

Chain Effects

The impact of academy chains on low income students

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Improving social mobility
through education



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When academy schools were first introduced in the UK in 2000, their primary purpose was to turn around failing schools – to ensure that the children these schools served, who were often from disadvantaged backgrounds, got the best education possible.

Since then the academies programme has expanded dramatically and its focus has widened. From around 200 academies in 2010, there are now almost 4,000 – more than two thirds of which are not failing schools, but high performing schools which have chosen to convert to academy status.

However, the original 'sponsored' route remains of huge importance. Schools that are failed by Ofsted – both primary and secondary – are expected to acquire a sponsor to provide them with new leadership.

Despite comprising less than a third of all academies, these schools are extremely important as a potential engine of social mobility. These previously underperforming schools often educate high proportions of disadvantaged children. The sponsored academy model, if successful, holds the promise of substantially improving the lot of these students.

The central aim of the sponsored academy model is for schools to benefit from the support and expertise of their academy sponsors, who include business leaders, charities, private education companies, and many other types of organisation. Increasingly, and encouraged by the Department for Education, many academies have banded together into academy chains under the direction of a single sponsor. According to the DfE, more than half of all academies are now part of academy chains, with the largest chains managing upwards of 70 schools.

The success or failure of these chains in driving improvement in their sponsored academies therefore has huge implications for a large number of children. For a disadvantaged child attending a previously failing school, whether their school joins a successful chain or a weaker one could have a dramatic effect on their future chances in life.

This report therefore represents an extremely timely and important in-depth look at the performance of the academy chains. It shows that some chains, including the Harris Federation, ARK Schools, and the City of London Corporation, as well as schools linked to the Mercers Livery Company, are doing particularly well; with attainment scores for disadvantaged pupils substantially above those of the general run of state schools. However, there are other chains which are performing less well than maintained schools on average, and are not doing enough to improve the prospects of their disadvantaged pupils.

Those chains that appear most successful are the ones with the greatest school improvement experience, a clear mission and a sustainable approach to growth. A recent DfE analysis concluded that 'high performing sponsors have strong and determined CEOs with a clear moral purpose'. The best chains have used their status effectively to recruit good teachers and leaders. They are clearly fulfilling the original mission of academies. Their students have been given the second chance that they deserve. Other chains, while performing well on the basics, have more work to do to improve results in other academic subjects. But there are also those that could and should do better across the board.

With such a large variation in the success of the various chains, it is vital that Ofsted, in addition to its work with individual schools, is able routinely to assess these groups of schools as a whole. Regular, transparent, and honest assessment of the performance of the academy chains – which are performing well, which are failing, and why – is essential if we are to prevent the tragedy of children being transferred from a failing school to a failing chain.

I am grateful to Professor Merryn Hutchings and Professor Becky Francis for their work with our research fellow Dr Robert de Vries on this timely and important report.

David Hall, Acting Chairman, Sutton Trust

1. The coalition government is pledged to promote the educational achievement of young people from disadvantaged backgrounds, and to narrow the socio-economic gap for attainment, as part of its strategy for promoting social mobility. One of the ways in which it is attempting to address this issue by encouraging more schools to become academies and arranging for 'failing' schools to become sponsored academies.
2. As the academies programme has developed, policymakers have increasingly promoted academy chains as the best method for fostering professionalism, value for money, and school-to school collaboration – and hence the best way of working to improve the performance of previously struggling schools and the educational outcomes of their (often disadvantaged) pupils. However, there has been very little analysis of the success or otherwise of this policy strategy in positively impacting the attainment of disadvantaged young people.¹
3. Our research set out to address this gap. We analysed school performance data to review how well disadvantaged pupils achieve in academy chains. We included chains only if they had at least three academies in 2013, and two sponsored secondary academies for the whole period from September 2010 to July 2013. This means that academies are included in our analysis only when there has been sufficient time for the sponsor chain to have some impact on performance.
4. We reviewed outcomes for disadvantaged pupils in sponsored secondary school academies across a range of measures, including their results in the best 8 GCSE subjects, progress in English and Maths, and the English Baccalaureate, in addition to the main measure of five good GCSE or equivalents including English and mathematics. This is intended to reflect the stronger focus taken by the coalition on academic subjects, and the change in emphasis in the league tables from 2016.
5. The characteristics of the various chains have also been reviewed in order to explore whether there are any common characteristics across the chains that are more or less successful in promoting the attainment of disadvantaged pupils.
6. Our analysis reveals eight key points:
 - There is very significant variation in outcomes for disadvantaged pupils, both between and within chains; and chains differ significantly in attainment against different measures.
 - On average, the improvement for disadvantaged pupils in 5A*CEM in sponsored academies in the analysis group was greater than the average for all mainstream schools between 2011 and 2013. However, there was enormous variation between chains, with only 16 out of 31 exceeding the figure for all mainstream schools in 2013.
 - Additionally, some sponsor chains are managing to raise attainment significantly for young people with low prior attainment - an important demonstration of value.
 - There are five chains that are promoting high attainment for disadvantaged pupils – and indeed for pupils of all types - across a whole range of measures.
 - However, there are also some chains which are highly ineffective across a range of measures, and which are failing to improve the prospects of their disadvantaged pupils.

¹ Throughout the report we use disadvantaged to mean those pupils who have been eligible for Free School Meals at any time in the last six years. This is the definition used for the Pupil Premium.

- Most academy chains in our study have relied heavily on equivalent qualifications, and underperform on the EBacc measure, in comparison to the national average. There are, however, some notable exceptions.
- When analysed against a range of Government indicators on attainment, a majority of the chains analysed still underperform the mainstream average on attainment for their disadvantaged pupils. While some of those below the average are continuing to improve, others are not.
- The key factors we have identified in the more successful chains are a measured approach to expansion, and the importance of building up strong experience of strategies for improving schools.

For Policymakers:

- Ofsted should be empowered to undertake formal inspections of academy chains, and to make judgements on their provision, based on clear criteria.
- The DfE should publish data on chains' performance, across a range of measures, in addition to that which they publish for individual academies.
- The DfE should sharpen and make more transparent its procedures for awarding sponsorship, including rigorous benchmarks on convincing strategies and capacity for school improvement.
- New chains should not be allowed to expand until they have a track record of success in bringing about improvement in their first academies
- The DfE should also continue to sharpen and make more transparent its process for issuing warning notices to sponsors, and for capping chains.
- Funding agreements for new sponsors should be for five years rather than seven. And the government should not renew funding agreements where improvement has not been demonstrated.
- The Government should learn and spread the lessons from successful chains. As the evidence on chains grows, the Government should commission robust research on the practices of those chains that are providing transformational improvement for their disadvantaged pupils, so that lessons of success may be spread throughout the system.

For sponsors and schools:

- Sponsor chains – but especially those needing to improve - should seek out successful practice and reflect on what their own chain could learn from it. In particular, they should ensure there are clear lines of responsibility and accountability for school improvement and performance within the chain.
- Academies need to do more to ensure that children from low and middle income homes gain good grades in the subjects that will facilitate access to prestigious universities and careers.
- There is growing evidence on the most effective strategies for school improvement, including the Sutton Trust/Education Endowment Foundation (EEF) Toolkit, which focuses on effective strategies to improve results for disadvantaged students. Sponsors and schools should make full use of this growing body of evidence to improve pupil outcomes.

The best chains have shown that academies have the potential to transform the lives of young people. But if the academies programme is to achieve its aims, it must learn from effective practice to improve educational outcomes for disadvantaged young people. It must also expect stronger improvement from those chains that urgently need to improve their results. In these ways, the sponsored academies programme will more effectively realise its intention to transform the educational outcomes of disadvantaged young people.

1. INTRODUCTION

The coalition government is pledged to promote the educational achievement of young people from disadvantaged backgrounds, and to narrow the socio-economic gap for attainment, as part of its strategy for promoting social mobility. One of the ways in which it is attempting to address this issue is by encouraging more schools to become academies and through academy sponsorship of struggling schools.

The sponsored academies programme was announced by the New Labour government in 2000, growing in pace during the latter part of the decade, and further accelerated by the Coalition government since 2010. As the academies programme has developed, policymakers have promoted academy chains (usually Multi Academy Trusts, where a school or other organisation sponsors a group of schools). This arrangement has been seen as best fostering professionalism, value for money and school-to-school collaboration; and hence best working to improve the performance of previously struggling schools, and the educational outcomes of their (often disadvantaged) pupils. However, there has been very little analysis of the success or otherwise of this policy strategy in positively impacting the attainment of disadvantaged young people.² The research reported here set out to address this gap, asking in particular, 'Which academy chains have had most success in advancing the outcomes of low income students?'

² Throughout the report we use disadvantaged to mean those pupils who have been eligible for Free School Meals at any time in the last six years. This is the definition used for the Pupil Premium.

2. BACKGROUND

Education is key to the Government's social mobility agenda. The education system is expected to prepare young people with the knowledge and skills they need to secure successful futures as workers and citizens, and to delineate merit through success in exams. Yet the evidence shows that in England, schooling at best replicates and at worst exacerbates existing inequality.³

Attainment gaps:

There is a 26 percentage point gap for Free School Meals in the key indicator of 5 A*-C including Maths and English at GCSE.

Only 8% of those eligible for Free School Meals achieved the English Baccalaureate, compared to 25% of all other pupils.

Only 7.5% of those pupils not achieving Level 4 for Key Stage 2 achieve 5 A*-C including Maths and English at GCSE.

There are many different social factors shown to impact inequality of experience and outcome in education, including gender, dis/ability, 'race' and ethnicity. However, socio-economic background remains the strongest predictor of educational attainment in the English system.⁴ Children from low socio-economic groups are already behind their more advantaged counterparts when they begin school.⁵ But far from narrowing this gap, the gap widens through school.⁶ With the exception of some modest recent narrowing of the gap, educational attainment has increased more rapidly amongst the well-off,⁷ and educational outcomes remain closely correlated with social class.⁸

These differentiated outcomes cannot be solely attributed to the education system: family income, job prospects, health, housing, social capital and social culture are all important. But system-level factors are also well documented, including the high levels of social segregation in the UK system,⁹ with the result that disadvantaged pupils are often concentrated in poorer quality schools.¹⁰ Hence those most in need tend to be those least likely to access good educational provision, facing 'double-disadvantage'.

These problems demand that we:

- Ensure that access to the best schools is equally available to all;
- Improve poor schools to ensure all provision is of a high standard.

The previous and current governments have sought to address the second point via the establishment of sponsored academies.

³ DfE (2014a, 2014b)

⁴ Other aspects of inequality intersect with social class; an important point to consider when examining which groups of children are underachieving.

⁵ Cabinet Office (2011)

⁶ DfE (2013, 2014a)

⁷ Lupton et al (2009); Lindley & Machin (2012)

⁸ Lupton et al (2009); Clifton & Cook (2012)

⁹ Secretary of State Michael Gove has pledged to transform what he complains is "one of the most segregated and stratified education systems in the world" (Gove, drawing on OECD data, reported in The Telegraph, 2012).

¹⁰ As illustrated by work such as that of Lupton (Lupton et al 2009; 2010) and Francis (2011), which demonstrate the over-representation of working class children in poorer quality schools.

2.1 What the Government is trying to achieve through the academies programme

The academies programme was instigated by the last Labour Government in 2000, with the opening of the first 'City Academies' in 2002. These academies replaced schools with a history of underperformance, located in areas of social deprivation. As the Academies Commission summarises of what it refers to as the Academies Programme 'Mark 1',

The model and mission were clear: the original and failing school was closed and a new school was opened, sponsored by a philanthropist or business partner, keen to make a difference to the lives of poor children and young people in deprived areas. The ambitious vision and business acumen of the sponsor were seen as key in establishing an ambitious new school, outside any governance by the local authority and in radically transformed buildings with highly paid headteachers. The new academies were considered strategic investments in change. They had start-up funds and freedoms to vary the curriculum, school year, staff pay and conditions of service.¹¹

Arguably, there were other agendas at stake in the early sponsored academies programme: the notion of school autonomy (especially from the local authority) and a faith in the private/business sector to sharpen public sector practice were clearly evident.¹² Nevertheless, the commitment to resourcing struggling schools in areas of social deprivation as a means to address social justice was clear.¹³ This focus on revitalising England's lowest performing schools was diluted with the Coalition's drive to turn many of the most successful schools into academies¹⁴ through its 'conversion' programme. The increased focus on school autonomy arguably trumped the original promotion of social redistribution, as it was now many of the best schools – where more advantaged children tend to be concentrated – that gained as a result of generous funding arrangements and autonomy.¹⁵ Nevertheless, the Coalition simultaneously enacted its pledge to maintain and significantly develop the sponsor academy programme; continuing to expect that underperforming schools become academies, and the encouragement of struggling schools to voluntarily join a sponsor.

Outcomes for the sponsored academy programme have been mixed,¹⁶ and the impact on pupil achievement remains a topic of controversy and debate;¹⁷ although there are emerging positive findings for the early wave of 'City Academies'.¹⁸ There have also been differing findings on the success of sponsored academies in narrowing socio-economic gaps for attainment. The National Audit Office¹⁹ found that, although early sponsored academies tended to raise attainment overall, the gap between more disadvantaged pupils and others had grown wider on average in academies than in comparable maintained schools. However, analysis by the DfE²⁰ shows more positive outcomes and a slight narrowing of the gap for pupils on free school meals (FSM), especially in sponsored academies open the longest. Others have expressed concerns about the potential for further social segregation, as academies are their own admissions authorities.²¹

¹¹ Academies Commission (2013) p.21-22

¹² Francis (2013, 2014)

¹³ Adonis (2012); Mahony and Hextall (2012)

¹⁴ Those schools graded by Ofsted as 'Outstanding', and later 'Good' with Outstanding features.

¹⁵ Francis (2010); Academies Commission (2013)

¹⁶ NAO (2012)

¹⁷ Machin & Vernoit (2010); Machin (2012); Academies Commission, 2013; Wrigley & Kalambuka, (2012)

¹⁸ Eyles & Machin (2014)

¹⁹ NAO (2012)

²⁰ DfE (2012a)

²¹ Academies Commission (2013); West et al (2009)

2.2 What the Government is trying to achieve via encouragement of the development of academy chains

Relatively early in the programme it became apparent that ‘stand alone’ academies – those single schools with an individual sponsor – showed mixed success and were more likely to achieve poor outcomes. While there were notable cases of transformative success, such as Mossbourne Academy in Hackney, there were also failures, and there was a risk of isolation impacting detrimentally on practice.²² Such concerns underpinned the policy promotion of academy chains.

The Academies Commission²³ identifies three phases of the English academies programme (and asserts the need for a fourth). The Commissioners argue that in the decade following the creation of the first City Academies, during the Labour government’s roll out of these sponsored academies across the country, the original model shifted to *Academies Mark II*. This model reduced the focus on individual businesspeople and philanthropists as potential sponsors, encouraging substantial organisations such as universities, charities and even some local authorities to act as sponsors. Sponsor capacity and educational expertise was established as an issue,²⁴ and the potential benefits of sponsor organisations operating as ‘chains’ (with a central organisation sponsoring and applying their model to more than one school) were increasingly identified.²⁵ These organisations, often with substantial existing infrastructure and resources, were seen as bringing expertise and resource to sponsorship, and mitigating some of the risks associated with individual sponsors. Meanwhile, more conditions were specified in academy funding agreements.²⁶

Hill²⁷ asserts the potential benefits of academy chains, but also notes some risks, including lack of a clear mission, introversion and overstretch of capacity. Likewise, there are debates about the role and impact of academy chains on the notion of autonomy at the heart of the academies programme. While chains may instigate innovative practice, their imposition on sponsor schools of a centrally-mandated model can reduce individual school autonomy (the Academies Commission found headteachers in some large chains experiencing the same constraints as they had formerly experienced from the Local Authority). Nevertheless, sponsor chains have been a lynch-pin of Coalition academies policy; first the scale-up of the philanthropic sponsor model facilitated by the DfE’s academy brokers in the early years of the Coalition administration; and later through its encouragement of school-led sponsorship.²⁸ School-led chains are a central feature of the Academies Programme ‘Mark 3’ (since 2010): scaled-up autonomy that seeks to free schools from bureaucracy and unleash a self-improving system via school-to-school collaboration.²⁹

The impact of chains is largely uncharted. While many were actively encouraged to expand rapidly in the early years of the Coalition government, as a result of the enormous increase in numbers of academies, capacity challenges have become evident recently, with 25 academy chains ‘capped’ and prevented from further expansion in 2014.³⁰ This DfE list was subsequently reduced to 14 chains,³¹ but there have also been well-publicised cases this year of schools being ‘removed’ from chains, due to lack of improvement.³² Nevertheless, Chris Cook’s analysis for the *Financial Times* in 2013 remains one of the few attempts in the public domain to measure academy chain performance. In spite of the overt intention of the sponsored academies programme to improve educational outcomes for

²² Hill (2010); Academies Commission (2013)

²³ Academies Commission (2013)

²⁴ Hill (2010)

²⁵ Hill (2010); Hill et al (2012); O’Shaughnessy (2012).

²⁶ Academies Commission (2013)

²⁷ Hill (2010); Hill et al., (2012)

²⁸ See e.g. DfE (2010)

²⁹ Academies Commission (2013); see also Gilbert (2013)

³⁰ DfE information to the Education Select Committee (2014)

³¹ Paton (2014)

³² BBC (2014)

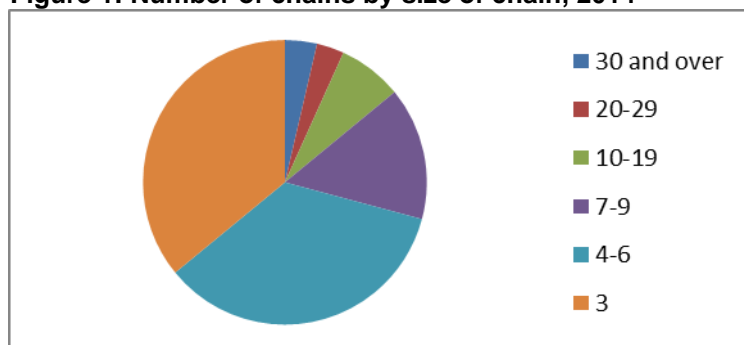
disadvantaged young people, there has been little attention to the effectiveness of different chains in raising attainment for disadvantaged pupils.

2.3 Academies and chains: the current picture

Academies are publicly funded schools, independent from the local authority. In May 2010, there were 203 academies. There are now almost 4000 (primary, secondary and special schools). The incentivising of maintained schools to convert to academy status through the offer of autonomy, specific freedoms and a generous funding calculation in the early years of the Coalition administration³³ led to an astonishingly rapid expansion of the programme: 57% of maintained secondary schools in England are now academies or free schools.³⁴ As the Academies Commission³⁵ emphasises, despite policy and media attention focusing on sponsor academies and free schools, the vast majority of academies are now converter academies. In June 2014, the DfE list included almost 4000 academies, of which only 28% (1105 academies) were sponsored. This growth in the number of academies had less impact on the primary sector, although numbers are increasing: 11% of all primary schools are academies.

The Academies Commission³⁶ reported that at the end of 2012 there were 312 academy chains (albeit noting that this figure includes potentially 'light touch' 'collaborative partnerships'); and that 39% of academies were in a chain (28% if 'collaborative partnerships' were excluded). However, some of these 'chains' were pairs of schools, and the DfE now uses the word chain only for groups of three or more schools. The June 2014 academies list³⁷ includes 192 chains of this sort (that is, groups of academies with a single sponsor). These may be formally linked as multi-academy trusts, but this is not the case for all of these 'chains'. The chains are extremely varied; the largest has 74 schools (June 2014) but the majority are very much smaller, with half consisting of only three or four schools (Figure 1). A further 139 sponsors have two academies each, and 112 sponsor just a single academy.

Figure 1: Number of chains by size of chain, 2014



Source: DfE (2014c)

This hints at the complexity involved in any discussion of academies, chains, and other types of schools in the contemporary English system. The level of complexity and fluidity has made it notoriously difficult to analyse the impact of academies (and academy chains) on educational outcomes for young people. For example, there has been a trend for proponents of the academies programme to highlight sponsored academies' faster-than-average improvement (when of course, this

³³ See Bassett et al (2012); Academies Commission (2013)

³⁴ DfE (2014b)

³⁵ Academies Commission (2013)

³⁶ *Ibid*

³⁷ DfE (2014c)

is to be expected given that so many sponsored academies start at a low base);³⁸ whereas opponents cite their lower-than-average attainment (when again, this is to be expected given their low starting points and pupil demographic). Applying measures to schools that have often adopted academy status only very recently, or to chains that have been in very rapid development and contain a mixture of school-types, can lack validity. Nevertheless, it is this terrain that this report attempts to chart. Given the specific intention of the sponsored academies programme to improve the outcomes for disadvantaged young people, and the encouragement of academy chains as a means of best facilitating these outcomes, it is vital to attempt to assess their impact.

