primary



²² Therefore, disadvantaged pupils in this context have either been eligible for free school meals in the past six years, or have been under the care of their local authority for a day or more, or have been adopted from care.

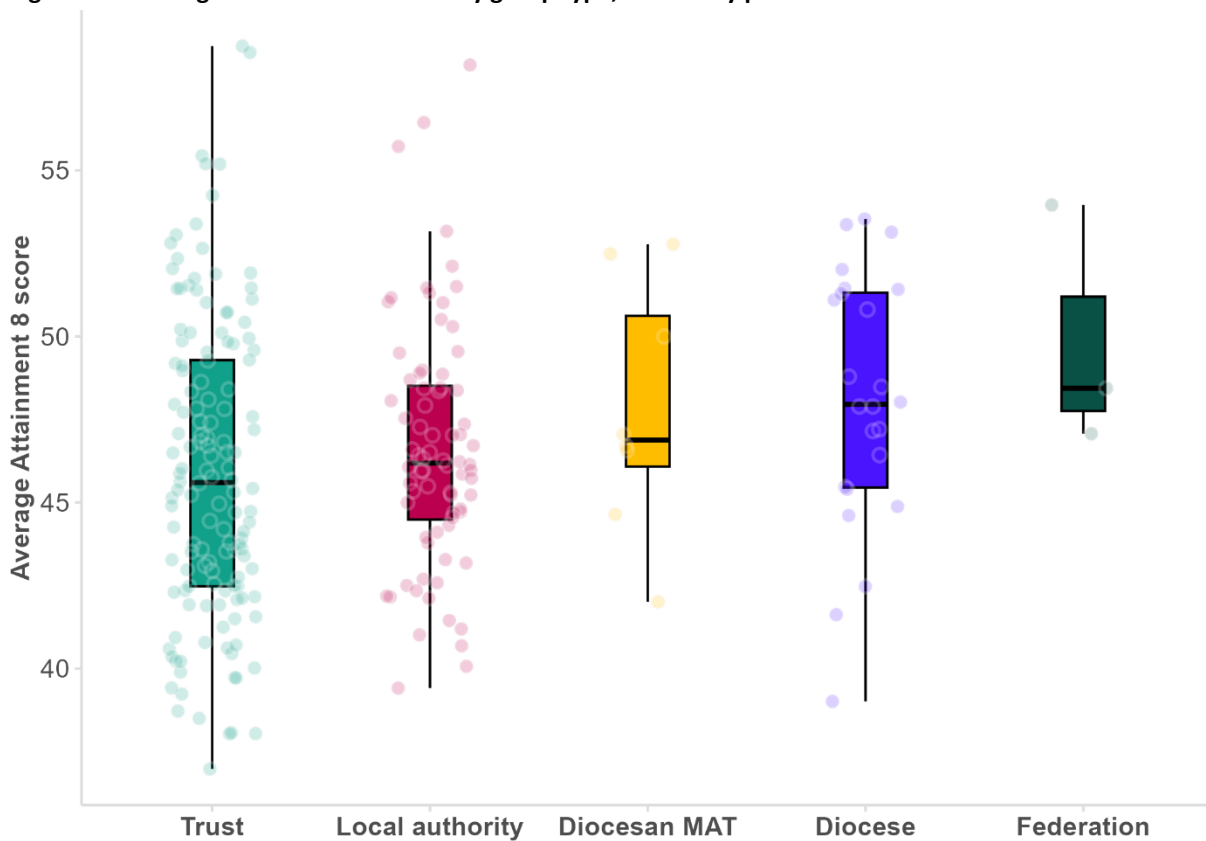
Attainment 8

Attainment 8 is one of the DfE's headline measures of key stage 4 (KS4) attainment. At a pupil level, the measure is calculated using a pupil's GCSE scores across eight subjects. The eight subjects must include English, maths and at least three Ebacc²³ subjects. The GCSE scores are summed with a double weighting for English and maths.

We include this measure as one of our metrics because it is currently a headline accountability and so provides a useful comparison. The metric is constructed by averaging the Attainment 8 score of all pupils who attend the schools in each group. However, there are weaknesses in the Attainment 8 measure. Attainment 8 is not contextualised; it does not account for schools facing very different intakes with regard to pupil characteristics or prior outcomes. In addition, whilst it has ensured a focus on a wider range of subjects than previous measures, it has not incentivised the take-up of creative subjects.

This metric is presented for secondary groups only.

Figure 3.2: Average Attainment 8 scores by group type, secondary phase



²³ English Baccalaureate subjects: English language and literature, maths, the sciences, geography or history, and a language.

Disadvantaged pupil progress

Progress 8 is a value-added measure indicating how much a pupil has improved between the end of primary school and the end of secondary school. This is calculated by comparing a pupil's Attainment 8 score to the scores of pupils across England who achieved similar results at key stage 2.

As with Attainment 8, Progress 8 has also been criticised as an ineffective accountability measure. Whilst Progress 8 reflects differences in prior attainment it does not reflect that socioeconomic and demographic factors are correlated with attainment. Leckie and Goldstein (2019) reveal significant changes in the rank order of schools if adjustments are made to Progress 8 for pupil background.²⁴

However, in other studies, Progress 8 has been found to give a good measure of school effectiveness.²⁵

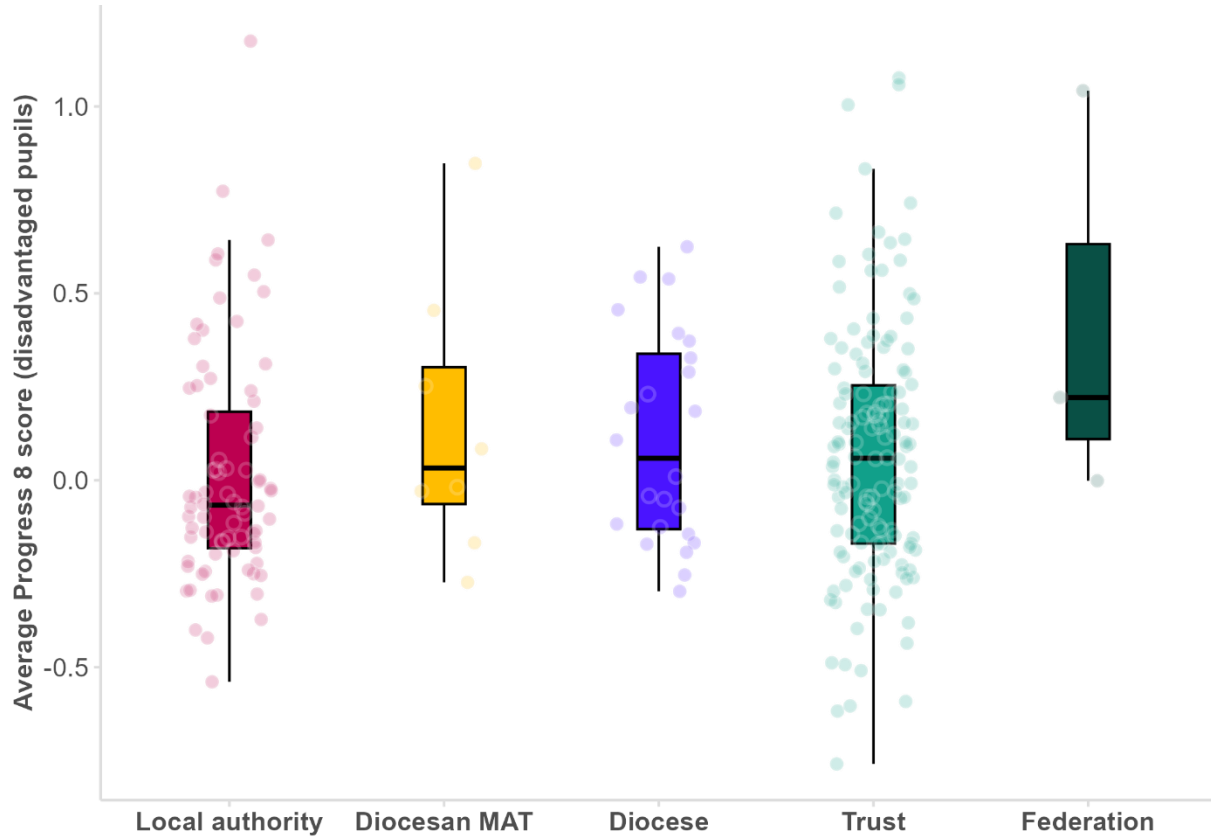
Our metric focuses specifically on the value-added a school group has for disadvantaged pupils, as we would expect an inclusive school to be good at supporting these pupils. As for our key stage 2 metrics we define a pupil as being disadvantaged if they attract pupil premium funding. The metric is constructed by averaging the Progress 8 score of all disadvantaged pupils who attend a school in the group and calculating the difference compared to disadvantaged pupils nationally. A metric of zero therefore means that disadvantaged pupils in a group progress at the same rate as disadvantaged pupils nationally.

This metric is presented for secondary groups only.

²⁴ George Leckie and Harvey Goldstein "The importance of adjusting for pupil background in school value-added models: A study of Progress 8 and school accountability in England". *British Educational Research Journal* 45 (2019): 518-537. <https://doi.org/10.1002/berj.3511>

²⁵ Jack Britton, Damon Clark and Ines Lee "[Unveiling school effectiveness: Progress 8, parental choices and closing the achievement gap](#)", *Institute for Fiscal Studies*, R273 (2023)

Figure 3.3: Average Progress 8 scores of disadvantaged pupils by group type, secondary

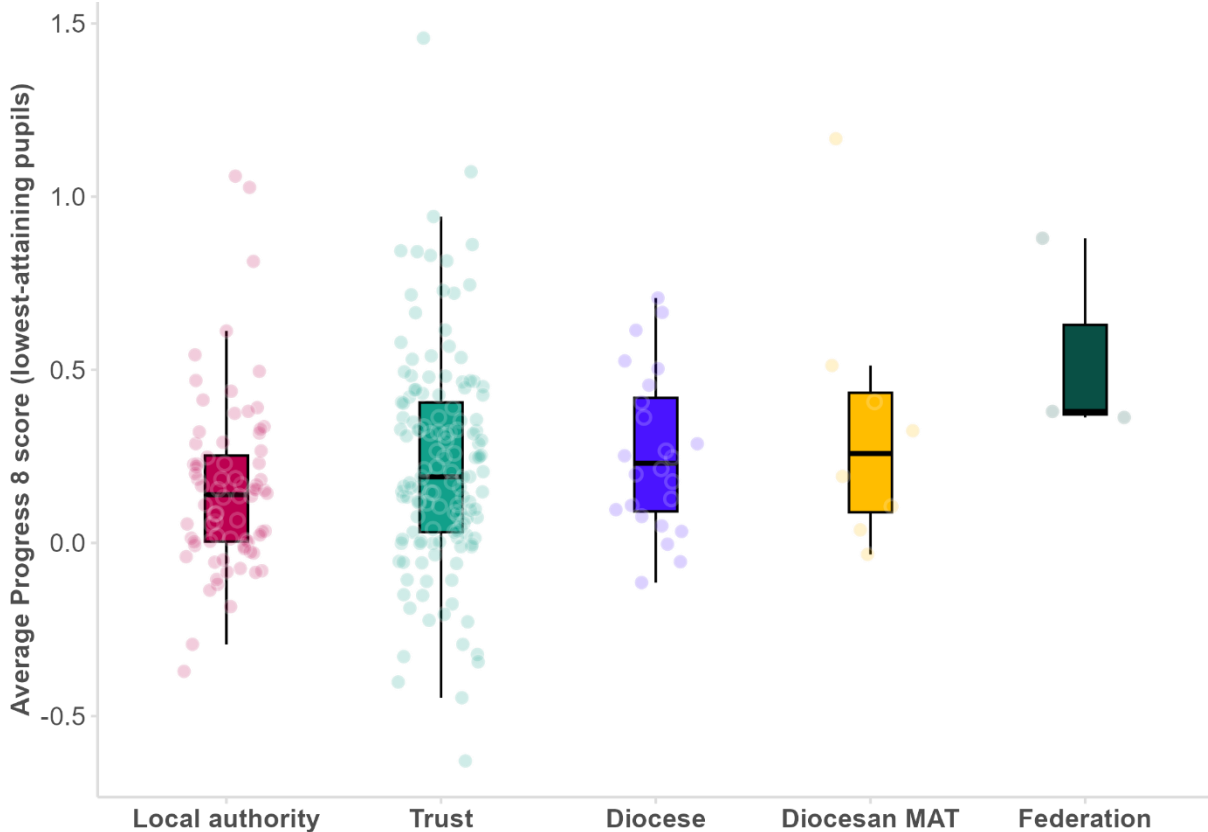


Progress of low prior attainers

The Progress 8 (low attainment) metric for a given group is the average Progress 8 score of the bottom 25 per cent of attainers in the group, differenced from the average Progress 8 score of the bottom 25 per cent of attainers nationally. This is constructed in the same way as the Progress 8 (disadvantage) measure. Again, a high performing school group should be securing good rates of progress for all pupils, not just the pupils who are already higher attaining.

This metric is presented for secondary groups only.