2.4 Aims of the research

So what has been the impact of sponsored academies on the outcomes for the disadvantaged pupils they were initiated to help? Which academy chains have had most success in advancing the outcomes of low income students – and how have they achieved this? These are the questions this report seeks to answer.

In doing so, we provide information about the relative impact of different sponsor chains on various facets of pupil progress and attainment, especially for disadvantaged pupils (as indicated primarily by eligibility for Free School Meals). We also attempt to examine what the successful sponsor chains have in common, and what they are doing to achieve their success.

³⁸ The DfE does this regularly, citing improvement for sponsors rather than attainment, and attainment for converters (which were already rated Good or Outstanding by Ofsted at the point of conversion) rather than improvement: see e.g. DfE (2014d)

3. RESEARCH DESIGN

3.1 The academies included in the analysis

This research is concerned with outcomes for disadvantaged pupils in secondary sponsored academies. We have included as chains all instances where one sponsor is listed for three or more academies (sponsored or converter, following the DfE usage). However, we acknowledge that in some cases these are not organised as chains, and that some schools have multiple sponsors; thus the organisations we include may not all consider themselves to be chains, and may not have primary responsibility for the schools listed against them. This is further discussed in Section 4.

We have analysed the results only of academies that have consistently been part of the chain since September 2010. While this inevitably limits the number of academies and chains included in the analysis, we have done this because the majority of pupils taking GCSEs in 2013 in these academies will have undertaken at least the most recent three years of their secondary education within the chain, and so it seems reasonable to relate their outcomes and progress to the chain. This is the same approach as Cook used in his 2013 analysis of chains' effectiveness. However, we have not included chains where only one secondary sponsored academy was part of the chain for the whole period since September 2010, because this would result in taking the performance of a single school as representing the chain as a whole. Similarly, we excluded chains where only one academy had pupils taking GCSEs during the period from September 2010.

The chains included in the analysis group are listed in Table 1,³⁹ which also shows the number of schools for which we were able to analyse data for the whole period, together with the total number of academies in the chain in 2013 (including convertors, and primary and special schools).⁴⁰

³⁹ Table 1 uses the chain titles given on the DfE list of academies 2013; throughout the remainder of this report we have shortened these titles by removing words such as 'Trust', 'Federation', 'Foundation', 'Group' etc.

⁴⁰ We have provided the 2013 figure because this matches the end date of the attainment analysis; many chains have grown further since that time. This figure given may still under-represent the total size of some chains, as some include Free Schools, and others, independent schools.

Table 1: Chains and numbers of academies included in the analysis

Sponsor	Academies included in analysis	Total academies in chain, 2013	Sponsor	Academies included in analysis	Total academies in chain, 2013
ARK Schools	5	15	Harris Federation	8	17
Academies Enterprise Trust (AET)	7	51	Kent Catholic Schools Partnership ²	2	2
Barnfield Education Partnership Trust	2	3	Leigh Academies Trust	3	5
Brooke Weston	3	6	Mercers Company, The	2	3
Cabot Learning Federation	3	10	Oasis Community Learning	11	19
City of London Corporation	2	3	Ormiston Academies Trust	9	17
David Meller	2	3	Outwood Grange Academies Trust	2	6
David Ross Education Trust	2	8	School Partnership Trust Academies (SPTA)	2	26
Diocese of Leeds and Ripon ¹	2	2	The Aldridge Foundation	2	4
Diocese of Oxford	2	4	The Co-operative Group	2	3
Diocese of Salisbury MAT	2	6	The Landau Foundation	2	4
Dixons Academy Trust	2	2	The Learning Schools Trust	2	3
E-ACT	11	27	The Priory Federation of Academies Trust	4	4
Grace Foundation	3	3	United Learning	19	23
Greenwood Dale Foundation Trust	2	11	Woodard Academies Trust	2	3
Haberdashers' Aske's Federation ³	3	4			

1. As a result of diocesan reorganisation, the Diocese of Leeds and Ripon is no longer an academy sponsor, and the schools they sponsored during the analysis period are now with different sponsors: Leaf Trust and Bradford Diocesan Academies Trust.
2. The schools previously listed by the DfE as Kent Catholic Schools Partnership are identified as sponsored by the Archdiocese of Southwark on the most recent (June 2014) academies list. On the Kent Catholic Schools Partnership website, the schools in London (which are the ones we were able to analyse) are not included. It is therefore unclear which organisation is the sponsor.
3. The Haberdashers' Company sponsors a number of academies; while the DfE list identifies them all as Haberdashers Aske's Foundation, the Haberdashers' website makes it clear that this is not the case; one is sponsored by Haberdashers' Adams Foundation.

3.2 The data

It is important to note that 18 of the 31 chains had only two secondary sponsored academies throughout the period we are analysing, and this is obviously a limitation. One school having particular difficulties could change the chain's data substantially. On the other hand if researchers do not analyse chain performance until a chain has had at least three schools for at least three academic years, very large numbers of pupils would have benefited or been disadvantaged before anyone drew attention to this. Some of the newer chains have already grown substantially yet only two schools have existed long enough to be included in this analysis. We have italicised their names throughout the text of the report and on tables so that readers are clear which they are. On graphs we have the names of the larger chains in capitals to show the distinction.

The data used in this report are mainly derived from the DfE school performance database for schools in England. The figures for chain level performance have been calculated from the relevant attainment measure, such as percentage of students attaining 5A*-C GCSE including English and mathematics (5A*CEM), for each sponsored secondary or all-through academy consistently present in the chain for the three academic years (2010-11, 2011-12, and 2012-13). We have used the average for each academy, weighted by the absolute number of pupils of the relevant type (all pupils, disadvantaged pupils, non-disadvantaged pupils).

We have also calculated the averages for the following groups, and used them for comparison:

- 1) the entire analysis group: sponsored secondary or all-through academies in chains which have been consistently in the same chain since September 2010;
- 2) solo sponsored secondary academies: those not in a chain or pair which were under the same sponsor throughout the period from September 2010, and had attainment data for each year;
- 3) converter academies: those secondary schools that have consistently been converter academies since January 2011. (Ideally we would have included only converter academies that have had this status throughout the period from Sept 2010, to parallel the selection of sponsored academies, but as this was the first month in which schools could become converter academies, this would have resulted in a very small sample);
- 4) all London secondary schools: attainment in London is higher than in other regions. In that some academy chains are based entirely in London, their attainment is perhaps more usefully compared to London schools' attainment rather than that of all mainstream schools;
- 5) all mainstream secondary schools.

Chain-level characteristics have been collected from published data. These include the composition of the chain (total number and type of schools in 2013); the date the chain acquired its first academy and its subsequent growth; and the characteristics of pupils in the analysis group of academies in the chain (such as percentage of disadvantaged pupils). These are again the average of the figures for each school in the chain. We have also drawn on material published on chain websites.

The main indicator of disadvantage we have used is the DfE definition (pupils who have been eligible for Free School Meals at any time from Year 6 to Year 11).⁴¹

3.3 The survey

To supplement the data on chain characteristics, we devised an online survey which was distributed to academy chains. This asked about school improvement strategies; the level of centralisation or school autonomy within the chain, and the extent to which academy freedoms have been used. The response rate was very low, so these data have only been used illustratively rather than as a central part of the analysis.

3.4 Limitations

Research focusing on academy chains is inevitably limited by the ongoing and rapid growth in the number of academies and chains. An analysis of past attainment has to focus on the chains and schools that existed a few years ago. This is necessary so that pupils will have experienced a sufficient part of their education within the chain, and attainment can fairly be attributed to the work of the academy and the chain (rather than to the predecessor school). While there are now 106 chains with at least three schools including a secondary sponsored academy, there are only 31 that meet these criteria to be part of our analysis group.

This research focuses entirely on secondary sponsored academies. Sponsored academies are deliberately the focus because part of the rationale for creating them was that they would improve the attainment of pupils in deprived areas. We have not included primary sponsored academies simply because few have been in existence long enough. The first primary sponsored academies opened in September 2011, but numbers were very small in the first year, and it is only since 2012 that numbers have increased rapidly. It will be some time before it is possible to identify the long term effect of the chains on primary level attainment.

⁴¹ Crawford and Greaves (2013) examined a range of indicators of educational disadvantage, and concluded that the most effective was eligibility for Free School Meals at any time in the last *three* years; however, this is not available on the school performance tables.

3.5 Structure of the report

The next section discusses the characteristics of academy chains that may impact on attainment, and the findings of previous research in relation to these. Section 5 analyses the attainment of disadvantaged pupils within the analysis group, identifying the chains that over the period from September 2010 to June 2013 have been most effective in relation to improving disadvantaged pupils' attainment. It then reviews the characteristics of the most and least successful chains. The final section discusses the findings and sets out recommendations.

4. CHAIN CHARACTERISTICS THAT MAY IMPACT ON ATTAINMENT

This section identifies a range of chain characteristics that may impact on attainment, and relates these to previous research and to the chains in the analysis group. When comparing the attainment of pupils in different schools, pupil characteristics have been identified as having a key impact on attainment. As we have observed, these include gender and ethnicity, socio-economic and social class background (as indicated by wealth, level of parental education, and so on), and also birth date within the school year.⁴²

In addition, a pupil's prior attainment has a considerable impact. DfE figures for 2013 show that 95% of those who had achieved *above* the expected level in primary school went on to achieve the expected level in secondary school, but this was the case for only 57% of those who achieved the expected level (Level 4) in primary school, and only 7.5% of those who achieved *below* the expected level. All these pupil characteristic variables interact.

It is important to note, however, that while pupils with certain characteristics tend to attain less well, this is not inevitable. Some schools 'buck the trend'. A key aspect of the creation of sponsored academies was the assumption that they would 'break the cycle of disadvantage'.⁴³

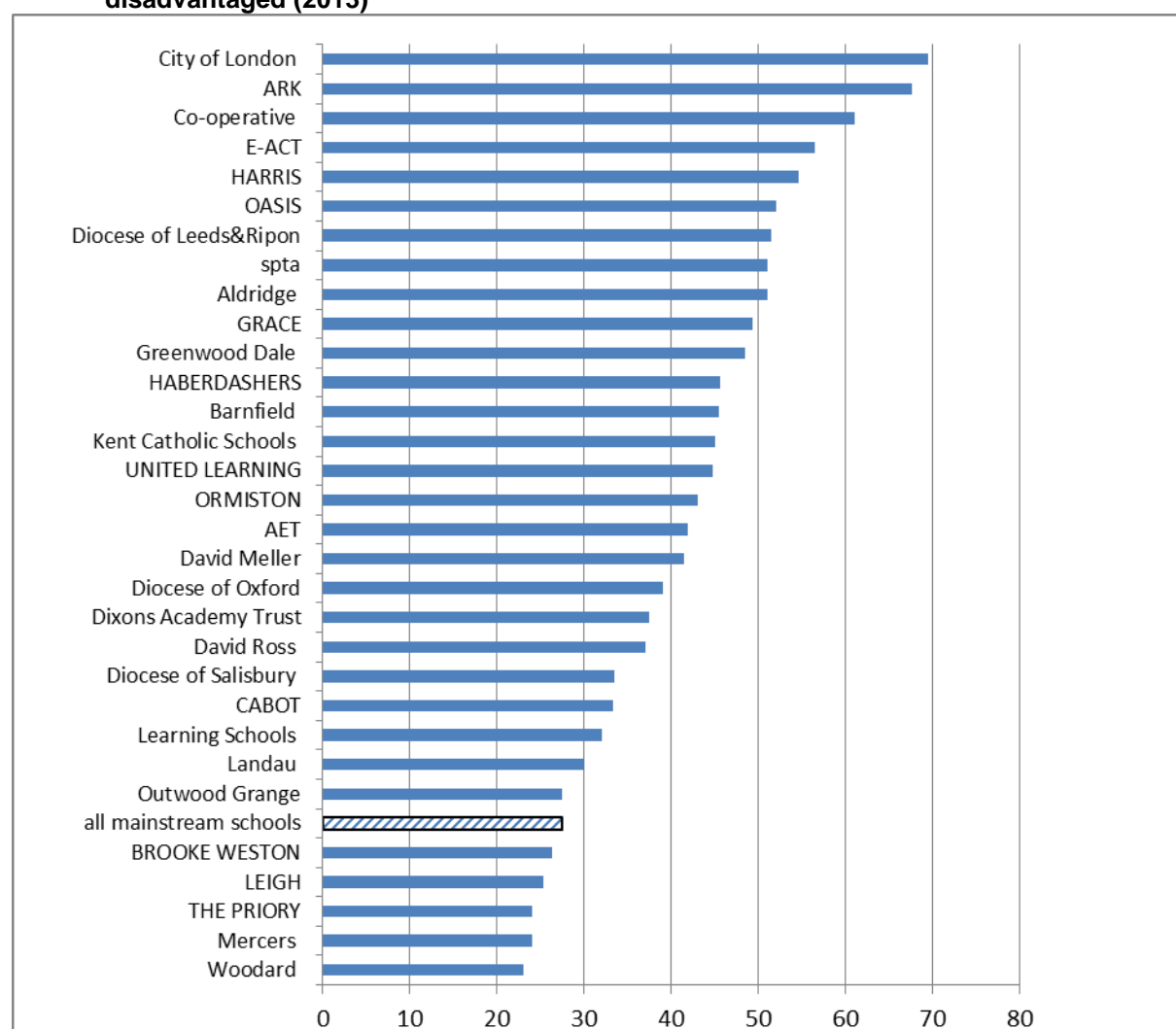
The **pupil intakes of schools** within the analysis group of chains vary considerably. Figure 2 illustrates this for the proportion of disadvantaged pupils, the specific focus of this report. Nationally, 27% of all pupils are defined as 'disadvantaged'; the figures for the analysis group of chains vary from 23% to almost 70%. However, the DfE analysis of characteristics of high performing sponsors concluded that there was 'no evidence that level or diversity of challenge in terms of ... pupil intake is relevant'.⁴⁴

⁴² For commentary on the impact of some of these factors on pupil attainment, see e.g. Lupton et al (2009); Strand (2014); Education Select Committee (2014b).

⁴³ See Blunkett (2000)

⁴⁴ DfE (2014e)

Figure 2: Mean percentage of Year 11 pupils in schools in analysis group who are disadvantaged (2013)⁴⁵



Source: Authors' analysis based on School Performance Tables

Another important pupil characteristic is prior attainment. The DfE statistics distinguish three groups of pupils; those whose attainment at Key Stage 2 (KS2, normally the end of primary schooling) was average (i.e. they achieved Level 4 in National Curriculum tests); below average (achieved below Level 4) and above average (achieved Level 5). In 2014, the percentages of pupils in each of these groups achieving the expected level at age 16 varied widely:

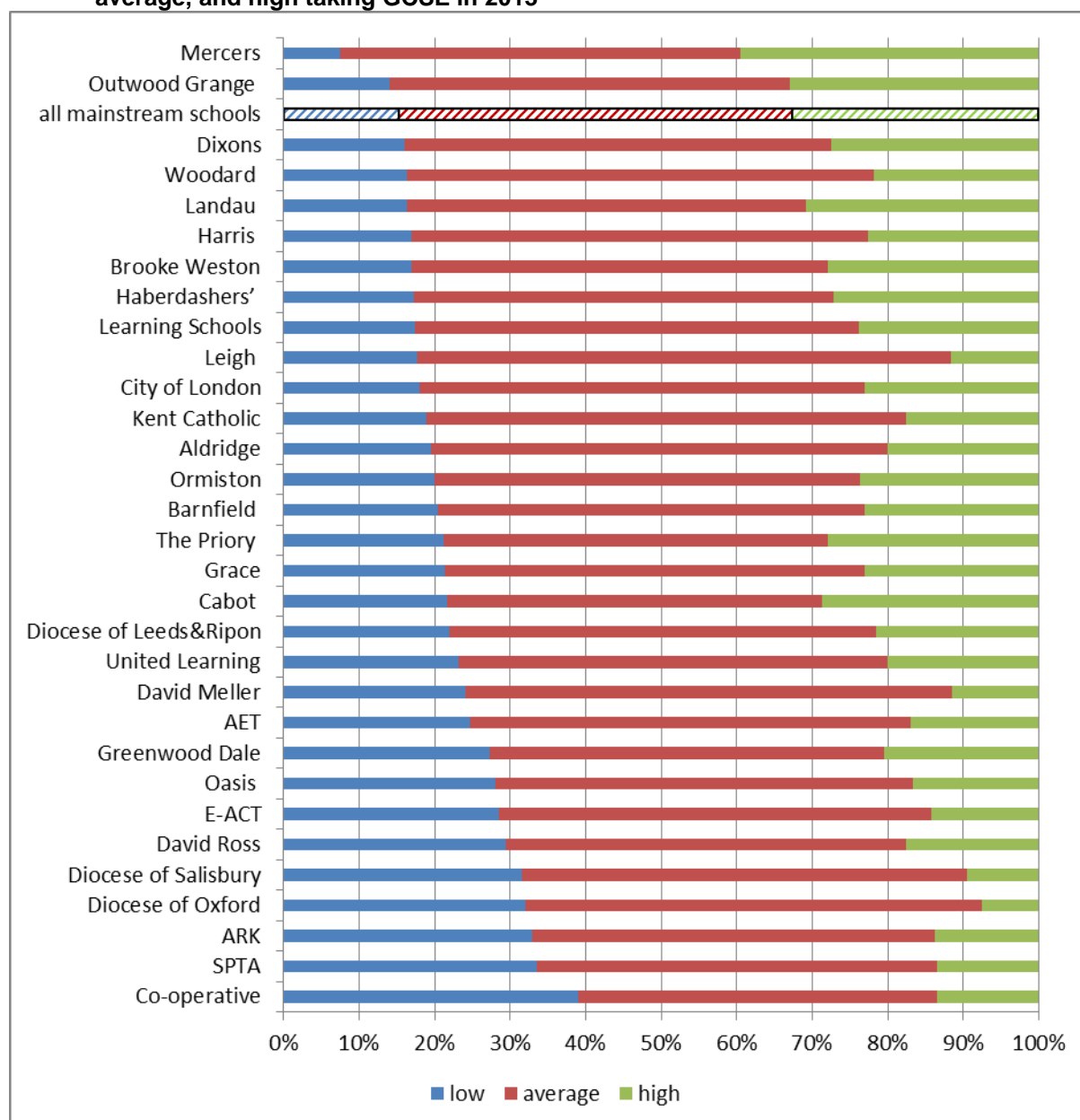
- Low attainers 7.5%
- Average attainers 57.6%
- High attainers 94.7%⁴⁶

Figure 3 shows the proportions of low, average and high attainers in each of the chains.

⁴⁵ The pupil characteristics of chains given in Figure 2 onwards are calculated as the average of the school level proportions given in the DfE School Performance Tables

⁴⁶ DfE (2014b)

Figure 3: Proportions of pupils in each academy chain whose prior attainment was low, average, and high taking GCSE in 2013



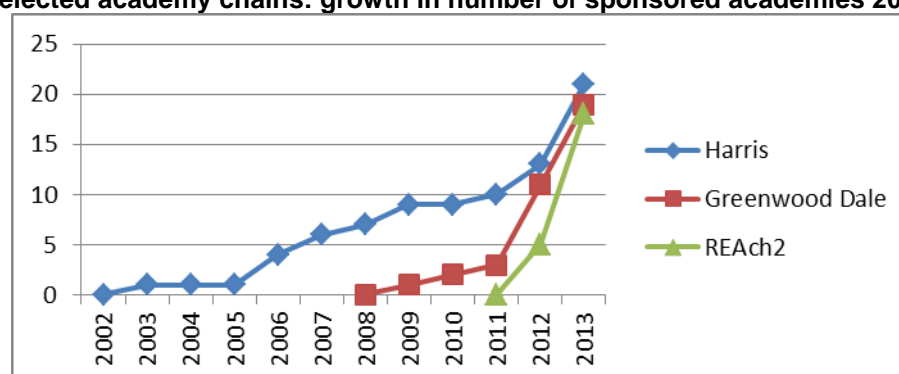
Source: Authors' analysis based on School Performance Tables

We recognise that pupil characteristics are not easily summed up in metrics; there is undoubtedly a difference in outlook and prospects between disadvantaged pupils living in a depressed area where long-term unemployment is endemic and those living in a more affluent area where it is possible to get jobs. The challenges facing schools will differ in each case. Thus we are not suggesting that all disadvantaged pupils, or all those with low prior attainment are the same. But we need to use definitions that enable us to distinguish between groups of pupils; recognising that this may oversimplify reality.