Figure 3.4: Average Progress 8 scores of low attaining pupils by group type, secondary



Sustained destinations

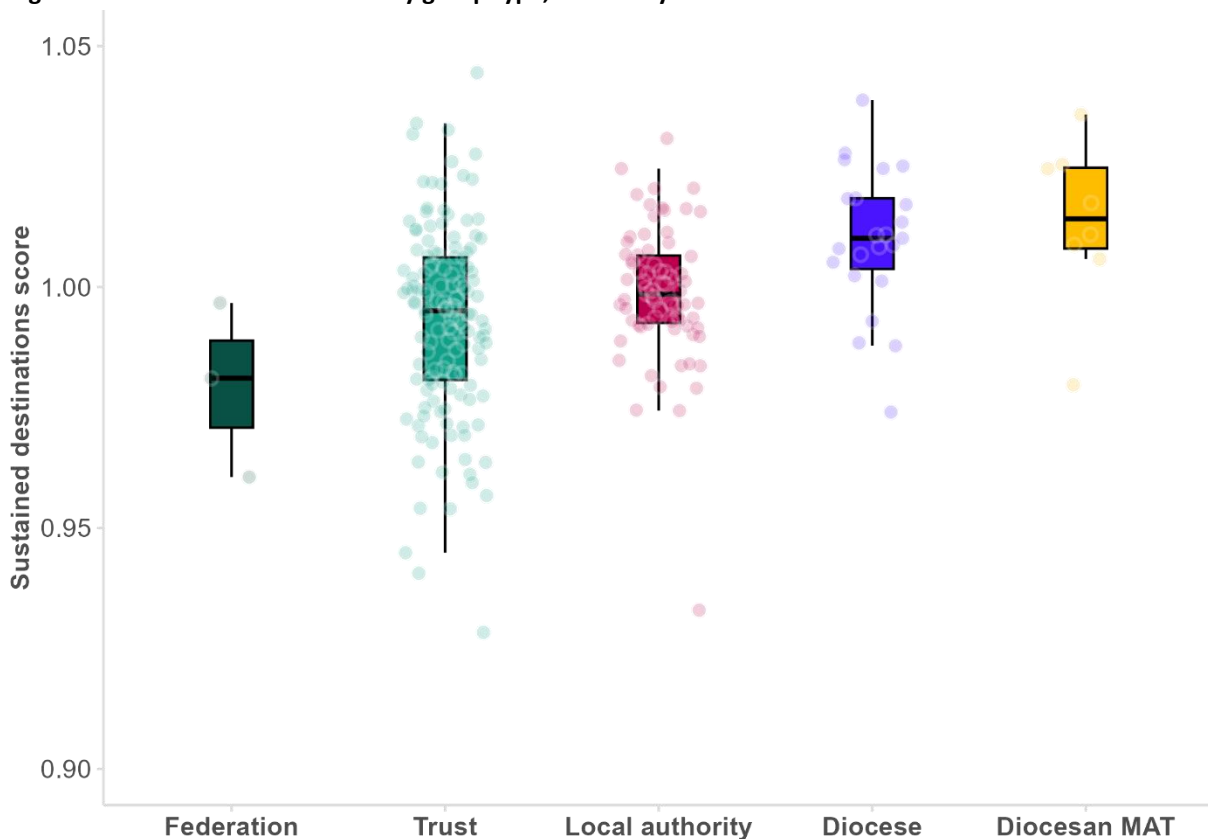
Our sustained destinations metric measures the success of groups in helping young people continue to a sustained destination (education, apprenticeship, or employment) after completing key stage 4 study, post-16.

For each school we calculate the percentage of pupils who were recorded as in a sustained destination in the year following the completion of their key stage 4 studies. We then adjust this for the local opportunities available to these pupils, by dividing by the percentage of pupils in a sustained destination across the whole local authority the school is located in. This ratio is then aggregated across the group, weighted by pupil numbers.

A score of one indicates the schools in the group had the same proportion of pupils progressing to sustained destinations as in the local authority as a whole. A score of less than one indicates a smaller proportion of pupils progress to sustained destinations, while a score of more than one indicates a larger proportion.

This metric is presented for secondary groups only.

Figure 3.5: Sustained destinations by group type, secondary

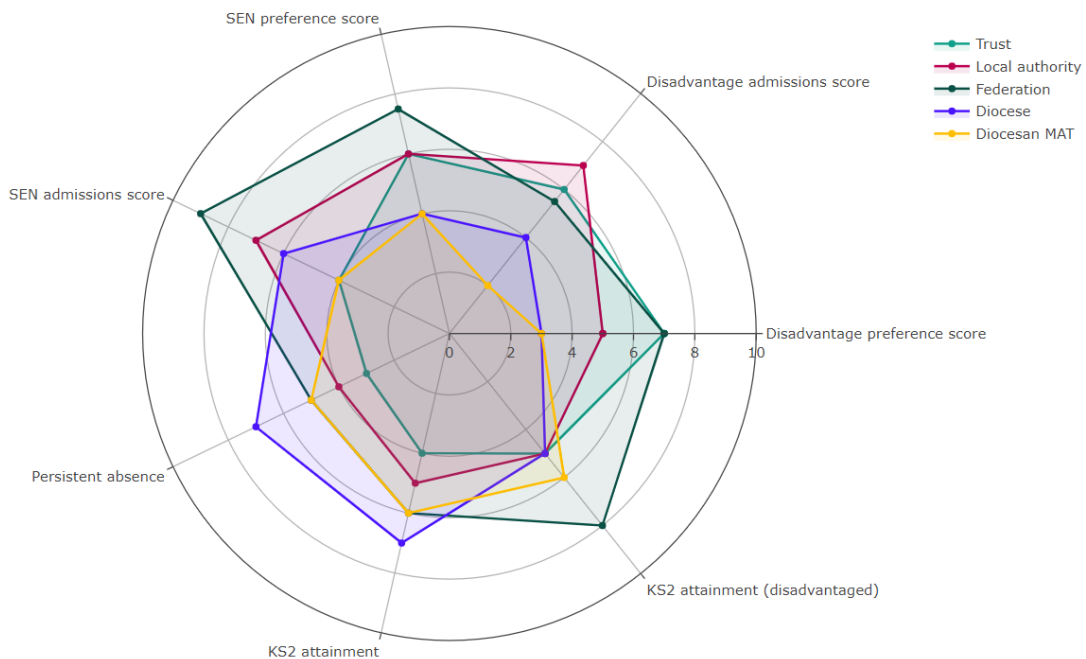


Differences by group type across all metrics

Above, we have shown that for each metric individually there is often more variation *within* group type than there is *between* group types. So, whilst the average MAT may look relatively similar to the average local authority, a given MAT often has quite different outcomes when compared to another MAT. In this short section we explore how similar the median average metrics are across all the metrics simultaneously. Whilst interpreting these plots it is important to remember that the number of groups in each school group type bucket is different and the degree of variation is also different between group types and metrics. Tables A1 and A2 in the annex provide exact figures. One pertinent observation is that amongst secondary groups the variation between MATs is greater than the variation between local authorities.

Figure 4.1 shows the median decile across all the metrics for each primary school group type on a radar plot. A decile of seven on a metric for a given school group type means that the median school group of that type is in the seventh decile of the distribution of all school groups. We find that school groups linked to dioceses (MAT and non-MAT) tend to have the lowest median scores on preferences and admissions. This implies they are not particularly inclusive in terms of their intake; many more families of disadvantaged pupils live in the area than list as a first preference and even if they do, they are less likely to be admitted. These school groups also have relatively low levels of persistent absence and the highest median overall attainment. Disadvantaged pupils and those with SEN, on the other hand, appear to be better served by MATs, both in terms of their school choice related metrics and also as they have the highest median attainment for disadvantaged pupils.

Figure 4.1: Median decile of metric by school group, primary



For secondary school groups, we choose to only present MATs and local authorities in the equivalent chart (Figure 4.2). This is because the numbers of other school group types are very small. Amongst secondary school groups, the average MAT and the average local authority look similar. There are though some subtle differences between the group type median decile. The median local authority is in a higher decile on the two suspension related metrics. Whilst the median MAT is in a higher decile for progressing the attainment of both disadvantaged and low prior attaining pupils.

Figure 4.2: Median decile of metric by school group, secondary



Correlations between metrics

With an understanding of how our metrics vary by group type and phase, we can now turn to the ways in which our metrics interact.

Investigating the correlations between metrics allows us to uncover the relationships between the different aspects of effective groups set out in this paper. For example, a negative correlation between absence and attainment suggests that groups with lower rates of absence see average higher attainment outcomes. Correlations are useful for measuring how two metrics relate to one another, but as discussed in the introduction to this report, this work aims to demonstrate that there are no two metrics that can be used to provide a holistic view of how a school group functions; instead, it is the relative performance across our range of metrics that can provide greater insight into group performance.

While understanding these relationships can help inform recommendations for improving group performance, it is important to note that the correlations shown below **do not imply a causal relationship**; that is, we cannot say that lower absence *results in* better attainment outcomes, only that there exists a statistical association between the two metrics.

Presenting our results

For both primary and secondary phase, we include a correlation matrix that shows the correlation coefficient between metrics available for that phase. These coefficients are between 1 and -1 (indicated by the blue and red colours respectively on the matrix), where -1 represents a perfect negative correlation (a rise in one metric indicates a fall in the other), 1 represents a perfect positive correlation (a rise in one metric indicates a rise in the other), and 0 indicates no correlation.

Primary phase

Figure 4.1 shows correlations between metrics available at primary phase. The matrix indicates:

- A moderate negative correlation between key stage 2 scaled scores and persistent absence – groups with higher key stage 2 attainment tend to have lower rates of persistent absence.
- A moderate negative correlation between key stage 2 scaled scores and disadvantage preference scores – groups with higher key stage 2 attainment are likely to receive a smaller proportion of applications from disadvantaged pupils than the proportion of disadvantaged pupils living in the local area.
- A moderate positive correlation between persistent absence and disadvantage preference scores – groups with higher rates of persistent absence are likely to receive a higher proportion of applications from disadvantaged pupils when compared to the proportion of disadvantaged pupils living in the local area.

Figure 4.1: Correlation matrix, primary phase

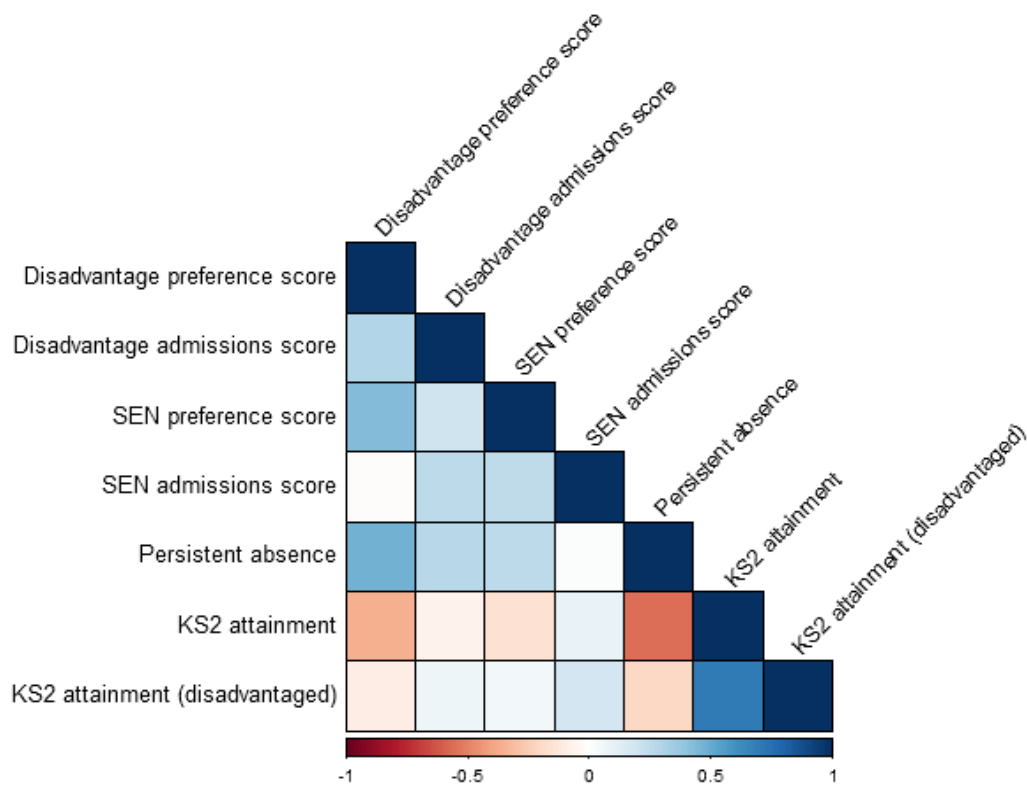
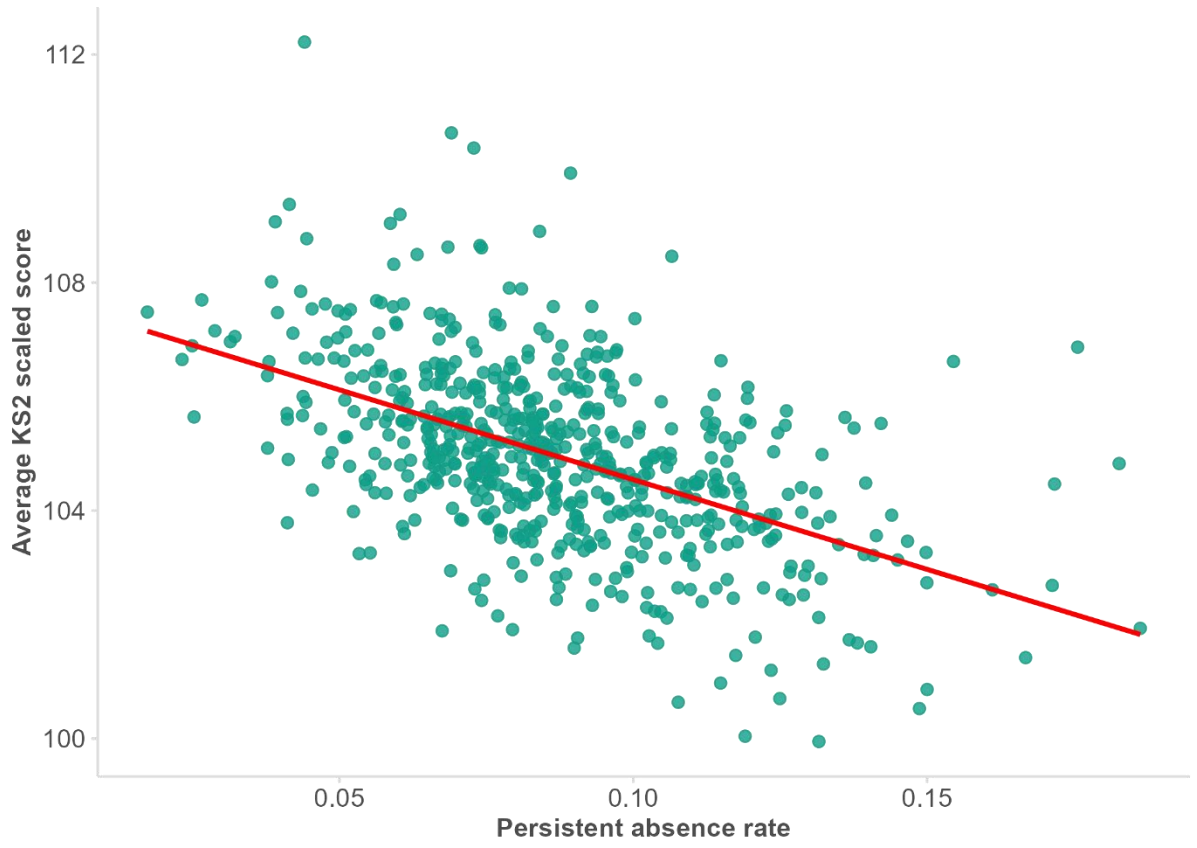