However, when considering the performance of individual academies and academy chains, it becomes evident that there are a number of other factors that may affect performance. These are discussed below. One aspect of this research is to try to identify the characteristics of chains that are more successful with disadvantaged pupils.

The **structural characteristics of a chain** (such as its history and composition) may impact on pupil attainment. If sponsored academies are an effective way of raising attainment, one would expect academies that have been in existence for longer to have higher attainment. Thus pupil attainment would be expected to be higher in chains made up of academies that have been open longer. Similarly, one might expect that the long-standing chains would have tried and tested school improvement strategies. These early chains expanded quite slowly in their initial years, and so were able to build up expertise that could be used over a considerable period of time. In contrast, some of the new chains have grown very rapidly, starting with several schools at once so that they have no opportunity to try out strategies on a smaller scale. Figure 4 illustrates the contrasting growth patterns of three chains which had similar numbers of schools by the end of 2013. Harris, which shows the most gradual growth of the three, has in fact developed over an even longer period since its first involvement with a City Technology College created in 1990.

Figure 4: Selected academy chains: growth in number of sponsored academies 2002-2013



Source: DfE 2014c

The **total number of schools in a chain** may also have some impact. It could be argued that a larger chain will have more resources; increased economies of scale; a stronger brand to attract parents; and a greater body of knowledge to apply to turning round new entrants – or alternatively, that a small chain (consisting of three or four schools) will have tighter focus, better communication and less stretched capacity. There may also be an optimum number of schools in a chain: some recent issues have arisen because of concerns that chains were expanding too rapidly.

Structural aspects also include the **model and composition of the chain**: for example, whether a chain is a multi-academy trust (MAT), an 'umbrella trust', or an even looser configuration; and the nature and composition of the trust itself. For example, where some sponsor trusts are created and designed purely to manage the collective of schools concerned, others have grown out of pre-existing organisations, charities and businesses. Sometimes a trust represents the local diocese, or a similar organisation. Many trusts represent a single organisation, but some represent numerous different stakeholders all listed as sponsors, which may impact leadership, direction and accountability. An example is included in our analysis group; the *Mercers'* Company did not respond to our survey on the grounds that they do not lead an academy chain. The schools listed on the DfE website as sponsored by the *Mercers'* company claim a range of sponsors on their websites:

- Madeley academy is sponsored by Thomas Telford School
- Sandwell Academy is sponsored by Tarmac plc, the *Mercers'* Company, Thomas Telford School, HSBC Education Trust and West Bromwich Albion FC.
- Hammersmith Academy is sponsored by the *Mercers'* Company and the Information Technologists' Company.

In this report we have used the DfE definition of a chain (three or more schools) but we are aware that not all 'chains' included in our analysis group consider themselves to be chains. Hill et al (2012) wrote:

... many academies – sponsored, converting and those working in collaboration – consider that the definition of a chain being used by the DfE is too broad and makes the term devoid of meaning. Academies working together in loose collaborations do not see or describe themselves as chains, even though they fall within the DfE's definition. Others that are working in a more structured fashion consider it wrong to equate a multi-academy trust that has an integrated budget and governance framework with a loose collaboration of schools. This is not to make a value judgement about the different types of partnership working: it's about being clear that different forms of activity each need their own label. (2012: 20)

They argued that it is better to view chains as being along a loose-to-tight spectrum, from the informal collaborative to the 'pedagogical chain' typified by integrated governance leadership and resourcing, and the development of a shared pedagogical approach.

While we had a poor response to our survey of chains, the responses we did have illustrated this spectrum. For example, the *Diocese of Oxford* summarised their strategy for school improvement: 'Whilst there is a central aspiration in the diocese to achieve certain standards, improvement to academies is delivered on a local level.' This contrasts with the response from *Outwood Grange* which indicates a centrally managed school improvement strategy:

Tried and tested monitoring and intervention systems ... Curriculum model that is responsive to all students. Directors of Maths, English, Science etc. work across all schools in the trust and have clear strategies for improvement. Whole day accountability meetings with all Executive Principals, Principals and Directors of subjects held every three weeks with the Chief Executive. Same exam board taught across all academies allow sharing of resources and revision materials e.g. Common 16 week revision course in lead up to first exam.

Chains also vary in the **nature of the sponsor**. Hill et al.⁴⁷ reported that at the time of their research, the most common form of sponsorship was by successful schools, followed by charitable non-faith based and faith-based organisation, philanthropic individuals, further and higher education institutions, and corporate sponsors.⁴⁸ We found it difficult to categorise the sponsors of all the chains in our analysis sample along these lines – partly because of the limited information given on some websites. Some were based around successful schools (*Outwood Grange*, Leigh, Brooke Weston, *Dixons*, The Priory); four were charitable trusts pre-dating academies, and with other activities (Ormiston, ARK, *Landau*); three were Christian charities (Oasis, Grace, United Learning); four were dioceses; and three were philanthropic individuals with successful businesses (*David Ross*, *David Meller*, Harris). While many trusts were created specifically to run academies, and this is their main activity, in other cases, the academies are only a small aspect of the work of the sponsoring organisation (including dioceses, livery companies, the *City of London*).

The **geographical distribution of schools** within a chain may also impact on the effectiveness of their school improvement strategies. The DfE's analysis *What does a high performing academy sponsor look like?*⁴⁹ concludes that 'high performing sponsors plan growth in terms of developing geographical clusters of schools and maximising opportunities for collaboration.'

Hill et al. (2012)⁵⁰ reported that 22 of the 28 chains responding to their survey identified geographical proximity as important, very important or essential. However, they pointed out that for historical reasons, a number of the long-standing chains had acquired academies scattered across the country; in many cases such chains were aiming to move to a structure of regional clusters.

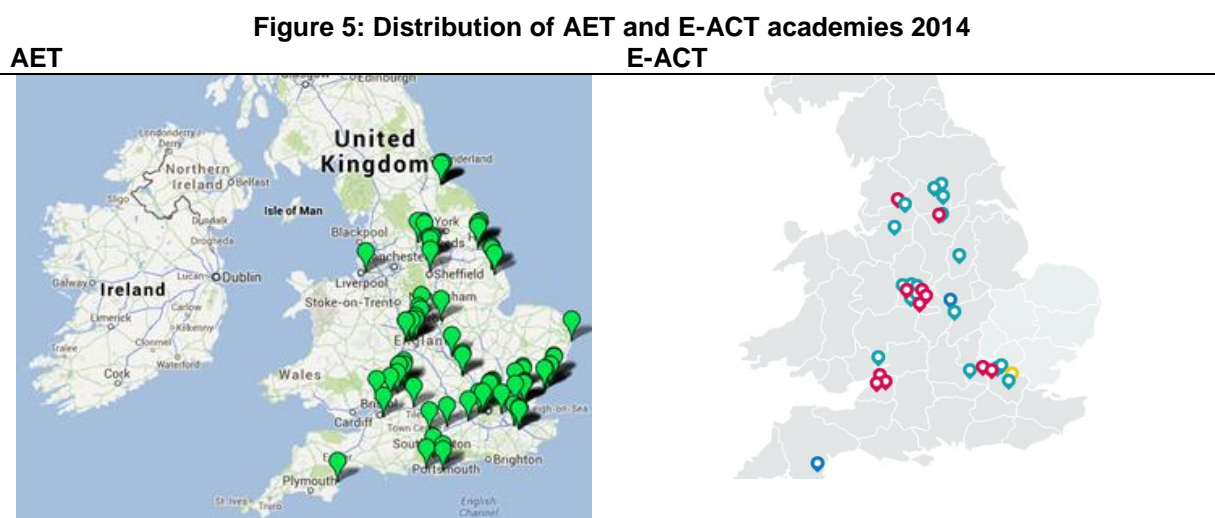
⁴⁷ Hill et al. (2012)

⁴⁸ Largely borne out by the DfE's *Academies Annual Report* (2014d), which uses slightly different categories, but again shows converter academies as the largest sponsor category.

⁴⁹ DfE (2014e)

⁵⁰ Hill et al. (2012)

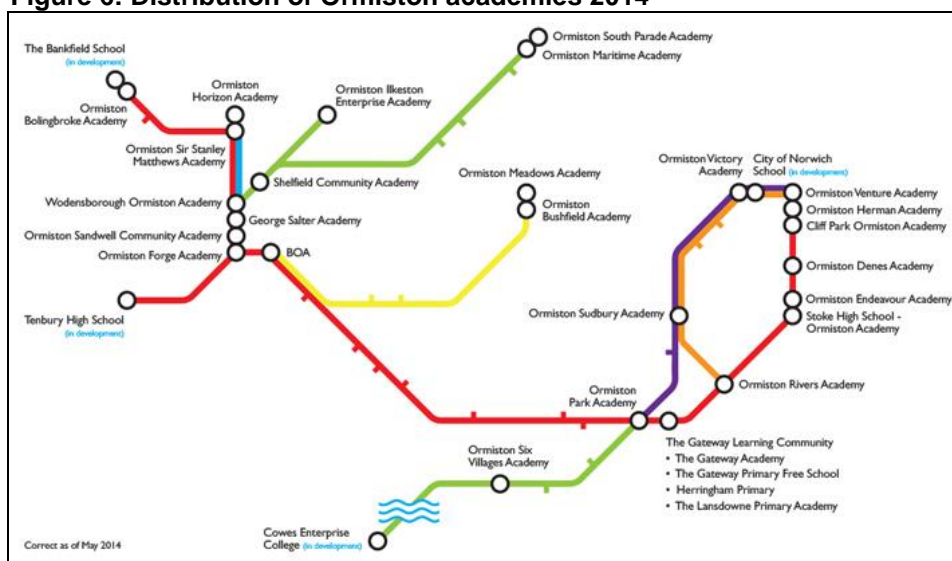
Figure 5 shows the distribution of AET and E-ACT academies; it can be seen that the latter is developing clusters of academies in certain areas; this is highlighted in its 2013-16 Business Plan which sets as an aim the development of regional networks and clusters of academies.



Source: AET and E-ACT websites, June 2014

The importance given to creating geographical links is clearly demonstrated on the Ormiston website, which shows their academies in the style of train map (Figure 6), perhaps deflecting attention from the wide geographical spread (including schools in Grimsby, Runcorn, Norwich, the Isle of Wight), and emphasising the close links.

Figure 6: Distribution of Ormiston academies 2014



Source: Ormiston website 2014

Other chains work in only in a specific area; the Harris schools are in and around London, with a majority in South London; more than half (23 schools) are located in just three boroughs: Croydon, Bromley and Southwark. The Cabot Learning Federation academies are all located in a small area in and around Bristol, and the chain argues that proximity is a key aspect of providing effective support and professional development opportunities. *Outwood Grange* is based in a limited area in the East Midlands and Yorkshire. Table 2 gives some indication of the differences, though some of the 'concentrated' chains are in much smaller areas than others.

Table 2: Geographical distribution of academies within each chain

Concentrated in one part of the country	Widely dispersed
<i>Barnfield</i>	ARK
Brooke Weston	AET
Cabot	E-ACT
<i>City of London</i>	<i>Mercers</i>
<i>David Meller</i>	Oasis
<i>David Ross</i>	Ormiston
<i>Diocese of Leeds & Ripon</i>	<i>Aldridge</i>
<i>Diocese of Oxford</i>	<i>Learning Schools</i>
<i>Diocese of Salisbury</i>	United Learning
<i>Dixons</i>	<i>Woodard</i>
Grace	Haberdashers
<i>Greenwood Dale</i>	
Harris	
<i>Kent Catholic Schools</i>	
Leigh	
<i>Outwood Grange</i>	
SPTA	
The Co-operative Group	
<i>Landau</i>	
The Priory	

Nationally, schools in London out-perform schools in other regions by some considerable margin. Thus one might expect that academy chains located in London would similarly outperform chains in other parts of the country. Harris and *City of London* are both based in London. Clearly it could be argued that the fact that the early academies were mainly in London is one of the many factors contributing to London's success, but it is generally agreed that this is not the most important factor.⁵¹ Local Authority schools in London are also well above the national average in terms of attainment.

The **characteristics of the schools in each chain prior to their becoming academies** are also worth noting. Some of the earlier sponsored academies were not 'failing' but successful schools. Some were City Technology Colleges and formed the school improvement base of several academy chains including Harris, Cabot, Leigh and *Dixons*. A small number of sponsored academies were formerly independent schools (such as Bristol Cathedral Choir School). Hill et al. (2012)⁵² excluded such schools from their analysis of academy attainment data. We have not done so because our interest is in the achievement of the chain in terms of pupil attainment regardless of the schools' histories.⁵³ Some academy chains created entirely new schools rather than taking on 'failing' schools, and so did not have the same challenges of changing ethos and poor practices. For example, two out of three of the *Mercers'* Company's sponsored academies were created as new schools. Of the larger chains, ARK has the highest proportion of newly created schools (five of its 20 schools, including a third of the sponsored academies taking secondary aged pupils). However, DfE analysis (2014e)⁵⁴ of characteristics of high performing sponsors concluded that there is 'no evidence that level or diversity of challenge in terms of historic attainment ... is relevant' to whether a chain performs well.

⁵¹ See Hutchings et al (2012), Hutchings and Mansaray (2013), Cook (2013b), CfBT/Centre for London (2014), Greaves et al. (2014).

⁵² Hill et al. (2012)

⁵³ We have reviewed the data to see how much difference including these schools made. In some chains the difference was negligible, because the former CTC performed only slightly better than the other academies, or because in averaging out data across schools, the CTC had little effect. In only one chain was the data skewed by the high-performing school; however, as this chain's overall performance was below average, it does not affect our findings about which are the most effective chains.

⁵⁴ DfE (2014e)

Another chain characteristic that might impact on effectiveness in school improvement is the **mix of schools within a chain**. All the early sponsored academies were for secondary aged pupils. But now there now more primary sponsored academies than secondary. Some chains, such as REAch2, with 29 academies (June 2014), specialise entirely in the primary sector. Some small chains (such as The Aldridge Foundation and the Grace Foundation) have only secondary or all-through academies. But the majority of chains include both primary and secondary schools, and some also have special schools.

Table 3: Analysis group chain characteristics: composition by age phase, 2013

Secondary	Secondary and all through	Primary and secondary and/or all through
<i>City of London</i>	<i>Barnfield</i>	ARK
<i>David Meller</i>	<i>Diocese of Leeds & Ripon</i>	Academies
<i>Dixons</i>	<i>Haberdashers' Aske's</i>	Brooke Weston
<i>Grace</i>	<i>Kent Catholic Schools</i>	Cabot
<i>Mercers</i>	<i>The Priory</i>	<i>David Ross</i>
<i>Ormiston</i>	<i>Aldridge</i>	<i>Diocese of Oxford</i>
<i>Outwood Grange</i>		<i>Diocese of Salisbury</i>
<i>Co-operative</i>		E-ACT
<i>Learning Schools</i>		<i>Greenwood Dale</i>
<i>Woodard</i>		Harris
		Leigh
		Oasis Community
		SPTA
		<i>Landau</i>
		United Learning

Source: DfE Academies List

Chains also vary in whether they include both sponsored and converter academies; some additionally include free schools. In 2012, Hill et al. referred to 'sponsored academy chains' and 'converter academy chains' as two different types of chains (while acknowledging that some chains were becoming more mixed). But in 2014, a third of converter academies are listed as having a sponsor, and they form a significant part of many chains (in addition to those instances where they are themselves the sponsor). Some chains deliberately include a mix of academy types as part of their improvement strategy, using converters to work with struggling schools within the chain.⁵⁵ The DfE analysis⁵⁶ concludes that high performing chains are more likely to have a blend of sponsor and converter projects, and states that those with more than 90% sponsored schools do not do as well. Table 4 shows that 13 of our analysis group of chains were made up entirely of sponsored academies between 2010 and 2013 and a further three (E-ACT, *Greenwood Dale* and Ormiston) had more than 90% sponsored academies.

⁵⁵ See e.g. RSA Academies: <http://www.thersa.org/action-research-centre/learning,-cognition-and-creativity/education/family-of-academies/4.-rsa-academies-what-the-family-does-together>; their arrangements highlighted in their questionnaire response.

⁵⁶ DfE (2014e)

Table 4: Analysis group chain characteristics 2013: mix of sponsored and converter academies

all sponsored	both sponsored and convertor
<i>City of London</i>	AET
<i>Diocese of Leeds & Ripon</i>	ARK
<i>Diocese of Oxford</i>	<i>Barnfield</i>
Grace	Brooke Weston
Haberdashers' Aske's	Cabot
<i>Kent Catholic Schools</i>	<i>David Meller</i>
<i>Mercers</i>	<i>David Ross</i>
<i>The Aldridge</i>	<i>Diocese of Salisbury</i>
<i>Co-operative</i>	E-ACT
<i>Landau</i>	<i>Greenwood Dale</i>
<i>Learning Schools</i>	Harris
The Priory	Leigh
<i>Woodard</i>	Oasis
	Ormiston
	<i>Outwood Grange</i>
	SPTA
	United Learning

Some chains also include independent schools. Jon Coles, Group Chief Executive of United Learning, argues that this is beneficial for schools in both sectors; independent schools can learn from academies as well as vice versa (see UL website). Many also now include free schools, identifying this as a key way to expand the chain.

As well as these structural factors, it is clear that the **quality of leadership of a chain**, and the strategies that are used for staff development and school improvement, are likely to have a strong impact on the effectiveness of the chain. The DfE analysis⁵⁷ concludes that 'high-performing sponsors have strong and determined CEOs with a clear moral purpose that is well transmitted to all staff.' It identifies a range of other working practices linked to high performance, such as provision of cross-school teaching and professional development. We explore some of these ideas in relation to our analysis of more successful chains later in the report.

In academy chains, the extent of individual school autonomy and central direction varies.⁵⁸ Hill et al. identified three core dimensions:

- shared vision (ethos, values, aspiration and ambitions)
- shared systems (uniforms, behaviour and discipline, target setting and data tracking, performance management)
- shared principles and models (curriculum design, teaching and learning, what an outstanding lesson looks like, intervention strategies).

They argue that 'in a chain that is functioning well and likely to achieve its educational potential all three of these dimensions would be evident and in balance', but add they were not suggesting that these factors should all be centrally determined ; there could also be space for local innovation to contribute to the chain's learning. The DfE notes that high performing sponsors usually have strong partnership with schools in the wider system.'

There is, then, considerable variety in the characteristics of chains that include secondary sponsored academies, and some emerging data about what type of chain is the most effective. We aim to contribute to this.

⁵⁷ DfE (2014e)

⁵⁸ See Hill et al. (2012)

5. OUTCOMES FOR DISADVANTAGED AND UNDER-ATTAINING PUPILS

Disadvantaged pupils include all those who were ever eligible for Free School Meals between Year 6 and Year 11, and looked after children.⁵⁹ This is a substantially larger group than the alternative measure (eligibility for Free School Meals). It is also the group that is eligible for the Government's pupil premium. Whereas some 15% of those taking GCSEs in 2013 were eligible for Free School Meals, 27% were disadvantaged. However, the attainment gaps relating to each of these groups are similar in size (Table 5).

Table 5: Attainment at GCSE for FSM and disadvantaged pupils, 2013

	No of eligible pupils	5+ A*-C grades inc. English & mathematics GCSEs
Free School Meals (FSM)		
FSM	85,182	37.9
all other pupils	486,152	64.6
<i>Attainment gap</i>		26.7
Disadvantaged Pupils		
disadvantaged pupils	154,087	40.9
all other pupils	317,247	67.8
<i>Attainment gap</i>		26.9

Source: DfE 2014a

We review the attainment of disadvantaged pupils on four key measures: attaining 5+ A*-C grades including English and mathematics (5A*CEM); pupil progress in mathematics and English; average (capped) point score (with and without equivalents); and the English Baccalaureate (EBacc). For the last few years, the most important of these measures has been 5A*CEM. Schools which do not reach the floor standard⁶⁰ set by the government for this measure risk being turned into sponsored academies, or moved to a different sponsor.

The measure of pupil progress in English and mathematics was published for the first time in 2009. From Key Stage 2 (age 11) to Key Stage 4 (age 16) pupils are expected to make three levels of progress. Thus a pupil who achieved Level 4 (the expected Level) at age 11 would be expected to gain a C grade in GCSE. But a pupil who achieved Level 5 at age 11 would be expected to achieve a B at GCSE, while one who was below Level 4 would have made the expected amount of progress if they achieved a GCSE grade below a C. This measure clearly helps school with low-attaining intakes to demonstrate that they are adding value for their pupils. Thus it may be of particular importance for some sponsored academies.