Figure 4.2 shows key stage 2 scaled scores plotted against persistent absence rates, demonstrating the moderate negative correlation shown in the matrix. The red line plots the linear relationship between the variables. As mentioned above, while we cannot infer a causal relationship between the variables, the possible implications of this correlation are intuitive: pupils frequently missing periods of study are less likely to achieve higher attainment results.

Figure 4.2: Key stage 2 attainment compared with persistent absence rates by group, primary phase



The red line illustrates the fitted linear model.

Secondary phase

Figure 4.3 shows correlations between metrics available at secondary phase. The matrix indicates:

- A strong negative correlation between Attainment 8 scores and persistent absence – groups with higher KS4 attainment outcomes tend to have lower rates of persistent absence. Persistent absence is also moderately negatively correlated with both KS4 progress measures.
- A strong positive correlation between persistent absence and suspensions (single and repeat) – groups with higher rates of persistent absence tend to have higher rates of suspension.
- A moderate negative correlation between Attainment 8 scores and disadvantage preference scores – groups with higher key stage 4 attainment are likely to receive a lower proportion of applications from disadvantaged pupils compared to the proportion of disadvantaged pupils living in the local area.
- A moderate positive correlation between suspensions and disadvantage preference scores – groups with higher rates of suspension are likely to receive a higher proportion of applications from disadvantaged pupils when compared to the proportion of disadvantaged pupils living in the local area.

Figure 4.3: Correlation matrix, secondary phase

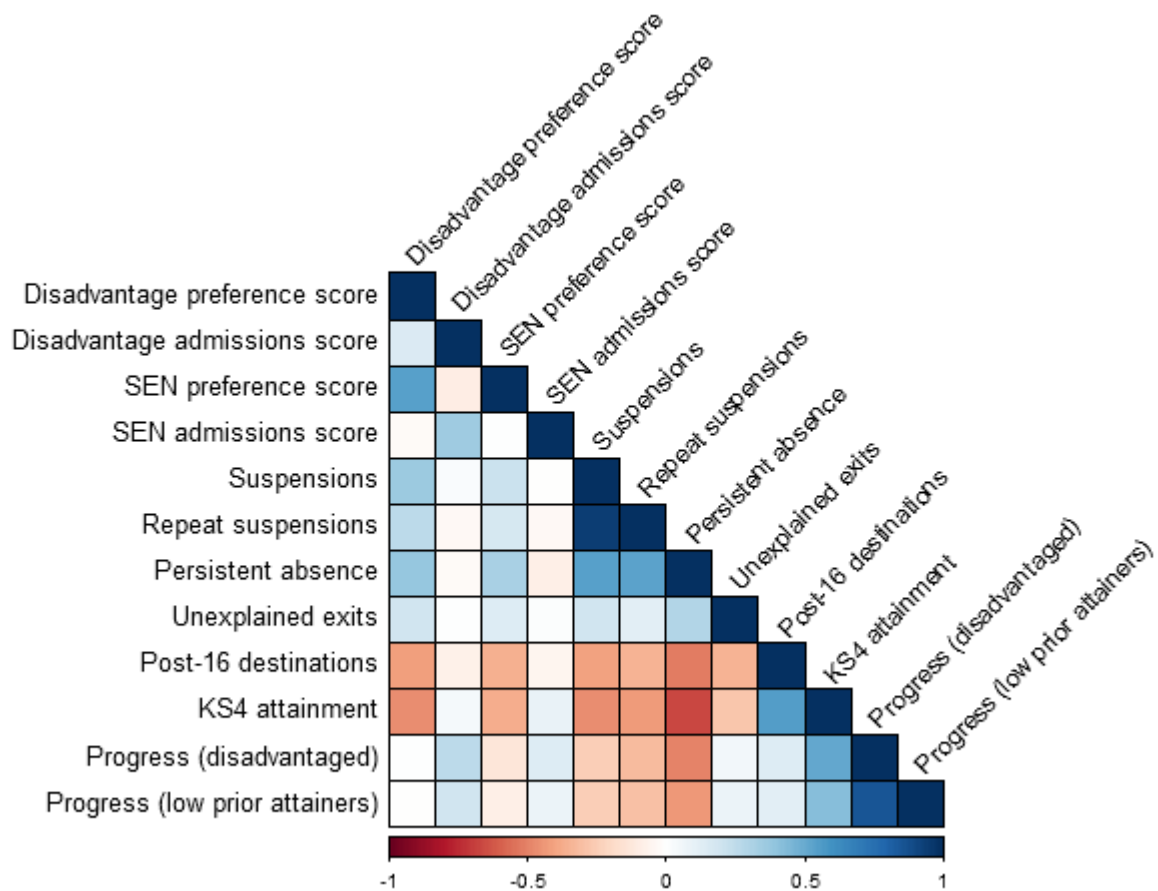
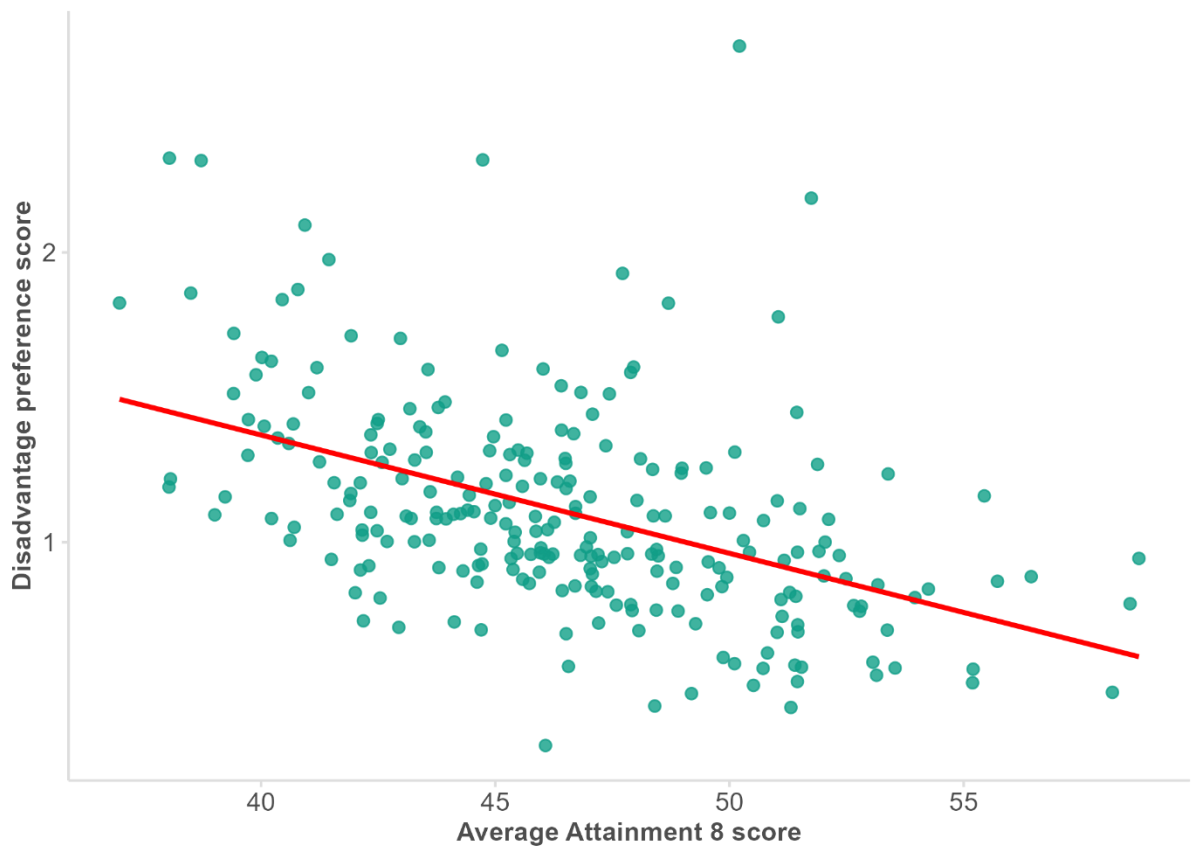


Figure 4.4 shows attainment 8 scores plotted against disadvantage preference scores, demonstrating the moderate negative correlation seen in the matrix. Again, while no causal link can be inferred, this relationship is particularly interesting as it illustrates the possible barriers pupils from disadvantaged backgrounds face when applying to high-performing groups. As the chart shows, the best performing groups tend to have disadvantage preference scores of less than 1, indicating they are likely to receive a lower proportion of applications from disadvantaged pupils when compared to the proportion of disadvantaged pupils living in the local area.

Figure 4.4: Attainment 8 scores compared with disadvantage preference scores, secondary phase



The red line illustrates the fitted linear model.

Comparing groups by size

Another feature of the government's school improvement strategy is building the size of school groups to develop central capacity among schools. Aimed at increasing financial stability, maximising workforce impact, and driving school improvement, last year's White Paper set out an ambition for groups to be either serving a minimum of 7,500 pupils or running at least 10 schools.²⁶

In this section we examine the ways in which our metrics are affected by the number of schools within a group. We define 'small' groups as any group with fewer than five schools, 'medium' groups as groups with between five and nine (inclusive) schools, and 'large' groups as groups with 10 or more schools.

We present these results on radar plots. These plots allow for the comparison of groups or group types across our suite of metrics, demonstrating the relative strengths and weaknesses of different groups. The axes for each metric represent deciles – a score of 1 on a given metric indicates that group is in the bottom 10 per cent of all groups at that phase, while a score of 10 indicates the 'best' 10 per cent. The plots below show the median decile for each group size classification across each metric.

²⁶ HM Government "[Opportunity for all: strong schools with great teachers for your child](#)", CP 650 (2022)

Primary – all groups

Figure 5.1 shows a radar plot of group sizes for all group types at primary phase.

Small groups have the highest preference scores and the highest average key stage 2 attainment for disadvantaged pupils. However, small groups have the lowest average SEN admissions score, suggesting that compared to larger groups, the intake of SEN students is a smaller proportion when compared to the proportion of SEN pupils that apply. This may be a result of smaller groups having a more limited capacity to provide SEN support.

Medium-sized groups do not outperform other group sizes in any metric at primary but have the lowest average disadvantage admissions score.

Large groups have the highest average score across four of the seven metrics at primary. This includes the higher admissions scores and better absence record, compared to smaller groups.