Attainment based on the other measures (average point score and EBacc) has also been reported, but has had less significance. Average (capped) point score is calculated from the best 8 GCSE or equivalent results a pupil achieves, and therefore encourages schools to ensure that all pupils take eight subjects. The EBacc, introduced in 2010, involves achieving A*-C passes in English, maths, two science subjects, a modern or ancient language and history or geography. Its aim was to create an incentive for schools to offer these subjects, in order to give students 'a properly rounded academic education'. Part of the concern was that too many pupils – especially those from disadvantaged backgrounds - were taking 'non-academic' or non-traditional subjects, which would not

⁵⁹ DfE (2014a)

⁶⁰ In 2013, a school was below the floor standard if less than 40% of pupils achieve 5+A*-C including English and mathematics and the expected progress between key stage 2 and key stage 4 is less than the median of 73% in English and less than the median of 73% in mathematics (DfE, 2014b).

facilitate access to the most prestigious higher education institutions and/or professions. Hence one of the aims of the EBacc measure is to incentivise practices that support social mobility.⁶¹ It was unclear when this measure was introduced how much importance was to be accorded to it, and the extent to which schools have changed their curriculum in response has varied.

However, the government has announced that from 2016, a new performance indicator, Progress 8, will be used.

The Progress 8 measure is designed to encourage schools to offer a broad and balanced curriculum at KS4, and reward schools for the teaching of all their pupils. The new measure will be based on students' progress measured across eight subjects: English; mathematics; three other English Baccalaureate (EBacc) subjects (sciences, computer science, geography, history and languages); and three further subjects, which can be from the range of EBacc subjects, or can be any other approved, high-value arts, academic, or vocational qualification. From 2016, the floor standard will be based on schools' results on the Progress 8 measure. (DfE, 2014f)

This measure will replace 5A*CEM. Along with performance in English and Maths, it will become the main attainment measure used to assess schools' performance.⁶² This new measure was announced in October 2013, and so will have had no impact on the curriculum offered to the pupils who took their GCSEs in that year. However, those schools that changed their curriculum in line with EBacc will already be moving in that direction.

Therefore, while our main focus in this report is on 5A*CEM (the expected level), we also briefly examine attainment figures using both average capped point score and EBacc, to see which academy chains appear to be well positioned to move towards Progress 8.

In this section, we also analyse data relating to pupils whose attainment at primary schools was below the expected level (Level 4). Such pupils are disproportionately from disadvantaged groups. Nationally, only 7.5% of this group achieve 5A*CEM. We review how successful the analysis group of academy chains have been in producing better outcomes for these pupils. Like the progress measure discussed above, this measure could be useful for sponsored academies with low attaining intakes to demonstrate their effectiveness.

⁶¹ See e.g. Michael Gove (2013)

⁶² Other measures published will be the percentage of pupils achieving a C grade or better in both English and mathematics, and EBacc (DfE 2014f).

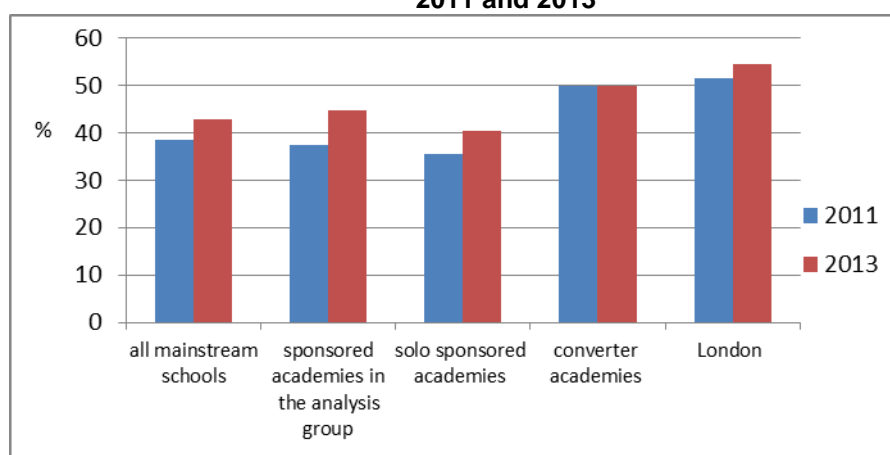
5.1 The expected level: five A*-C GCSE or equivalents including English and mathematics

5.1.1 Disadvantaged pupils reaching the expected level

Figure 7 shows the mean school percentage of disadvantaged pupils achieving the expected level (5 A*CEM) in 2011 and 2013 in all mainstream schools and in the group of sponsored academies in chains included in this research (the analysis group). While the 2011 figure for the analysis group was lower than for all mainstream schools, by 2013, the academies showed a greater improvement (improving by 7.3% compared with 4.2% for all maintained schools). Solo academies on average had lower attainment for disadvantaged pupils in 2011 and 2013. This pattern of chains of three or more academies doing better than solo academies occurs throughout our analysis and fits with previous findings.⁶³ Converter academies had a higher proportion than sponsored academies of disadvantaged pupils achieving the expected level in 2011, but showed no improvement by 2013.

Figure 7 also includes the equivalent figures for all London schools, where a higher percentage of disadvantaged pupils achieved the expected levels in each year. This indicates the potential for other schools and academies to improve.

Figure 7: Percentage of disadvantaged pupils achieving the expected level (5A*CEM), 2011 and 2013



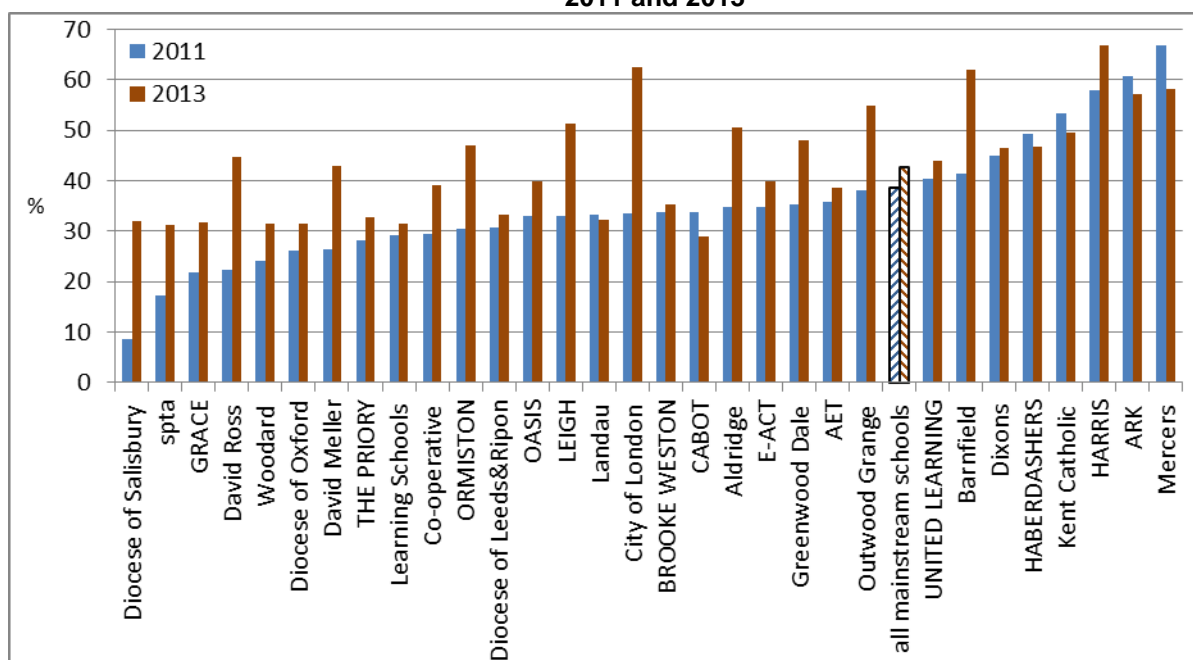
Source: Authors' analysis based on School Performance Tables⁶⁴

Figure 8 shows the mean percentage of disadvantaged pupils reaching the expected level in each of the chains in the analysis group. In 2011, there was considerable variation across chains. This may relate to the previous history of the schools in the chain, how long they had been academies, attainment in their predecessor schools, or other factors. But the extent to which this figure had increased or decreased by 2013 clearly reflects the effectiveness of the strategies of the chain and the schools that make up the chain in bringing about improvement in the outcomes for disadvantaged pupils.

⁶³ Hill et al, 2012 reported that on average, chains of three or more academies made greater progress between 2008-9 and 2010-11 than 'standalone' and 'two-strong' academies.

⁶⁴ The analysis of attainment is entirely based on data from the School Performance Tables; thus we have not repeated the source under each Figure.

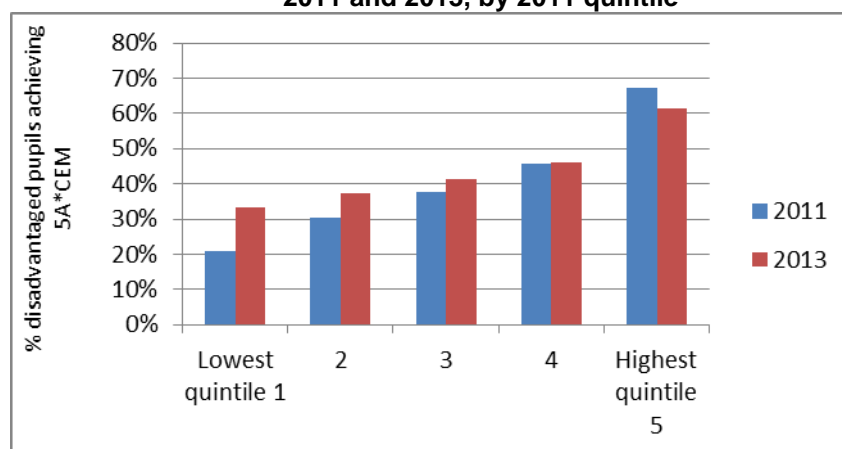
Figure 8: Percentage of disadvantaged pupils achieving the expected level (5A*CEM), 2011 and 2013



Note: on this and subsequent graphs, those chains shown in capital letters have three or more schools included in the analysis, while those in lower case have only two.

It would be expected that those with the lowest initial attainment would show the greatest improvement, because it is clearly easier to improve from a low baseline, and this is the pattern normally found: on average, low attaining schools always show greater improvement than high attaining schools. This is illustrated in Figure 9. All mainstream schools have been divided into five groups (quintiles) on the basis of the 2011 percentage of disadvantaged pupils achieving 5A*CEM. Figure 8 shows the mean 2011 and 2013 attainment for the schools in each quintile, together with the mean improvement made. While the lowest quintile improved by 13%, the highest achieving quintile of schools in 2011 actually had, on average, results from their disadvantaged pupils that were 6% lower in 2013.

Figure 9: Percentage of disadvantaged pupils in all mainstream schools achieving 5A*CEM, 2011 and 2013, by 2011 quintile



If we then review the performance of the analysis group of chains in this light, it is possible to identify those that improved less or more than schools with comparable initial attainment. For example, sponsored academies in one chain had average attainment for disadvantaged pupils of 22% in 2011, which placed it in the lowest quintile. By 2013, this figures had improved by 22.5 percentage points;

this is 10 percentage points more than all mainstream schools in this quintile improved over the same period. On the other hand, academies run by another chain had the same initial mean attainment, but improved by less than ten percentage points – less than the mean for all school in the quintile.

Chains that improved less than all mainstream schools in the same quintile	Chains that improved more than all mainstream schools in the same quintile
Grace	<i>Diocese of Salisbury</i>
Woodard	<i>David Ross</i>
<i>Diocese of Oxford</i>	<i>David Meller</i>
The Priory	Ormiston
<i>Learning Schools</i>	Leigh
Diocese of Leeds & Ripon	<i>City of London</i>
<i>Landau</i>	<i>Aldridge</i>
Brooke Weston	<i>Greenwood Dale</i>
Cabot	<i>Outwood Grange</i>
	<i>Barnfield</i>
	Harris

Some chains stand out: *City of London* improved more than any other chain, improving from half way up the rankings in 2011 to second place in 2013.

The chains with the highest proportion of disadvantaged pupils reaching the expected level in 2013 were:

- Harris
- *City of London*
- *Barnfield*
- *Mercers*
- ARK
- *Outwood Grange*

Previous research about sponsored academies has drawn attention to the extent to which some have relied on alternative ‘equivalent’ qualifications, rather than GCSEs, to boost attainment figures.⁶⁵ It is clearly important that some vocationally oriented courses are included in the curriculum, and that these may serve to engage less academic pupils. However, it is a concern if pupils are encouraged to take such subjects to enhance their school’s position on the league tables, rather than to benefit the pupils themselves.⁶⁶ Moreover, the government has expressed concern about the extent to which equivalents are taken, and for the 2014 league tables has vastly reduced the number of equivalent qualifications that will count, leaving only those that demonstrate rigour and have a track records of taking young people into good jobs and higher education.⁶⁷ Both the EBacc and Progress 8 have a strong focus on GCSEs rather than equivalent qualifications.

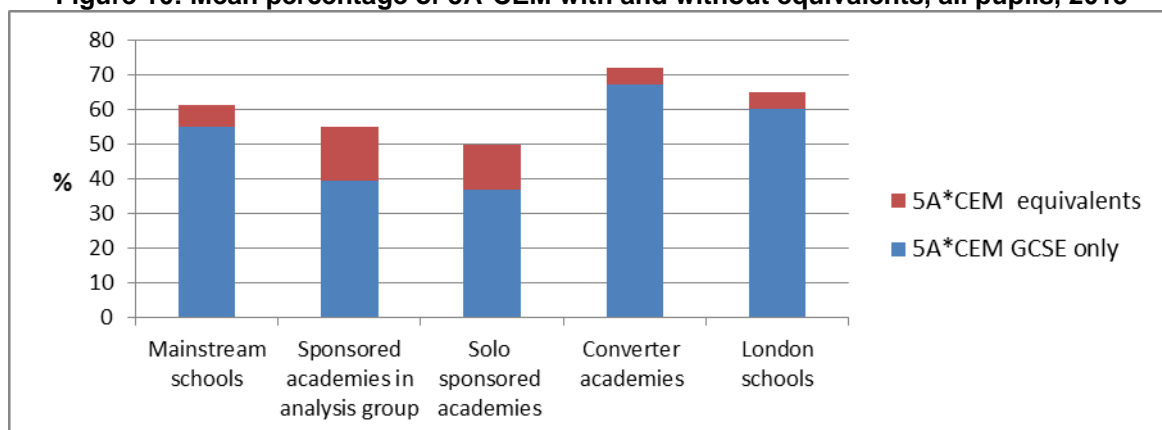
While the school performance tables give the overall percentage of 5A*CEM GCSEs only (without equivalents), this is not provided for disadvantaged and non-disadvantaged pupils. But it is worth noting that the use of equivalents in the analysis group and in solo sponsored academies in 2013 was significantly higher than in all mainstream schools (Figure 10).

⁶⁵ National Audit Office, 2010; Wrigley and Kalambuka, 2012.

⁶⁶ Wolf (2012)

⁶⁷ DfE (2012b) Press release, 30 January 2012

Figure 10: Mean percentage of 5A*CEM with and without equivalents, all pupils, 2013



On average, use of equivalents was higher than that reported by Wrigley and Kalambuka.⁶⁸ However, there was considerable variation between chains in this. Some chains used them considerably; others (such as Cabot, Landau, Woodard, Kent Catholic, Learning Schools, The Priory, City of London, and Harris) much less so. Notably, use of equivalents in Cabot was below the average figure for mainstream schools. With the changes in league table measures, those with a lower reliance of equivalents may find themselves better positioned to do well under those measures.

We will return to this issue in relation to the average point score, for which figures for disadvantaged pupils are available.

5.1.2 Pupils who are NOT disadvantaged reaching the expected level

In this section we turn to the other students in academies: those pupils who are not categorised as disadvantaged. They are not the main focus of this report, but it is of interest to see whether the chains that have the highest attainment for disadvantaged pupils are equally successful with other pupils.

Figure 11: Mean percentage achieving 5A*CEM: pupils who are NOT disadvantaged

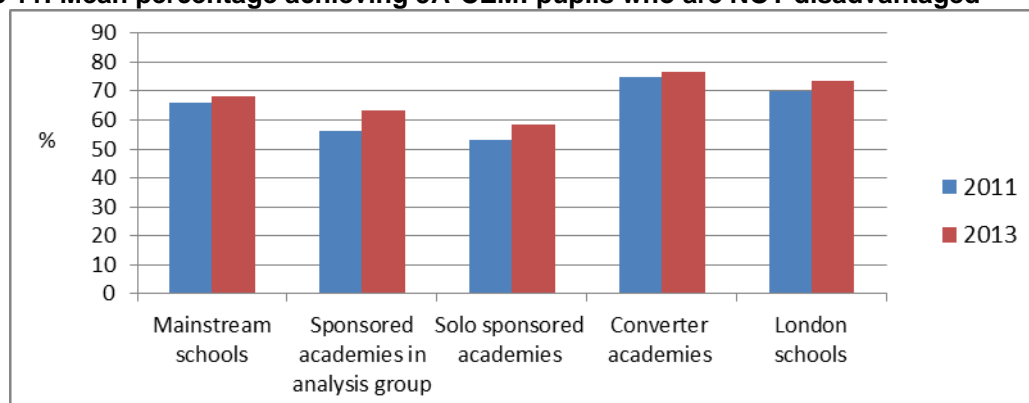


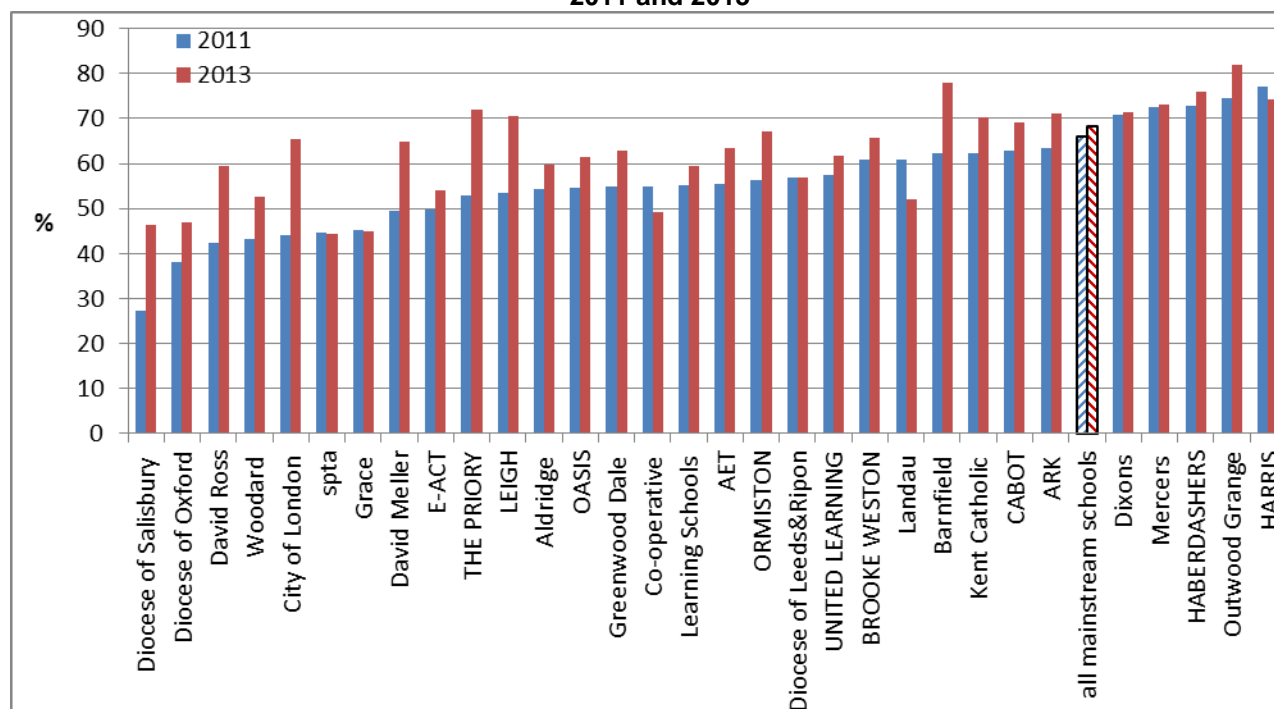
Figure 11 shows that the attainment of these pupils showed greater improvement in sponsored academies than in all mainstream schools, but that in 2013 their attainment was still lower. A key reason for this lower attainment may be there is much greater economic diversity among those who not disadvantaged than there is among the disadvantaged group; sponsored academies are generally located in deprived areas where the families of non-disadvantaged pupils may be only marginally better off than those classed as disadvantaged, and this may impact negatively on attainment. However, it is also possible that some sponsored academies are focusing most of their attention on disadvantaged pupils and neglecting those from more affluent backgrounds; this possibility will be

⁶⁸ Wrigley and Kalambuka (2012)

examined by comparing the performance of disadvantaged and other pupils within each chain (the attainment gap).

Figure 12 shows the 2011 and 2013 percentages of non-disadvantaged pupils reaching the expected level in 2011 and 2013.

Figure 12: Percentage of non-disadvantaged pupils achieving the expected level (5A*CEM), 2011 and 2013



As with the disadvantaged pupils, some of the lower-achieving chains have made substantial improvements between 2011 and 2013, but others show relatively little or no improvement. Some have also fallen back without having reached the attainment level for all mainstream schools.

Figure 12 shows that several of the chains that achieved the best for disadvantaged pupils in 2013 were also the most effective for their other pupils too:

- *Outwood Grange*
- *Barnfield*
- *Harris*
- *Mercers*
- *ARK*

City of London, which was one of the best for disadvantaged pupils, improved greatly for both groups between 2011 and 2013, but was still just below the national average for non-disadvantaged pupils in 2013.

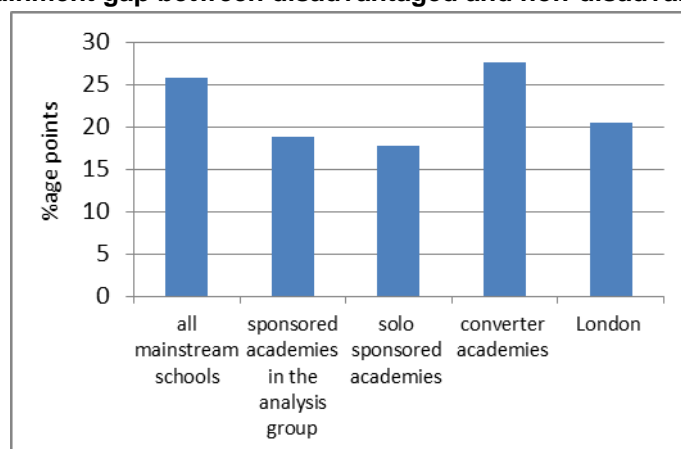
These differences are generally expressed as the attainment gap, to which we now turn.

5.1.3 The attainment gap between disadvantaged and non-disadvantaged pupils

The attainment gap between disadvantaged pupils and their peers is a government impact indicator, and reducing the gap is a policy priority. The mean attainment gap in the academies in the analysis group was substantially smaller than the gap for all mainstream schools (18.8% v 25.7%). This is perhaps to be expected because the gap is generally much smaller in urban areas, and most

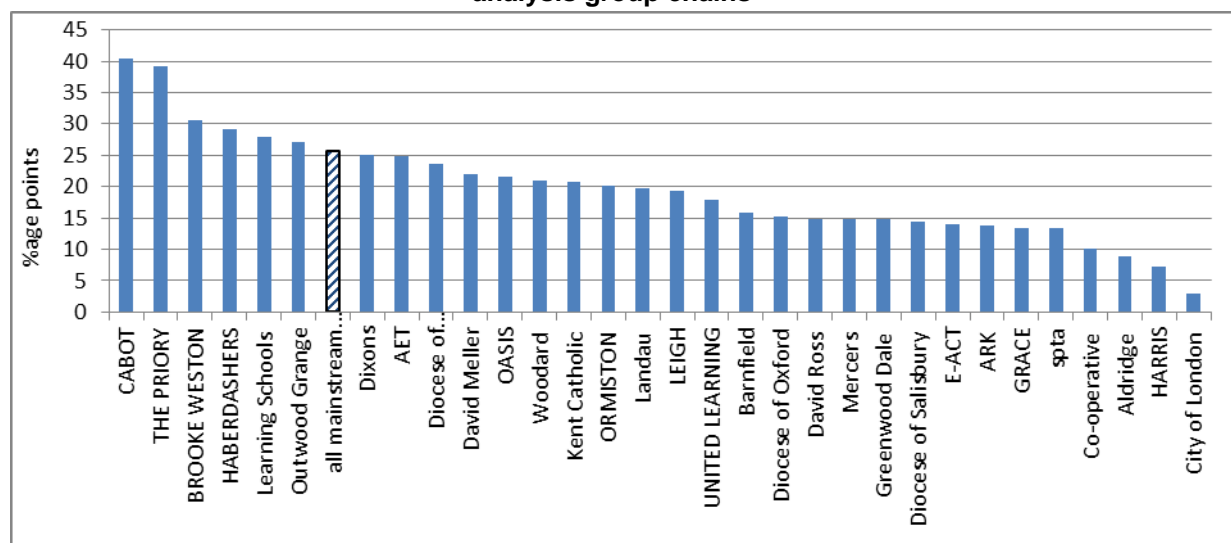
sponsored academies are urban. However, the gap in solo sponsored academies was smaller than that of the analysis group (Figure 13).

Figure 13: Mean attainment gap between disadvantaged and non-disadvantaged pupils



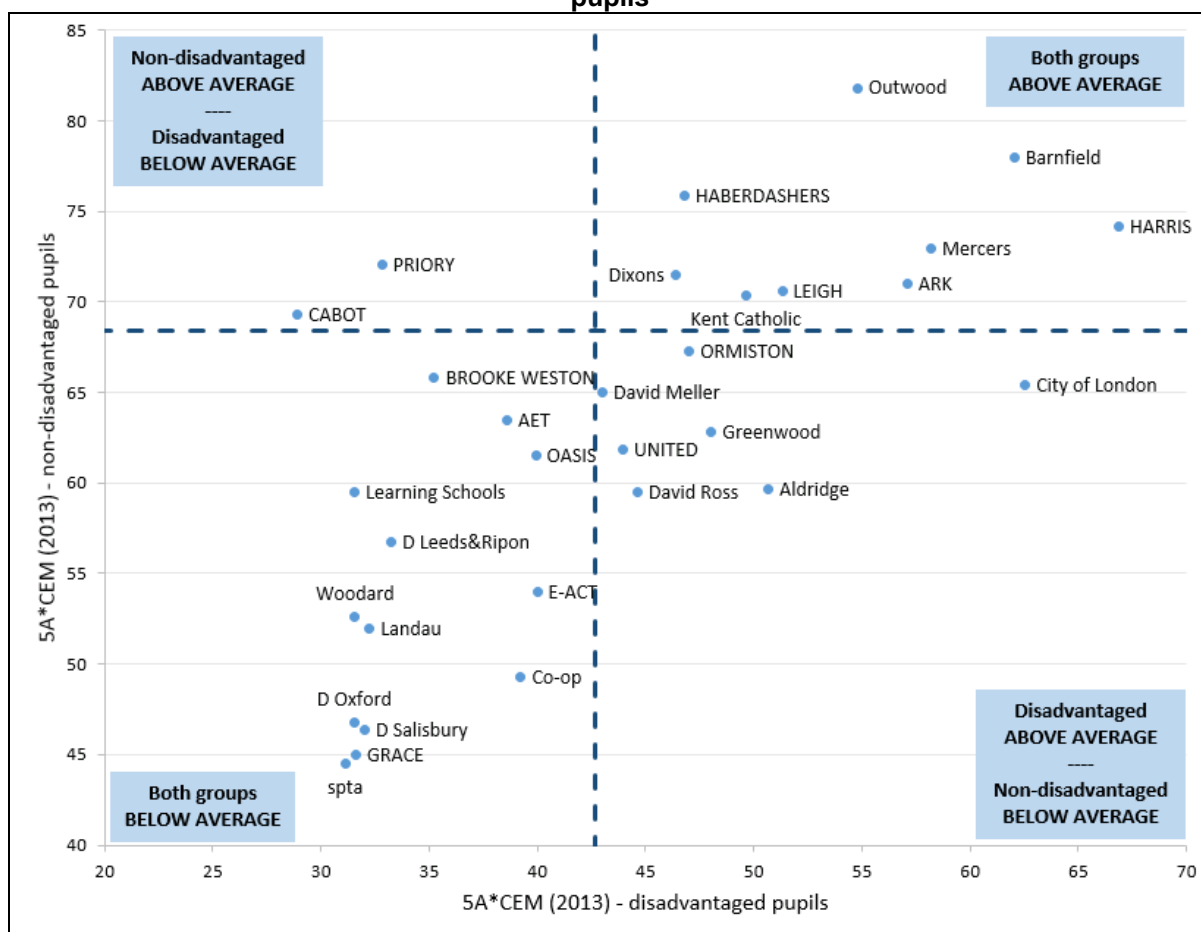
Of more interest is the variation in the gap across academy chains; this ranges ranged from over 40% for one chain down to just 3% another.

Figure 14: Mean attainment gap between disadvantaged and non-disadvantaged pupils 2013 in analysis group chains



While the size of the gap clearly matters, this figure is of little use without knowing the level of attainment of each group. There is little merit in having a small attainment gap if the non-disadvantaged pupils are underachieving. On Figure 15, therefore, we have mapped the percentages of disadvantaged and other pupils achieving 5A*CEM in each chain, and also showed how they compare with the figures for all mainstream schools.

Figure 15: Percentage achieving 5A*CEM: disadvantaged pupils compared to other pupils



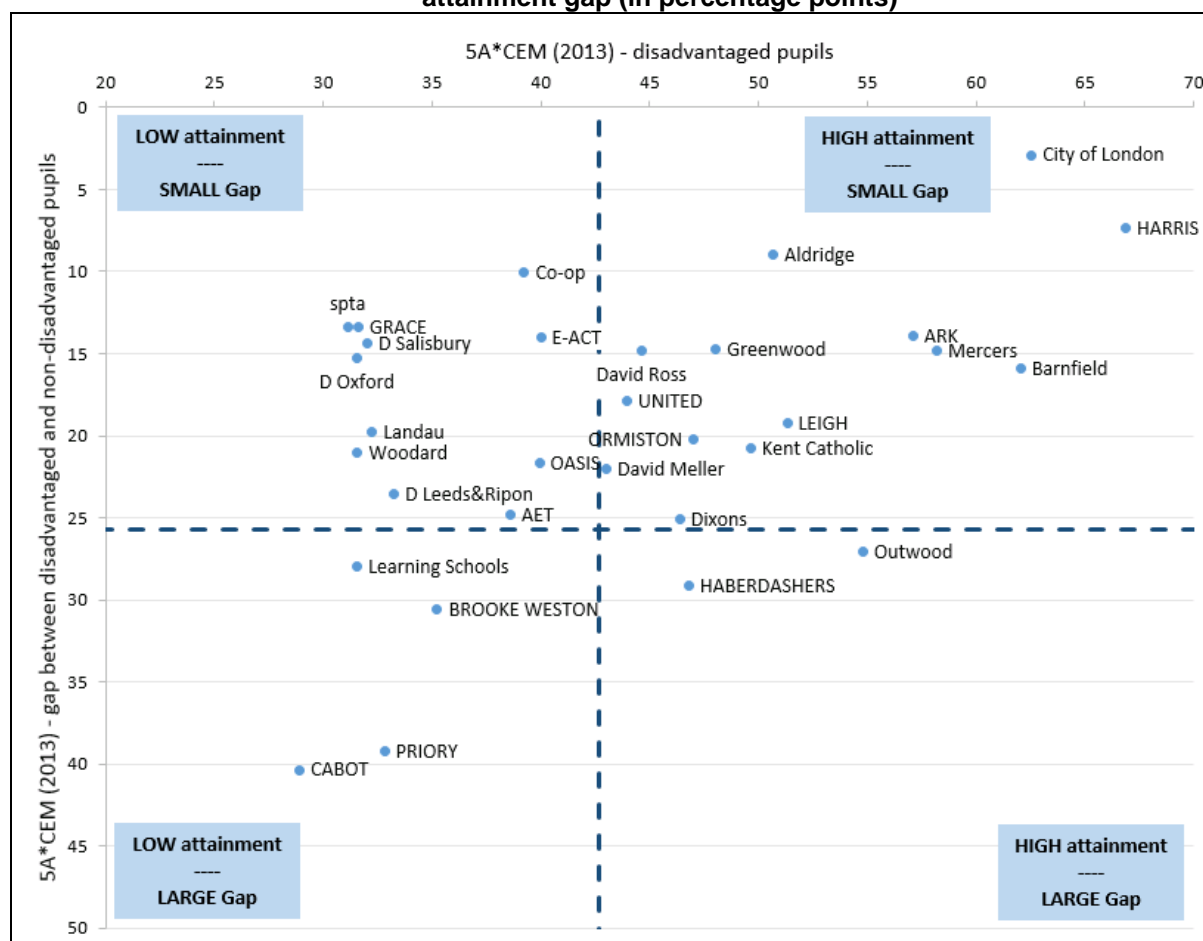
Note: the broken lines show mean performance for all mainstream schools on each measure

It is important to keep in mind that the socio-economic status of the 'non disadvantaged' group varies significantly between localities and school. However, as suggested earlier, it is also possible that some chains may be prioritising their efforts to raise the attainment on those who are disadvantaged. Some chains show well above average improvement between 2011 and 2013 for disadvantaged pupils, but little improvement for other pupils.

When we consider only those chains that were above the national mean for both disadvantaged and other pupils, the chains with the narrowest attainment gaps were Harris and ARK (7.3 and 13.9 percentage points respectively).

Figure 16 represents another way of looking at the 2013 data, showing the chains that have above average attainment for disadvantaged pupils (on percentage achieving the expected level) and a below average attainment gap.

Figure 16: Percentage of disadvantaged pupils attaining 5A*CEM compared with the size of the attainment gap (in percentage points)

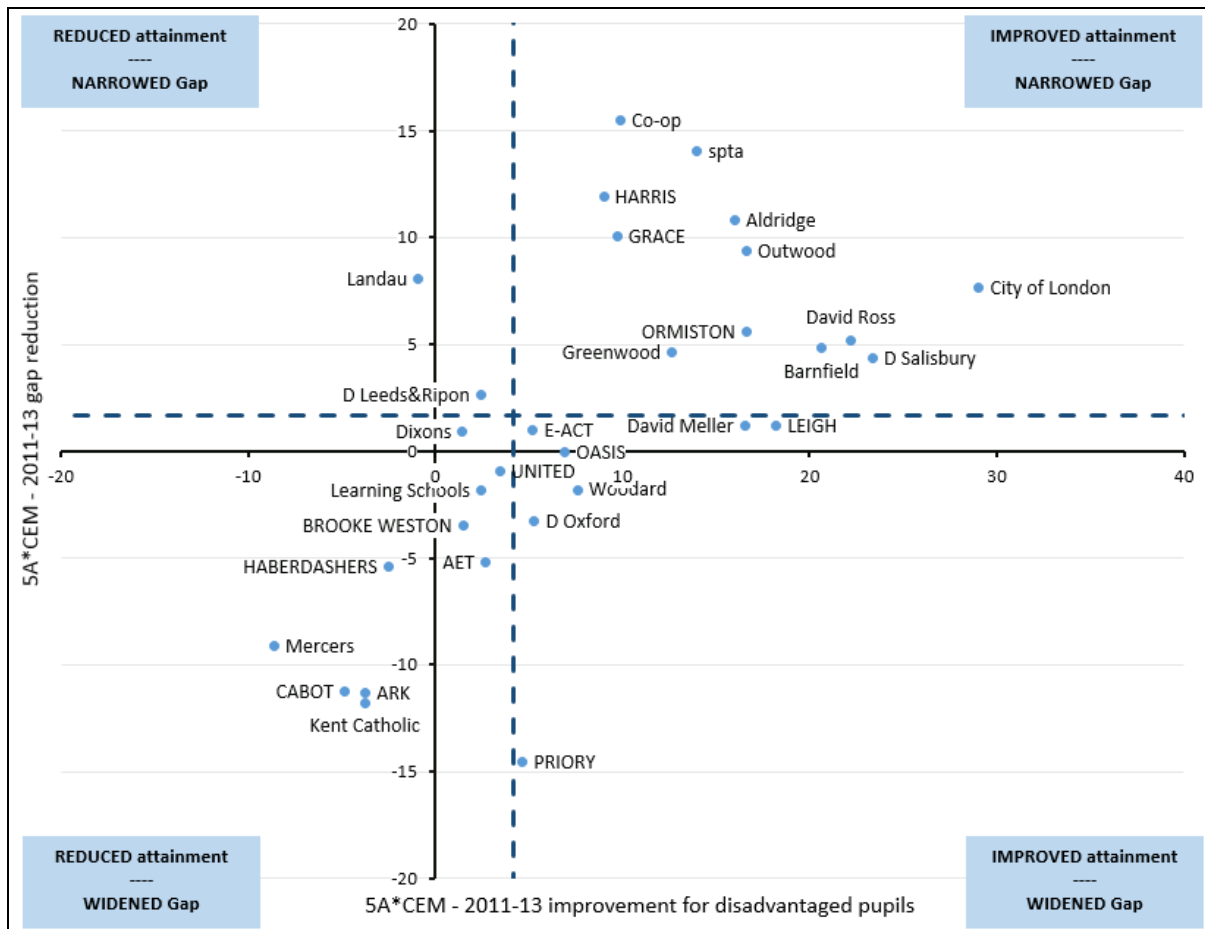


Note: the broken lines show mean performance for all mainstream schools' on each measure

Figure 16 shows that, in comparison to the figures for all mainstream schools, more than half of the chains in this research had both a higher percentage of disadvantaged pupils achieving the expected level, and a smaller attainment gap. Two chains (both based in London) especially stand out: Harris and the *City of London*, and four others that did well on both measures: *Aldridge*, *ARK*, *Mercers* and *Barnfield*. Figure 16 also shows the different ways large or small gaps arise. Large gaps tend to accompany low attainment by disadvantaged pupils; whereas small gaps can arise from relatively high attainment for disadvantaged pupils or from relatively low attainment for non-disadvantaged pupils.

Next we review how both attainment levels for disadvantaged pupils and the attainment gap changed between 2011 and 2013.