Figure 5.1: Deciles of median metric scores by group size, all group types, primary



Primary – MATs

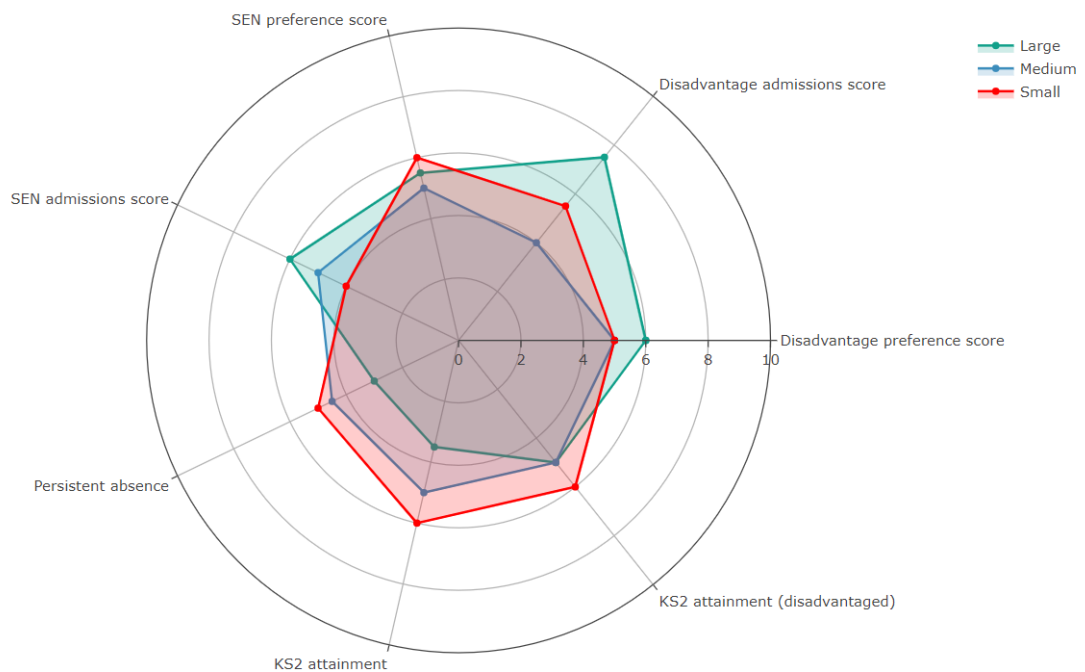
Figure 5.2 shows a radar plot of group sizes for MATs only at primary phase.

Small MATs outperform other MAT sizes in key stage 2 attainment, both overall and for disadvantaged pupils. Small MATs also perform better on persistent absence, as well as SEN preferences.

Medium-sized MATs do not outperform both small and large MATs in any single metric and also have the lowest average disadvantage admissions score.

Large MATs perform worse than smaller MATs in key stage 2 attainment and persistent absence but outperform other small and medium-sized MATs on our disadvantage admissions and preference scores.

Figure 5.2: Deciles of median metric score by group size, MATs, primary



Secondary - all groups

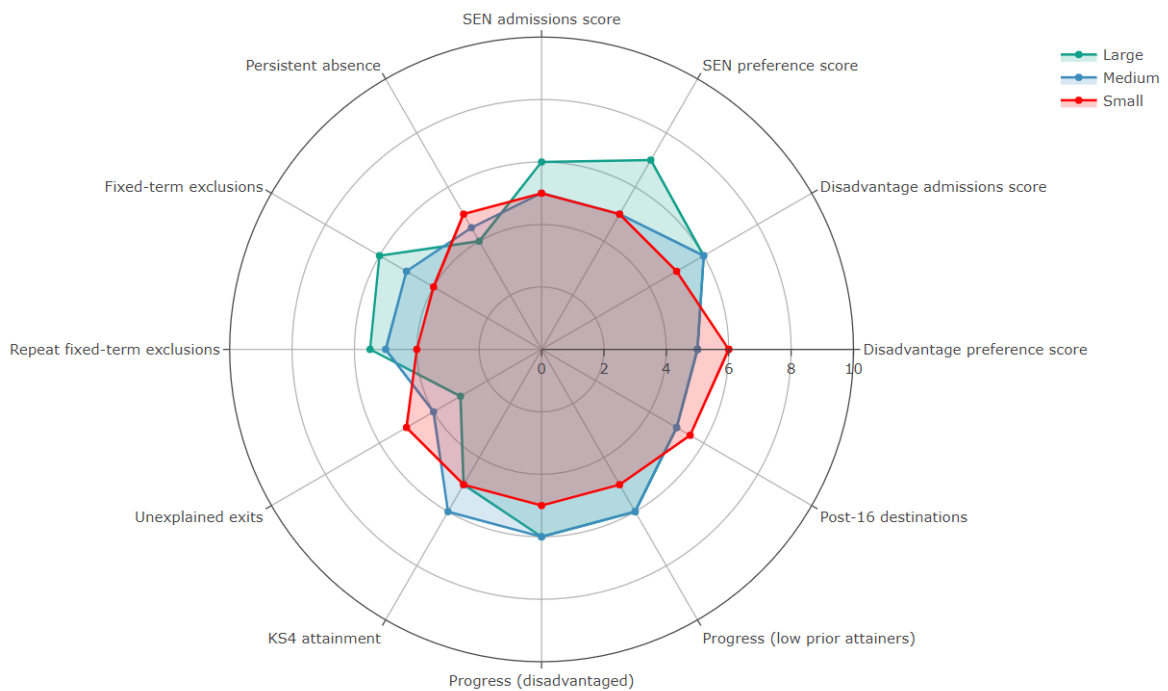
Figure 5.3 shows a radar plot of group sizes for all group types at secondary phase.

Small groups typically outperform other larger group sizes in persistent absence, unexplained exits, disadvantage preference score and post-16 destinations.

Medium-sized groups score similarly well to large groups, outperforming other group sizes in just overall key stage 4 attainment.

Large groups tend to score highest on most metrics but have the lowest average unexplained exits score (meaning a higher unexplained exit rate) and persistent absence score. They outperform other group sizes in fixed- and repeat suspensions, as well as SEN preference scores.

Figure 5.3: Deciles of median metric scores by group size, all group types, secondary