Figure 17: Percentage point improvement in disadvantaged pupils attaining 5A*CEM 2011-13, compared to percentage point change in attainment gap 2011-13



Note: the broken lines show mean performance for all mainstream schools on each measure

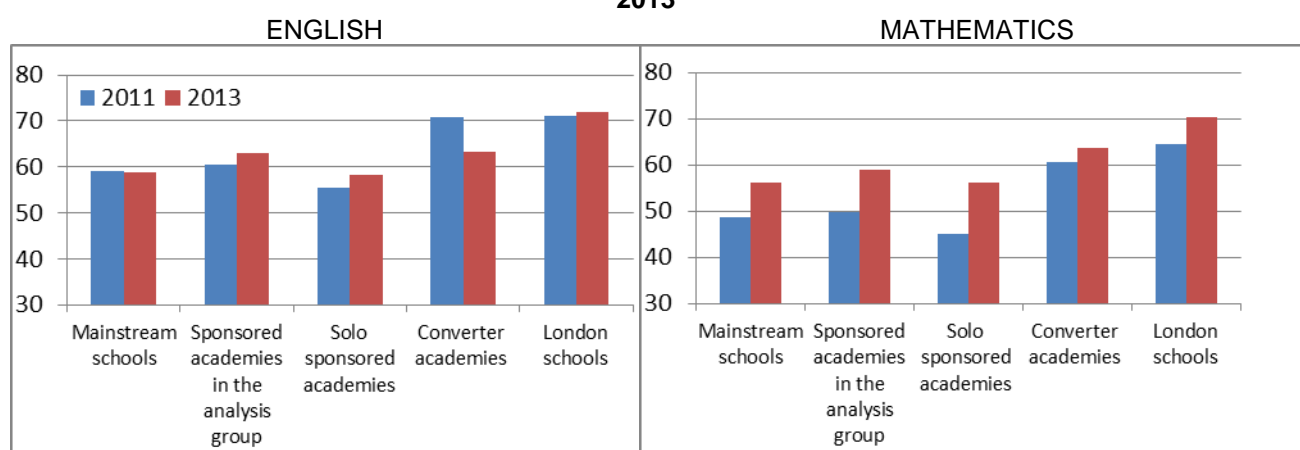
Figure 17 shows that the chains that have been most successful in improving the performance for their disadvantaged pupils and to narrow the attainment gap between 2011 and 2013 are: *City of London*, *SPTA*, *Cooperative*, *Aldridge*, *Harris*, *Grace* and *Outwood Grange*. But in some chains, the percentage of disadvantaged pupils achieving the expected level has decreased, and the attainment gap has widened.⁶⁹

⁶⁹ Of course, it is important to bear in mind that raw attainment differs widely between chains: see Figures 7 and 11

5.2 Progress in English and mathematics

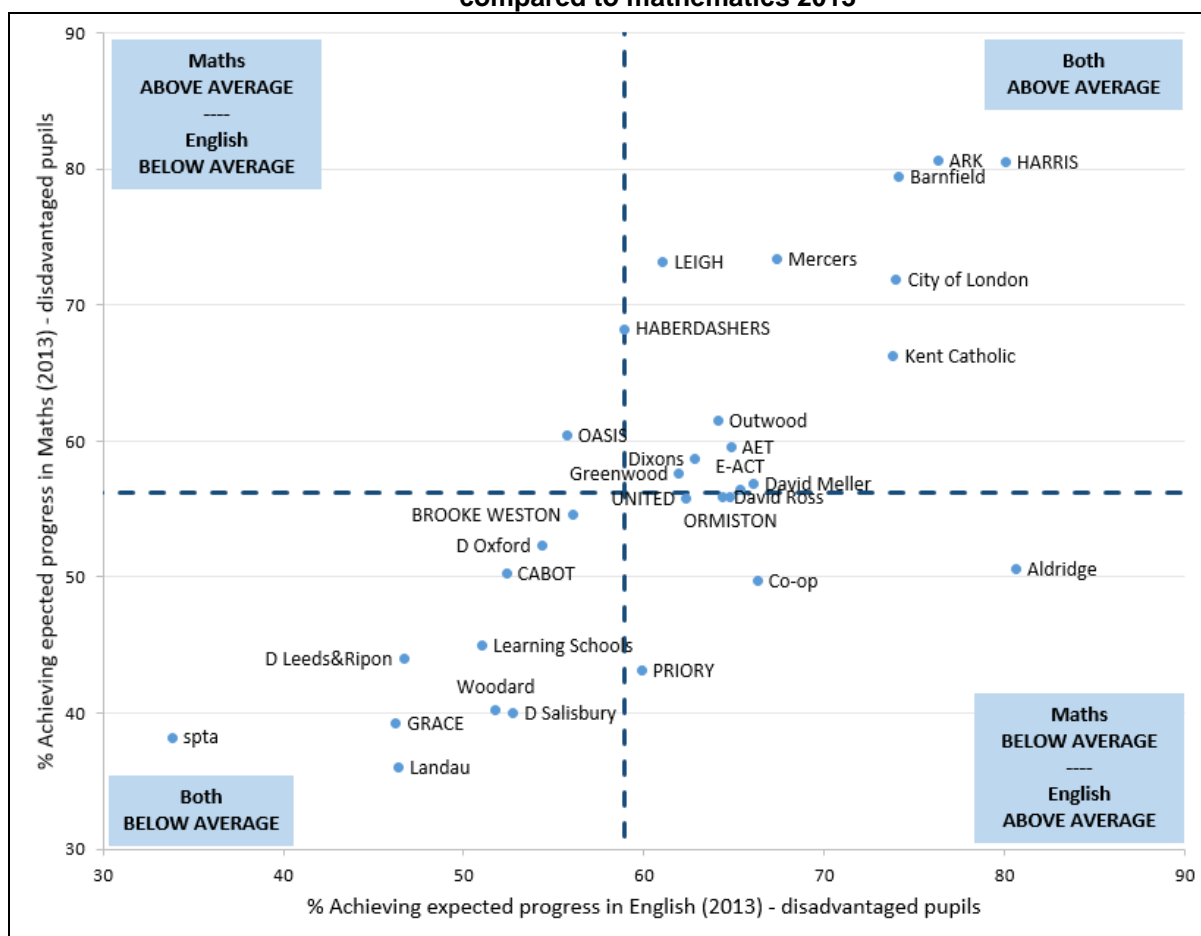
Figure 18 shows that disadvantaged pupils in our analysis group made, on average, slightly better progress in English and mathematics than did all mainstream schools. In 2011, a higher percentage of pupils made the expected progress in English than in mathematics, but Figure 17 shows that the percentage achieving the expected progress in had improved more between 2011 and 2013. The same pattern of sponsored academies in chains in the analysis group performing better than solo sponsored academies is evident.

Figure 18: Mean percentage of disadvantaged pupils achieving expected progress, 2011 and 2013



Since our analysis group is of schools that have been sponsored academies since September 2010, and have remained in the same chain throughout that period, it would be expected that the chain has had an impact on the progress of the pupils taking their GCSEs in 2013, as the majority of them will have spent three years in that chain. Yet Figure 19 shows a considerable difference between the highest and lowest proportions of disadvantaged pupils making expected progress in English and mathematics in the chains in the analysis group.

Figure 19: Mean percentage of disadvantaged pupils making expected progress in English compared to mathematics 2013



Note: the broken lines show mean performance for all mainstream schools on each measure

The chains in which the proportions of disadvantaged pupils making progress in English and mathematics are above average are generally those very much the same as those with high proportions of disadvantaged pupils achieving 5 A*CEM : Harris, ARK, *Barnfield*, *Mercers'*, *City of London* and *Kent Catholic* are the best.

5.3 Average capped point score

5.3.1 Disadvantaged pupils' average capped point score

Figure 20 shows that the sponsored academies in the analysis group were achieving a higher average (capped) point score than all maintained schools in 2011, and extended this lead in 2013. As with 5A*CEM, solo sponsored academies did less well than the chains in our analysis group, while converter academies did better than either set of sponsored academies, but showed no improvement over the period.

Figure 20: Average capped point score for disadvantaged pupils 2011 and 2013

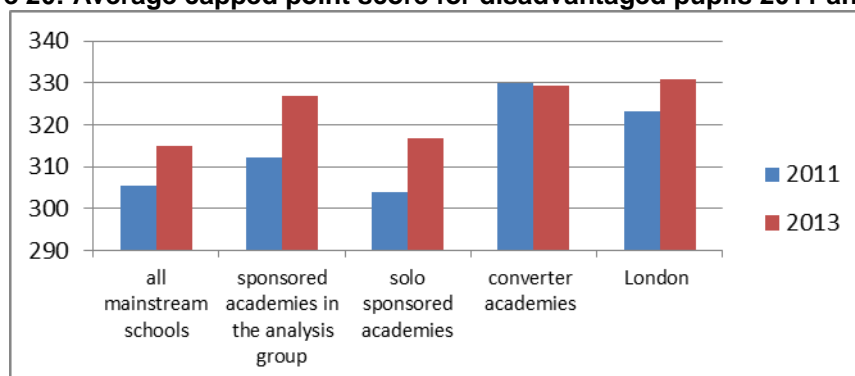
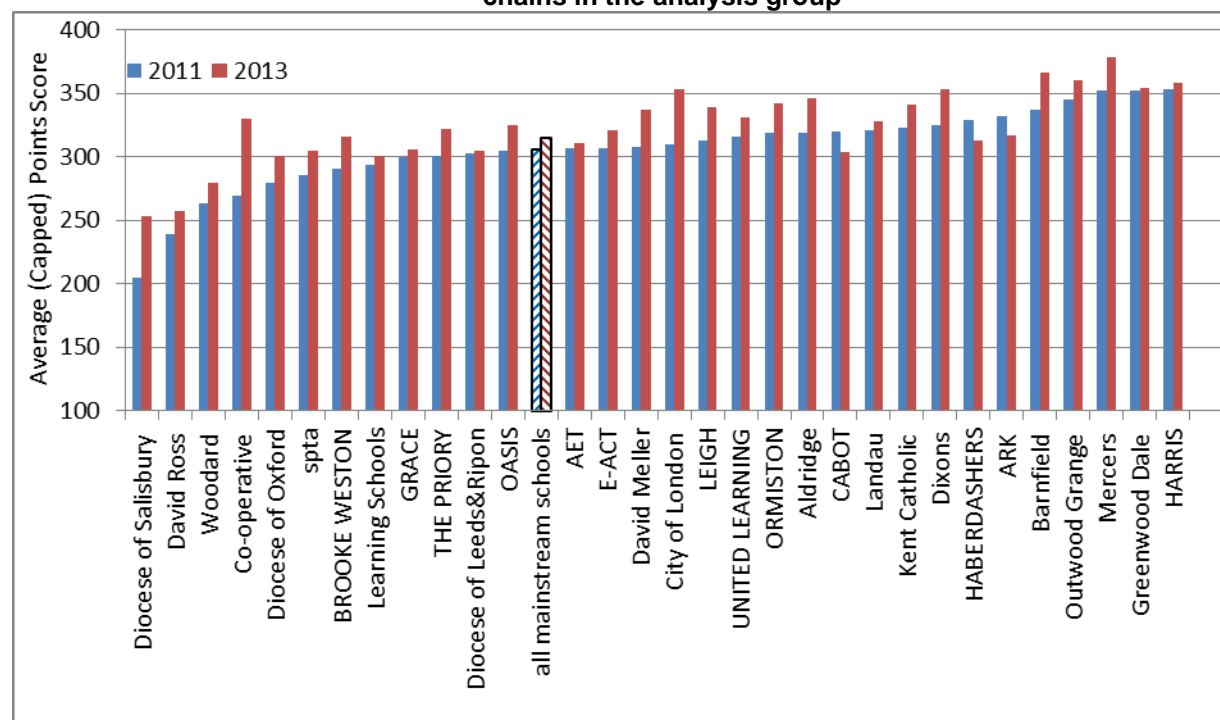


Figure 21 shows the 2011 and 2013 point scores for the analysis group chains.

Figure 21: Average capped point score achieved by disadvantaged pupils, 2011 and 2013: chains in the analysis group



When we compare the mean percentage of pupils achieving 5A*CEM and the mean average (capped) in score for each chain in the analysis group there is a moderate correlation. A comparison of the ranking of sponsor chains on each score shows that for most chains the difference in rank is three or fewer places. However, for a few chains there are greater differences. Some do rather better on average (capped) point score (*Landau, Dixons, The Priory, Greenwood Dale, Mercers*). This may suggest a policy of encouraging pupils to take a broader curriculum (point score is calculated on the

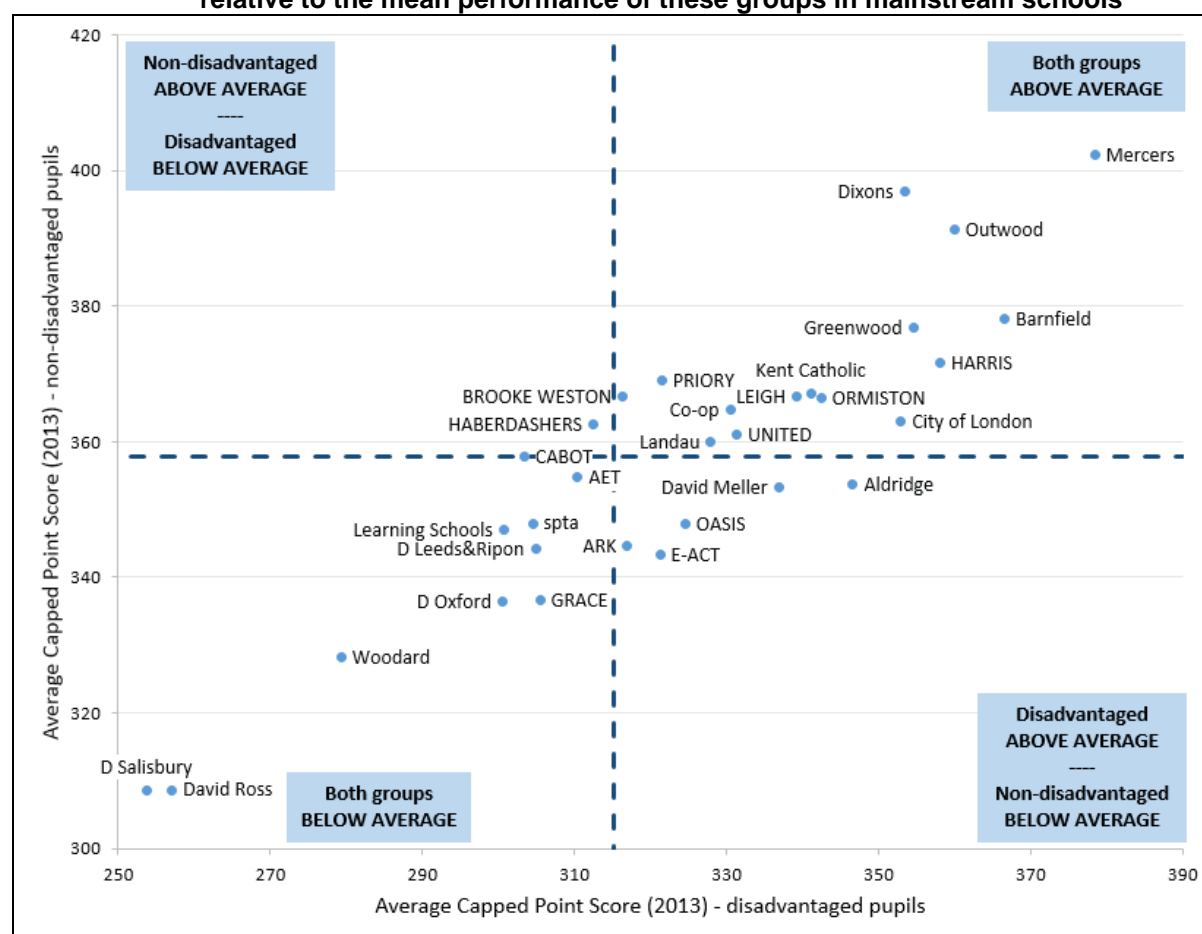
best eight GCSE or equivalent grades) rather than concentrate only on achieving 5 A*-C grades. This strategy would obviously be a positive one when the new Progress 8 measure is introduced from 2016.

A few chains are ranked very much higher on percentage of pupils achieving 5A*-CEM than on capped point score. This would suggest a strategy focused on enabling pupils to achieve the necessary grades in five subjects, rather than on a broader curriculum (taking eight subjects).

5.3.2 Non-disadvantaged pupils and the attainment gap using average capped point score

Figure 22 compares the attainment of disadvantaged and non-disadvantaged pupils using average capped point score. It is thus comparable to Figure 15 which looked at the percentage reaching the expected level. Because the analysis group chains generally did better than all mainstream schools on point score, more chains were above average on this measure for both advantaged and disadvantaged pupils. Among these, the smallest attainment gaps were *City of London*, *Harris* and *Barnfield*.

Figure 22: Average (capped point score) - disadvantaged and non-disadvantaged pupils, relative to the mean performance of these groups in mainstream schools



Note: the broken lines show mean performance for all mainstream schools on each measure

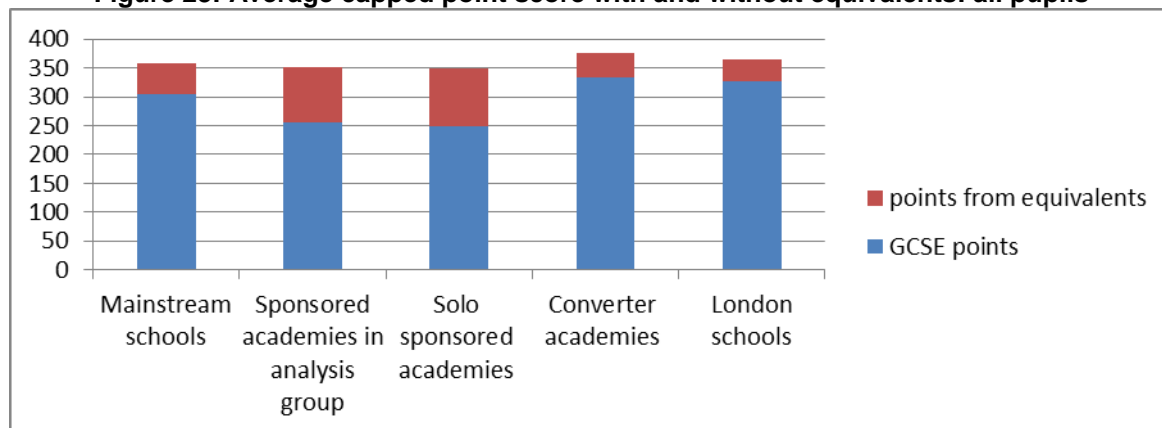
5.4 Average GCSE capped point score

As discussed earlier, sponsored academies in general make very much greater use of 'equivalent' qualifications, which are not as rigorous as GCSEs,⁷⁰ but boosted their position on league tables. The

⁷⁰ Wolf, 2012

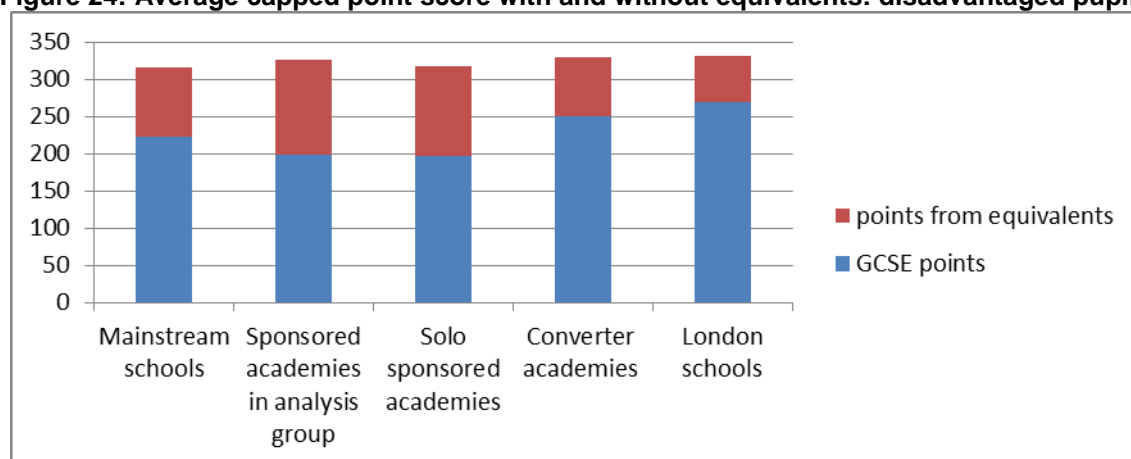
performance tables provide capped point score data with and without equivalents and break this down for disadvantaged and other pupils. Figure 23 shows that a higher proportion of the points recorded by sponsored academies come from GCSE equivalents than is the case for all mainstream schools (33% of the points recorded by academies in the analysis group were from equivalents, compared with 17% for mainstream schools).

Figure 23: Average capped point score with and without equivalents: all pupils



Using the capped point score data, we are able to investigate whether equivalents are disproportionately taken by disadvantaged pupils, and whether some chains make more use of equivalents for disadvantaged pupils than others. Figure 24 shows that while the sponsored academies in the analysis group had a higher point score for disadvantaged pupils than all mainstream schools in 2013, this reflected a much higher use of equivalents (39% of the total points came from equivalents for academies in the analysis group; the equivalent figures for all mainstream schools was 29%). If the equivalents are removed, the sponsored academies did less well than all mainstream schools. Converter academies and London schools outperformed both.

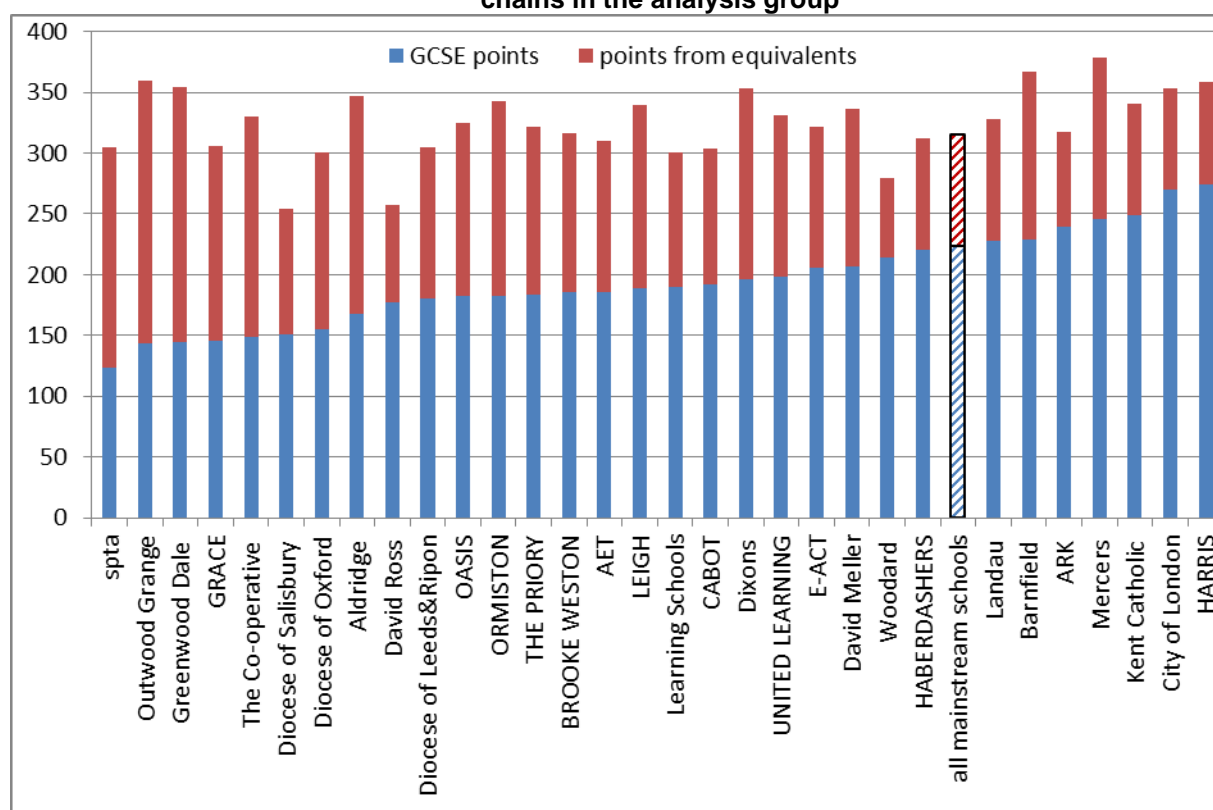
Figure 24: Average capped point score with and without equivalents: disadvantaged pupils



Similarly, both the sponsored academies in the analysis group and the solo sponsored academies made more use of equivalents for those pupils who were not disadvantaged. However, a lower percentage of the total point score came from equivalents for this group (27% for academies in the analysis group; 15% in mainstream schools). Thus all schools made greater use of equivalents for disadvantaged pupils.

Figure 25 then shows the 2013 the average capped point score for disadvantaged pupils in sponsored academies in each chain, with and without equivalents.

Figure 25: Average capped point score for disadvantaged pupils with and without equivalents: chains in the analysis group



It shows that there is a considerable difference across chains in the extent to which equivalent qualifications are taken by disadvantaged pupils. In some chains less than a quarter of the points came from equivalents (Harris, Woodard, City of London, ARK), whereas in others the figure was around 60%. For comparison, in all mainstream schools 29% of points came from equivalents and in London schools just 18%.

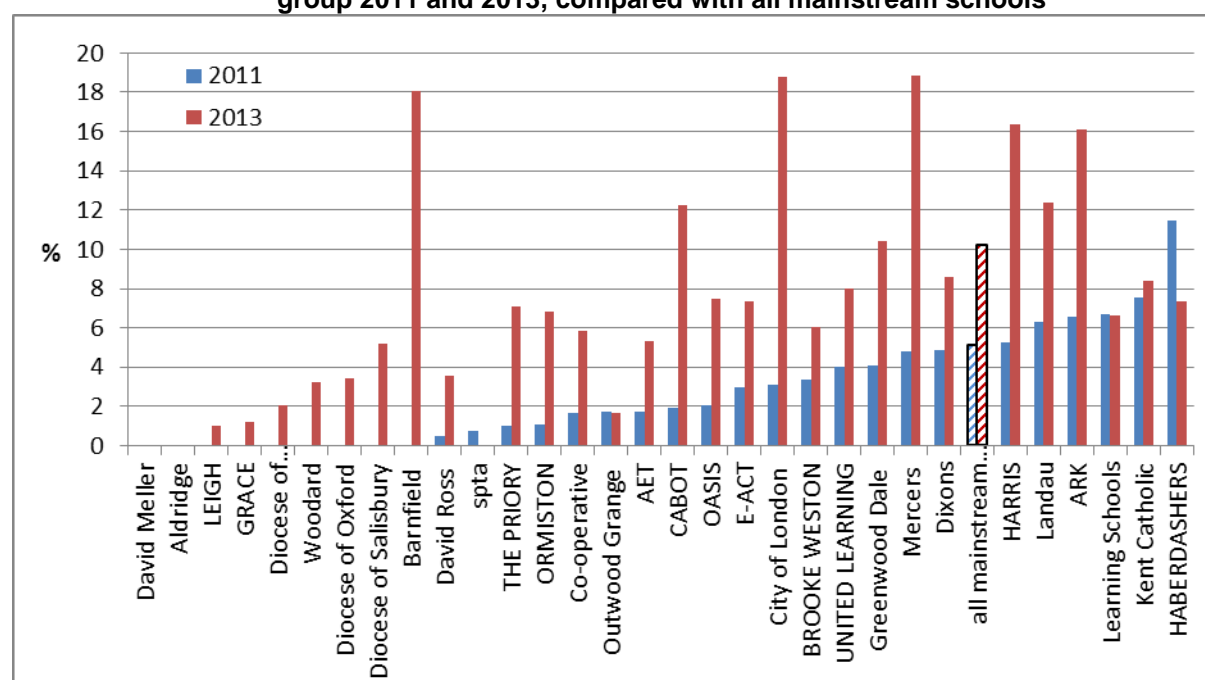
When we consider the points achieved from GCSEs alone, the most successful chains are those that come out as most successful throughout the report: Harris, City of London, Mercers, ARK, Barnfield – with the addition of Kent Catholic Schools.

5.5 EBacc

5.5.1 Disadvantaged pupils achieving Ebacc

We have also reviewed the data relating to percentage of pupils achieving EBacc. The 2013 data (Figure 26) suggest that than many (but not all) of the chains may have changed their curriculum offer to increase pupils' chances of achieving EBacc. However, some chains appear not to use EBacc as a target.

Figure 26: Percentage of disadvantaged pupils achieving EBacc in chains in the analysis group 2011 and 2013, compared with all mainstream schools

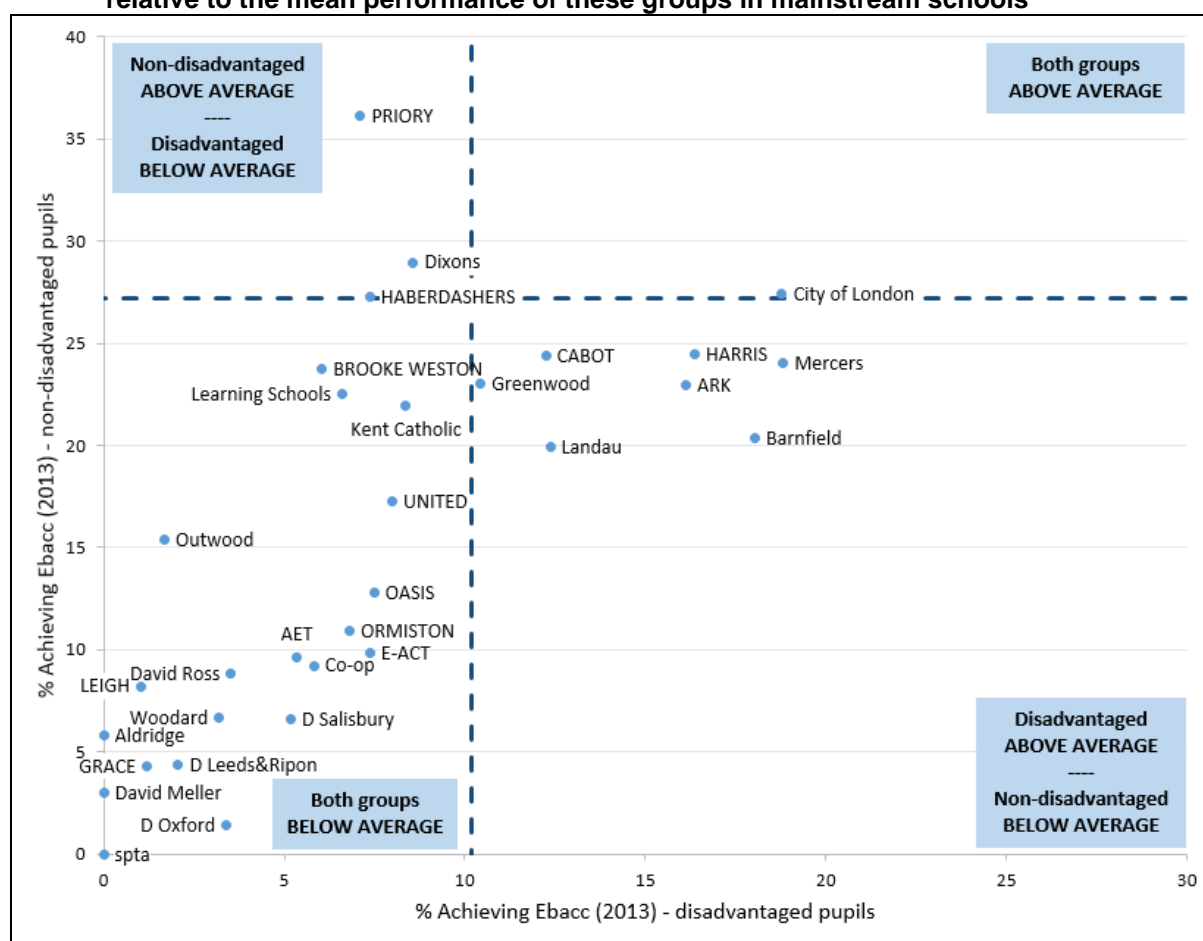


5.5.2 Non-disadvantaged pupils and the attainment gap using EBacc

The percentages of non-disadvantaged pupils achieving EBacc for chains in our analysis group were generally below the national average in 2013.

Figure 27 compares the EBacc outcomes of disadvantaged and non-disadvantaged pupils and so is comparable to Figures 15 and 22 which presented equivalent data for 5A*CEM, and for average point score. Since the analysis group were generally below the national average on EBacc, particularly for non-disadvantaged pupils, only one chain – *City of London* – performed above average for both groups.

Figure 27: Percentage of disadvantaged and non-disadvantaged pupils achieving EBacc, relative to the mean performance of these groups in mainstream schools



Note: the broken lines show mean performance for all mainstream schools on each measure

Given this picture somewhat reflects strategic decisions on the part of schools, we are cautious of reaching conclusions, except to note the high achieving chains in this regard (notably *Barnfield*, and the cluster including *Mercers*, *ARK*, *Harris* and *City of London*). However, given the policy premise of the EBacc – a focus on facilitating social mobility by securing access to those ‘high status’ subjects that best secure access to elite universities and professions – it may be a cause for concern that so few academy chains appear to be supporting this agenda.

5.6 Pupils with low attainment in primary school

In this section we review the secondary school attainment of those pupils who did not achieve the expected level (Level 4) at age 11. Clearly improving outcomes for this (often disadvantaged) group of pupils is important for promoting life chances.

Figure 28: Percentage of pupils whose prior attainment was below Level 4 achieving 5A*CEM

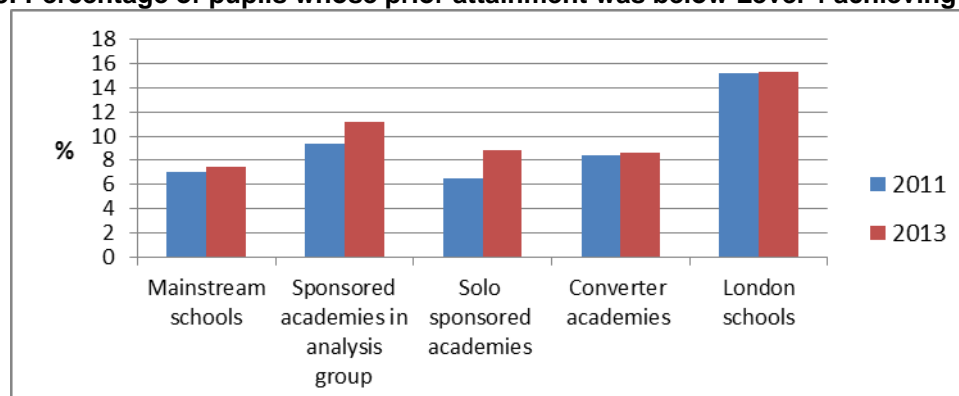
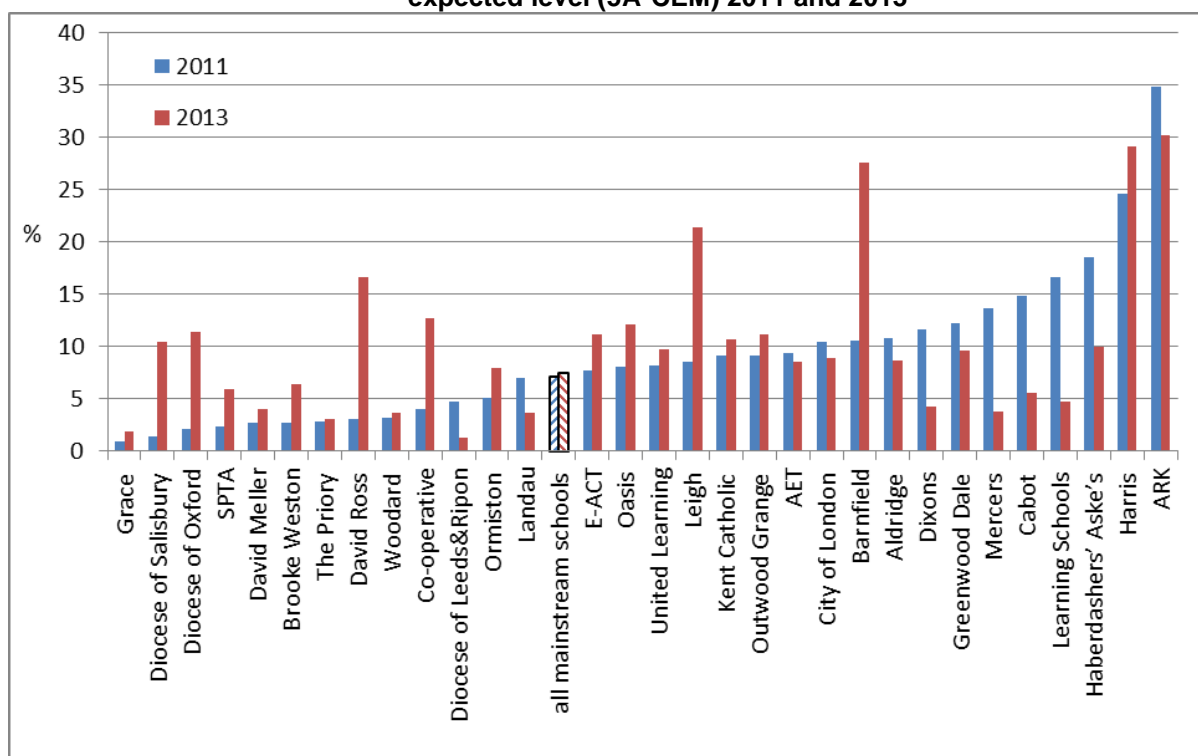


Figure 28 shows that, on average, these pupils fared better in the sponsored academies in the analysis group than in mainstream schools, and that both the analysis group academies and solo sponsored academies showed improvement in this between 2011 and 2013.

Figure 29 then shows that some chains have been very much more effective than others with this group of pupils. Whereas in all mainstream schools around 7% of this group go on to achieve 5A*CEM, five of the chains in the analysis group achieved more than double this figure in 2013: ARK, Harris, *Barnfield*, Leigh and *David Ross*. Of these, ARK and Harris have consistently scored highly on this measure in the last three years, but the other three chains have shown rapid improvement. Other chains did very much worse on this measure in 2013 than they had in 2011, and some had few low attaining pupils achieving 5A*-CEM in either year.

Figure 29: Percentage of pupils whose prior attainment was below Level 4 achieving the expected level (5A*CEM) 2011 and 2013



Clearly, although very important, it is not sufficient for a chain to produce above average results for those entering with low attainment. We have also reviewed the achievements of those with average and high prior attainment. This showed Harris, Leigh, *Barnfield* and *Outwood Grange* as the most successful chains with all three groups of learners.

5.7 Summary: which chains are the most effective for disadvantaged pupils?

This analysis suggests that some chains have different targets from others – some, for example, prioritising the EBacc subjects, while others have focused on getting the 5A*CEM score up by encouraging pupils to take equivalent qualifications.

To achieve this we looked at the chains in relation to the following measures of attainment of disadvantaged pupils in 2013:

- percentage achieving 5A*CEM
- percentage making expected progress in English
- percentage making expected progress in mathematics
- average capped GCSE point score
- percentage achieving EBacc

The outcomes for pupils whose attainment was low in primary school are not included here as they are not the same group as disadvantaged pupils, but may overlap. Nor have we included improvement made between 2011 and 2013; this is clearly important, and is analysed in the next table. However, at this point our focus is on the 2013 results. Note again, the analysis group includes only those schools that have been sponsored academies in the same chain since at least September 2010. The chain has therefore had three school years in which to bring about improvement before the 2011 results.

We then sought to identify those chains that did best in terms of disadvantaged pupils' attainment on a summary score combining all of the measures. This is weighted as follows

- percentage achieving 5A*CEM – 50%
- average capped GCSE point score - 20%
- percentage making expected progress in English – 10%
- percentage making expected progress in mathematics – 10%
- percentage achieving EBacc – 10%

The rationale for the high weighting given to 5A*CEM is that it is still currently the key measure on which schools are assessed, in conjunction with pupil progress in English and maths, which together receive further 20% of the weighting. GCSE capped point score is of interest because it excludes equivalents, and both that measure and EBacc give some indication of how the chain is responding to the government drive for more academic qualifications which will be reflected in the 2014 league tables.

Each chain's score has been calculated using the difference between the chain and all mainstream schools for each of the above measures, weighted in the proportions given. Table 7 gives the chains performing above and below the average for mainstream schools in this weighted attainment measure.

We then followed exactly the same strategy to present data related to improvement on each measure between 2011 and 2013, yielding a score for improvement weighted in exactly the same way as the overall score for attainment. Table 11 gives the chains performing above and below the average for mainstream schools in this weighted improvement measure.

Table 7: Chains performing above and below the mainstream average on the key measures of 2013 attainment for disadvantaged pupils

5A*CEM	Expected progress: English	Expected progress: maths	EBacc	GCSE capped point score	Overall rank
Aldridge ARK Barnfield City of London Harris Kent Catholic Leigh Mercers Outwood Grange <i>(Significantly above average)</i>	Aldridge	ARK	ARK	City of London	ARK
	ARK	Barnfield	Barnfield	Harris	Barnfield
	Barnfield	City of London	Cabot	ARK	City of London
	City of London	Haberdashers' Aske's	City of London	Barnfield	Harris
	Harris	Harris	Harris	Kent Catholic	Mercers
	Kent Catholic	Kent Catholic	Landau	Landau	Dixons
	Leigh	Leigh	Mercers	Mercers	Haberdashers' Aske's
	Mercers	Mercers	Greenwood Dale	Haberdashers' Aske's	Kent Catholic
David Ross Dixons Greenwood Dale Haberdashers' Aske's Ormiston United Learning <i>(Above average)</i>	David Meller	AET	AET	Cabot	Leigh
	David Ross	David Meller	Aldridge	David Meller	Greenwood Dale
	Dixons	Dixons	Brooke Weston	Dixons	Ormiston
	E-ACT	Greenwood Dale	Co-operative	E-ACT	Outwood Grange
	Greenwood Dale	Oasis	David Meller	Learning Schools	AET
	Leigh	Outwood Grange	David Ross	United Learning	David Meller
	Mercers	David Ross	Diocese of Leeds & Ripon	Woodard	David Ross
	Ormiston	E-ACT	Diocese of Oxford	AET	E-ACT
David Meller <i>(Average)</i> AET Co-operative E-ACT Oasis <i>(Below average)</i>	Outwood Grange	Ormiston	Diocese of Salisbury	Brooke Weston	Oasis
	The Priory	United Learning	Dixons	David Ross	Aldridge
	United Learning	Brooke Weston	E-ACT	Diocese of Leeds & Ripon	Co-operative
	Haberdashers' Aske's	Cabot	Grace	Diocese of Oxford	United Learning
	Brooke Weston	Diocese of Oxford	Haberdashers' Aske's	Diocese of Salisbury	Brooke Weston
	Cabot	Aldridge	Kent Catholic	Grace	Cabot
	Diocese of Oxford	Co-operative	Learning Schools	Greenwood Dale	Diocese of Leeds & Ripon
	Diocese of Salisbury	Diocese of Leeds & Ripon	Leigh	Leigh	Diocese of Oxford
Diocese of Leeds & Ripon Diocese of Salisbury Grace SPTA Landau Learning Schools Priory Woodard <i>(Significantly below average)</i>	Oasis	Diocese of Salisbury	Oasis	Oasis	Diocese of Salisbury
	Learning Schools	Grace	Ormiston	Ormiston	Grace
	Woodard	SPTA	Outwood Grange	Outwood Grange	SPTA
	Diocese of Leeds & Ripon	Landau	SPTA	SPTA	Landau
	Grace Foundation	Learning Schools	The Priory	Aldridge	Learning Schools
	SPTA	Priory	United Learning	Co-operative	Priory
	Landau	Woodard	Woodard	Priory	Woodard

Top tier: Significantly above average (15+% better performance than the mean for all mainstream schools), second tier: above average (>1% & <15% better); third tier: average (within 1% of mainstream); fourth tier: below average (>1% & <15% worse); bottom tier: significantly below average (15+% worse). Within categories chains are in alphabetical order.