Secondary – MATs

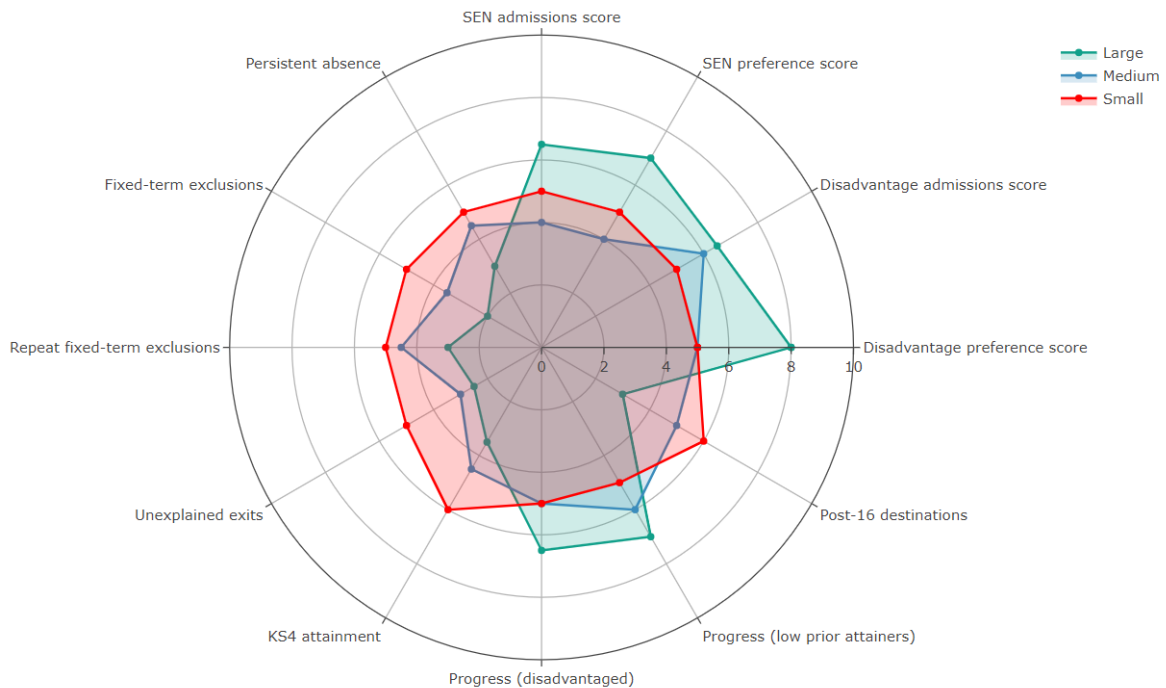
Figure 5.4 shows a radar plot of group sizes for MATs only at secondary phase.

Small MATs outperform other MAT sizes across six metrics: persistent absence, fixed- and repeat suspensions, unexplained exits, overall key stage 4 attainment, and post-16 destinations. Only in progress for low prior attaining pupils and disadvantage preference scores do small MATs perform worse than both medium-sized and large MATs.

Medium-sized MATs do not outperform other MAT sizes in any single metric and have the lowest average SEN preference and admissions scores.

Large MATs have the highest preference and admission scores, for both disadvantaged and SEN pupils. Low prior attaining and disadvantaged pupils also make more progress compared to pupils in smaller groups. However, on average large MATs have the lowest scores for persistent absence, fixed- and repeat suspensions, unexplained exits, overall key stage 4 attainment, and post-16 destinations.

Figure 5.4: Deciles of median metric score by group size, MATs, secondary



Annex

Table A1: Summary statistics of inclusion and attainment metrics, by group type, primary

Metric	Diocesan MAT N = 84	Diocese N = 57	Federation N = 85	Local authority N = 147	Trust N = 241
KS2 attainment	104.51 (103.59, 105.93)	105.05 (104.69, 105.71)	104.44 (103.20, 105.94)	104.42 (103.96, 105.27)	104.06 (103.06, 105.01)
KS2 attainment (disadvantaged)	102.05 (100.57, 102.87)	101.91 (101.37, 102.58)	103.04 (100.73, 104.20)	101.88 (101.29, 102.77)	101.73 (100.78, 102.89)
Disadvantage preference score	0.71 (0.46, 1.04)	0.67 (0.55, 0.77)	1.02 (0.71, 1.51)	0.87 (0.77, 1.02)	1.06 (0.77, 1.38)
Disadvantage admissions score	0.49 (0.40, 0.76)	0.70 (0.56, 0.85)	0.82 (0.63, 0.98)	0.97 (0.72, 1.25)	0.87 (0.57, 1.21)
SEN preference score	0.63 (0.53, 0.80)	0.65 (0.57, 0.70)	0.91 (0.53, 1.49)	0.80 (0.68, 0.91)	0.79 (0.54, 1.03)
SEN admissions score	0.43 (0.33, 0.75)	0.56 (0.45, 0.76)	1.10 (0.81, 1.45)	0.64 (0.44, 0.82)	0.41 (0.22, 0.65)
Persistent absence	0.081 (0.059, 0.095)	0.068 (0.065, 0.075)	0.079 (0.062, 0.103)	0.084 (0.077, 0.095)	0.093 (0.074, 0.114)

Notes: Figures are median (first quartile, second quartile)

Table A2: Summary statistics of inclusion and attainment metrics, by group type, secondary

Metric	Diocesan MAT N = 8	Diocese N = 24	Federation N = 3	Local authority N = 76	Trust N = 138
KS4 attainment	46.9 (46.1, 50.6)	48.0 (45.5, 51.3)	48.4 (47.8, 51.2)	46.2 (44.5, 48.5)	45.6 (42.5, 49.3)
Progress (disadvantaged)	0.03 (-0.06, 0.30)	0.06 (-0.13, 0.34)	0.22 (0.11, 0.63)	-0.07 (-0.18, 0.18)	0.06 (-0.17, 0.25)
Progress (low prior attainers)	0.26 (0.09, 0.43)	0.23 (0.09, 0.42)	0.38 (0.37, 0.63)	0.14 (0.00, 0.25)	0.19 (0.03, 0.41)
Post-16 destinations	1.014 (1.008, 1.025)	1.010 (1.004, 1.018)	0.981 (0.971, 0.989)	0.999 (0.993, 1.007)	0.995 (0.981, 1.006)
Disadvantage preference score	0.85 (0.81, 0.89)	0.86 (0.79, 0.98)	0.81 (0.79, 0.85)	1.07 (0.91, 1.26)	1.10 (0.94, 1.36)
Disadvantage admissions score	0.55 (0.37, 0.77)	0.53 (0.41, 0.62)	0.69 (0.59, 0.80)	0.76 (0.56, 0.98)	0.72 (0.54, 0.99)
SEN preference score	1.43 (0.87, 1.59)	1.11 (0.95, 1.25)	0.62 (0.46, 0.80)	1.28 (1.07, 1.44)	1.31 (1.04, 1.59)
SEN admissions score	0.68 (0.58, 1.20)	0.88 (0.78, 1.00)	1.05 (0.71, 1.38)	0.84 (0.57, 1.08)	0.76 (0.57, 1.13)
Persistent absence	0.14 (0.12, 0.14)	0.12 (0.10, 0.14)	0.12 (0.09, 0.13)	0.14 (0.13, 0.15)	0.14 (0.12, 0.17)
Suspensions	0.042 (0.035, 0.049)	0.045 (0.038, 0.052)	0.048 (0.036, 0.069)	0.048 (0.041, 0.056)	0.054 (0.041, 0.074)
Repeat suspensions	0.017 (0.012, 0.021)	0.015 (0.012, 0.022)	0.017 (0.010, 0.023)	0.018 (0.015, 0.024)	0.023 (0.014, 0.032)
Unexplained exits	0.0027 (0.0022, 0.0033)	0.0032 (0.0027, 0.0037)	0.0153 (0.0099, 0.0207)	0.0038 (0.0030, 0.0048)	0.0040 (0.0026, 0.0056)

Notes: Figures are median (first quartile, second quartile)