Averages for disadvantaged students in mainstream schools: 5A*CEM= 42.7%, Expected progress in English=58.9%, Expected progress in maths=56.2%, GCSE capped point score=223.2, EBacc=10.2%

Table 8: Chains performing above and below the mainstream average on the key measures of 2011-13 improvement for disadvantaged pupils

5A*CEM	Expected progress: English	Expected progress: maths	EBacc	GCSE capped point score	Overall rank
<i>Aldridge</i> <i>Barnfield</i> <i>City of London</i> <i>David Meller</i> <i>David Ross</i> <i>Diocese of Salisbury</i> <i>Leigh</i> <i>Ormiston</i> <i>Outwood Grange</i> <i>Co-operative</i> <i>Grace</i> <i>Greenwood Dale</i> <i>Harris</i> <i>Oasis</i> <i>SPTA</i> <i>Woodard</i> <i>Diocese of Oxford</i> <i>E-ACT</i> <i>The Priory</i> <i>United Learning</i> <i>AET</i> <i>ARK</i> <i>Brooke Weston</i> <i>Cabot</i> <i>Diocese of Leeds & Ripon</i> <i>Dixons</i> <i>Haberdashers'</i> <i>Kent Catholic</i> <i>Landau</i> <i>Learning Schools</i> <i>Mercers</i>	<i>Aldridge</i> <i>Co-operative</i> <i>David Meller</i> <i>David Ross</i> <i>Diocese of Oxford</i> <i>Diocese of Salisbury</i> <i>Leigh</i> <i>Barnfield</i> <i>City of London</i> <i>E-ACT</i> <i>Harris</i> <i>Mercers</i> <i>Oasis</i> <i>Ormiston</i> <i>The Priory</i> <i>AET</i> <i>Learning Schools</i> <i>Outwood Grange</i> <i>ARK</i> <i>Brooke Weston</i> <i>Cabot</i> <i>Diocese of Leeds & Ripon</i> <i>Dixons</i> <i>Grace</i> <i>Greenwood Dale</i> <i>Haberdashers'</i> <i>Kent Catholic</i> <i>Landau</i> <i>SPTA</i> <i>United Learning</i> <i>Woodard</i>	<i>Barnfield</i> <i>Brooke Weston</i> <i>City of London</i> <i>David Ross</i> <i>Diocese of Salisbury</i> <i>Leigh</i> <i>Outwood Grange</i> <i>AET</i> <i>Aldridge</i> <i>Co-operative</i> <i>David Meller</i> <i>Diocese of Oxford</i> <i>Grace</i> <i>Greenwood Dale</i> <i>Learning Schools</i> <i>Mercers</i> <i>Oasis</i> <i>Ormiston</i> <i>SPTA</i> <i>Woodard</i> <i>ARK</i> <i>Cabot</i> <i>Diocese of Leeds & Ripon</i> <i>Dixons</i> <i>E-ACT</i> <i>Haberdashers'</i> <i>Harris</i> <i>Kent Catholic</i> <i>Landau</i> <i>The Priory</i> <i>United Learning</i>	<i>Barnfield</i> <i>City of London</i> <i>Mercers</i> <i>ARK</i> <i>Cabot</i> <i>Greenwood Dale</i> <i>Harris</i> <i>Landau</i> <i>The Priory</i> <i>Diocese of Salisbury</i> <i>E-ACT</i> <i>Oasis</i> <i>Ormiston</i> <i>AET</i> <i>Aldridge</i> <i>Brooke Weston</i> <i>Co-operative</i> <i>David Meller</i> <i>David Ross</i> <i>Diocese of Leeds & Ripon</i> <i>Diocese of Oxford</i> <i>Dixons</i> <i>Grace</i> <i>Haberdashers' Aske's</i> <i>Kent Catholic</i> <i>Learning Schools</i> <i>Leigh</i> <i>Outwood Grange</i> <i>SPTA</i> <i>United Learning</i> <i>Woodard</i>	<i>Barnfield</i> <i>Cabot</i> <i>City of London</i> <i>E-ACT</i> <i>Harris</i> <i>The Priory</i> <i>Aldridge</i> <i>ARK</i> <i>David Meller</i> <i>Diocese of Leeds & Ripon</i> <i>Diocese of Salisbury</i> <i>Greenwood Dale</i> <i>Leigh</i> <i>Oasis</i> <i>Ormiston</i> <i>Woodard</i> <i>AET</i> <i>Grace</i> <i>Kent Catholic</i> <i>Learning Schools</i> <i>Brooke Weston</i> <i>Co-operative</i> <i>David Ross</i> <i>Diocese of Oxford</i> <i>Dixons</i> <i>Haberdashers'</i> <i>Landau</i> <i>Mercers</i> <i>Outwood Grange</i> <i>SPTA</i> <i>United Learning</i>	<i>Barnfield</i> <i>City of London</i> <i>Diocese of Salisbury</i> <i>Leigh</i> <i>Aldridge</i> <i>Co-operative</i> <i>David Meller</i> <i>David Ross</i> <i>E-ACT</i> <i>Grace</i> <i>Greenwood Dale</i> <i>Harris</i> <i>Oasis</i> <i>Ormiston</i> <i>Outwood Grange</i> <i>SPTA</i> <i>The Priory</i> <i>Woodard</i> <i>AET</i> <i>Diocese of Leeds & Ripon</i> <i>Diocese of Oxford</i> <i>Learning Schools</i> <i>ARK</i> <i>Brooke Weston</i> <i>Cabot</i> <i>Dixons</i> <i>Haberdashers'</i> <i>Kent Catholic</i> <i>Landau</i> <i>Mercers</i> <i>United Learning</i>

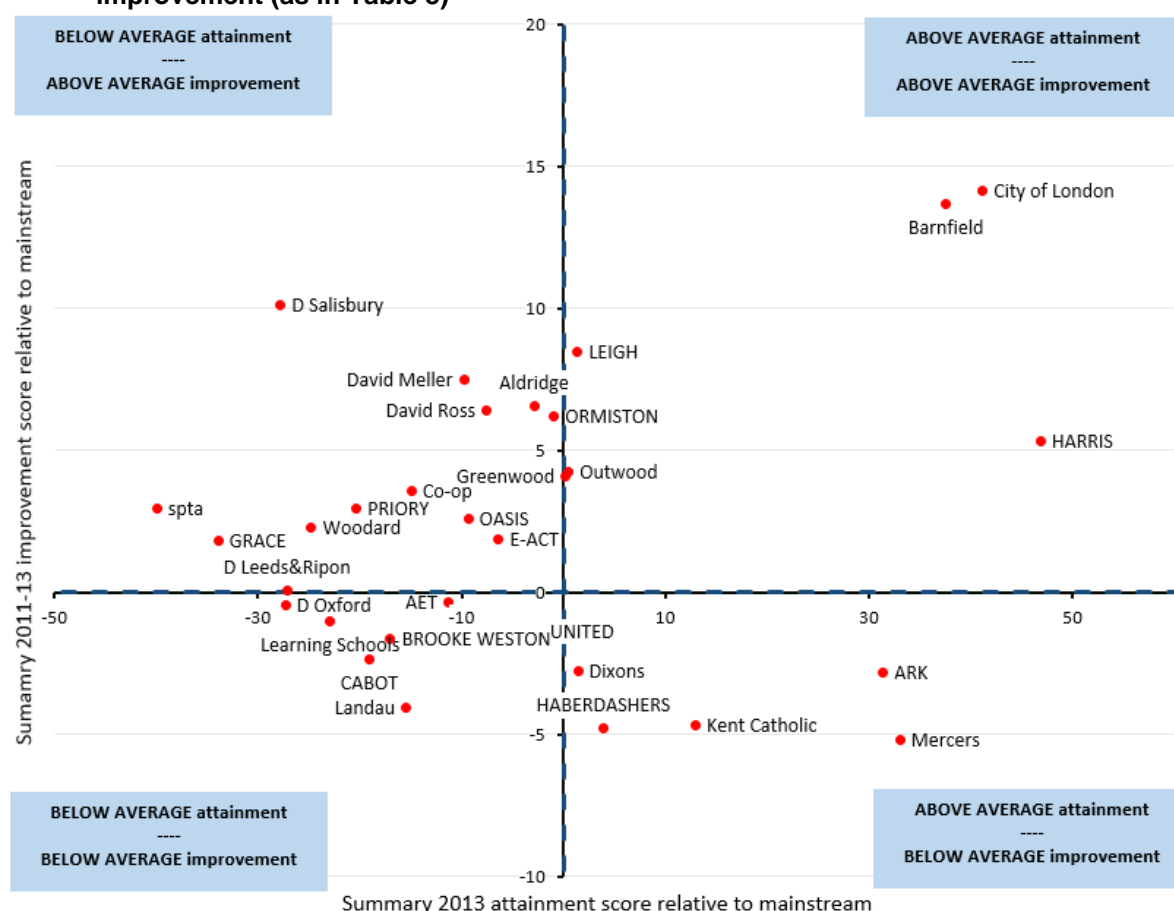
Top tier: Significantly above average (>1.0 Standard Deviation better improvement than mean for all mainstream schools), second tier: above average (>0.10 & <1.0 SDs better); third tier: average (within 0.10 SDs of mainstream); fourth tier: below average (>0.10 & <1.0 SDs worse); No chains were significantly below average (>1SD worse than mainstream). Within categories, chains are in alphabetical order.

Average improvement for disadvantaged students in mainstream schools: 5A*CEM= +4.2pp, Expected progress in English=-0.2pp, Expected progress in maths=+7.7pp, GCSE capped point score=+5.3pt, EBacc=+5.1pp

Comparing Tables 7 and 8 shows that the only nine of the 31 chains are performing better than all mainstream schools 2013 (with five in particular, Harris, *City of London*, *Barnfield*, *Mercers*, and ARK, performing particularly well) in terms of attainment for disadvantaged pupils, whereas the majority (18 chains) showed more improvement than mainstream schools over the 2011-13 period. This is exactly what one might expect of academies – low attainment in the first instance at least, but rapid improvement.

It is sometimes argued that because the majority of sponsored academies were ‘failing’ schools, it requires time to bring about improvement. All the academies in our analysis group had been sponsored academies under the same sponsor since September 2010 or earlier, so it seems reasonable to expect that some improvement would have taken place. We showed in Section 5.1.1 that, on average, attainment in low attaining schools improves by more percentage points than attainment in high attaining schools, so again this would suggest that the lowest attaining chains should have shown some improvement. Figure 30 compares the overall score for the combined measures of attainment with that for improvement.

Figure 30: Overall rank for attainment for disadvantaged pupils (as in Table 7) compared with improvement (as in Table 8)



Note: the broken lines show mean performance for all mainstream schools' on each measure

Some chains have below average attainment and above average improvement which is what one might expect, whereas others show improvement despite starting from a high base (*City of London*, *Barnfield*, and Harris).

Others have high attainment but have declined rather than continued to improve. This follows the pattern by which high attaining schools generally improve less than low-attaining schools, or even

drop back. This is a concern, but it has to be recognised that their attainment (particularly ARK and Mercers) is well above the mainstream average and this is improving the prospects of many disadvantaged pupils. Unfortunately some chains have both low attainment and low improvement.

We are acutely aware that each chain is dealing with different issues and that strategies may vary. This analysis should therefore in no way be considered the final word on the effectiveness of any given academy chain, but as a basis for future discussion on how academies chains can best help to improve the prospects of their disadvantaged students.

5.8 Characteristics of chains that are effective for disadvantaged pupils

Finally, we consider whether there are any common characteristics across chains that are more successful with disadvantaged pupils, or those that are less so, drawing together the data presented in Sections 4 and 5.

5.8.1 Characteristics of effective chains

First, we consider the five chains that have the best outcomes for disadvantaged pupils: Harris, *City of London*, *Barnfield*, *Mercers* and ARK. The five chains exhibit notable differences. The most notable similarity is their experience of running academies. Harris, *Mercers* and *City of London* each took on their first academies in 2003 and ARK and *Barnfield* in 2006 and 2007 respectively. Obviously longevity is not an automatic recipe for success, but a second advantage shared by each of these chains is that they have expanded slowly – in some cases very slowly. The larger chains, ARK and Harris, added only three or four schools each year until 2012 and 2013, when Harris added 11 sponsored academies and one converter academy over two years, and ARK added 11 sponsored academies and three converters. (This raises the question of whether there is potentially any link between this period of ARK's more rapid expansion and the slight decline in attainment for disadvantaged pupils that we have noted.) But this expansion is very modest indeed when compared with one chain which took on 18 sponsored academies and 11 converters in the same period, or another which expanded by 35 sponsored academies and a further nine converters during 2012 alone.

Another common factor is that three of these chains (ARK, Harris, and *City of London*) have a strong London base, or are entirely in London. We have noted that London schools on average have higher attainment than those in any other region, and while there is debate about the key factors responsible, with the London Challenge (2003-11) agreed to be the main factor, some analyses have suggested that the ethnicity of the pupils and the booming economy may also have contributed to this. Certainly it may be easier to motivate pupils in an area where there are jobs than in one where long-term unemployment is endemic.

In other respects, however, there are considerable differences between the chains. Some are secondary only or only have sponsored academies, others are more mixed. Harris and ARK both have strong management and clear policies. Harris, for example, stated on our survey:

We have an expectation that results ... will rise significantly at the end of the first year after conversion. This is supported by a set of Harris Policies for monitoring and evaluation, data and tracking, HR, performance management etc. Policies other than HR can be amended by successful Principals – but not by less experienced Principals until they have earned the right, through demonstrable success, to do so.

ARK similarly state that they have chain policies:

ARK introduces standardised systems for reporting to the centre, monitoring performance and finances. They set clear divisions of responsibilities with the governing body. ...More widely school improvement is driven by 'ARKepedia', a set resource for all ARK senior school

leaders. 'ARKeopedia' explains the chain's vision and principles, sets out what it means to be an ARK school in practice, clarifies the central services offered and any related charges. It also sets out a full range of ARK policies, including those '*which are mandatory and which are customisable*'.⁷¹

These descriptions fit with the DfE⁷² conclusions about the range of working practices linked to high performance. However, while *City of London* and *Mercers* also have a long experience of running sponsored academies, they are much smaller, and have only sponsored secondary academies. It is unclear to what extent either of these groups functions as a chain. Each of these sponsors also has independent schools, but we do not know whether there are any links between the academies and the independent schools. *Mercers* has told us that it is not a chain, but at least two of its academies are working with Thomas Telford School, and this is likely to be a source of strong guidance and support.

Three of these chains (Harris, ARK and *City of London*) have very high proportions of disadvantaged pupils; arguably this might lead to a greater focus on their needs. But *Mercers* has fewer disadvantaged pupils than the national figure. Similarly, there is considerable variation in the percentage of low-attaining pupils, ranging from *Mercers*, which has the second lowest proportion of any of the chains, to ARK and *City of London* which have the highest proportions.

In contrast with the DfE findings⁷³ about the characteristics of high attaining chains, there is very little in common between those that stand out in our analysis. What probably matters most is the quality of the staff (at chain and particularly school level), the quality of teaching and learning, and the strategies used to improve this (whether across a chain or within a school).

5.8.2 Characteristics of ineffective chains

We turn now to those chains that had lower than average outcomes for disadvantaged pupils and were not improving.

Like the successful chains, these vary in size, and range from one national chain to some focused in very small areas. They also include chains with very high proportions of disadvantaged pupils and much lower proportions, and there is also considerable variation in the proportions of low attainers.

As with the effective chains, they include chains with strong central management directed at school improvement, and those with looser arrangements.

On average, these sponsors have fewer years of experience of running sponsored academies than those in the more successful chains – which perhaps suggests some hope for future improvement.

⁷¹ DfE/ARK, *ARK schools sponsor profile* April 2014

⁷² DfE (2014e)

⁷³ *Ibid*

This analysis has illustrated the complexities that any rigorous analysis of the impact of academy chains on pupil outcomes must take into account, and the consequent challenge to effectively and meaningfully monitor developments. It has demonstrated the ways in which chain performance can differ dramatically against different indicators. Nevertheless, given the scale of activity, the impact of schooling on young peoples' lives and outcomes, and the financial and strategic policy investment in sponsors and chains for educational improvement, it is imperative that such analysis is conducted and built upon.

This research has confirmed the findings of some previous research; it has shown that sponsored academies in chains on average outperform solo sponsored academies; that while sponsored academies in chains achieve higher results than all mainstream schools on some measures, this has reflected a very much higher use of equivalent qualifications which it is generally agreed are not in fact equivalent to GCSEs. We also compared sponsored academies with the very first converter academies. These were all outstanding schools, so unsurprisingly their attainment was higher than that of the sponsored academies, but this analysis showed that they improved very little between 2011 and 2013 (indeed on 5A*CEM, their performance dipped in 2012 – although this was the year in which there were widespread concerns about the marking of the English exams).

Our analysis shows that there is enormous variation between chains in pupil outcomes for disadvantaged pupils, and the extent to which these have improved in the period 2011-13. For the current key indicator of 5 A*CEM, based on the result of academies in chains for at least three years just over half of the chains in our sample are shown to be improving the results of disadvantaged young people beyond the average, narrowing gaps with their more advantaged peers; and some are significantly raising the achievement of our lowest-achieving pupils. The scale of this challenge, and the scale of improvement for these pupil groups across many chains (and the transformational success of some individual chains in this regard), deserves to be acknowledged.

However, the complexity involved in measuring and comparing attainment is illustrated by Tables 6 and 7, which show a range of ways of ranking the various chains, and where we have looked at rankings for attainment and improvement. When modelling against our identified measures (see Section 5.7) which are in line with the Government's social mobility policies and future direction, a rather different picture emerges, with a majority of chains remaining below the average for all maintained schools in relation to the outcomes of their disadvantaged pupils. This relates to the demonstrated trend for sponsored academies and chains to make greater use of equivalences, and lesser compliance/success with the EBacc measure. These tendencies have implications for social mobility and social justice agendas. The prevalence in the use of equivalences, and related underperformance on EBacc, may reflect a perceived need to engage and accredit the (disproportionate numbers of) disadvantaged pupils in sponsored academies via use of vocational qualifications. However, it is of concern that as such, these disadvantaged pupils may be missing opportunities to pursue those subjects most likely to facilitate access to prestigious post-16 education routes and careers. Moreover, while it is important to celebrate the success of our sample chains in promoting the achievement of disadvantaged pupils against the 5 A*-C measure, it is important that they are able to serve *all* their pupils, in order to ensure that sponsor chains do not become ghettos for more disadvantaged pupils, reducing the benefits of social mixing and potentially storing up further problems for sponsor/school capacity.

The striking success of a handful of academy chains across a whole range of measures needs to be acknowledged and celebrated. Their success against a variety of different indicators (and - often – their lesser tendency to make use of equivalences) demonstrates the holistic quality of their provision, suggesting depth and strength of the structures and teaching and learning underpinning it.

The key factors which we have identified in the more successful chains are a measured approach to expansion, and the importance of building up experience of strategies for improving schools. It may be possible for newer chains to take some shortcuts if the experience of the successful chains is shared. It would seem important that academy chains should emulate current models of school improvement in which schools learn from each other; chains need to do the same. It may be incorrect to suggest that what works in these chains will necessarily work in others, and indeed it may be too early for these chains to be able to identify such factors themselves. However, it seems important to explore, identify and share the various structural and qualitative elements that are supporting their success. Proper research is urgently needed to facilitate this.

Even for these very successful chains, the level of challenge in sustaining improvement for disadvantaged pupils should not be underestimated. A few of the 'outlier' chains that have achieved exceptionally strong results for their disadvantaged pupils have not been able to sustain prior results in 2013, albeit still performing significantly above the national average. But there is greater concern about the larger group which were coming from a lower base in 2010 (see Figure 8). While many of these are rapidly improving to catch or exceed the mainstream average in attainment for disadvantaged pupils, a couple have stalled – and the picture is worse in the case of non-disadvantaged pupils, with five chains stalling or even slipping back in terms of (already below average) attainment.

The very poor results of some chains – both for pupils generally and for the disadvantaged pupils they were particularly envisaged to support – comprises a clear and urgent problem. The extent of underperformance of some chains across diverse measures begs the question of how this has been allowed to happen. Clearly some of these chains continue to improve, and in some cases the prior low base was such that even following improvement between 2011 and 2013 they still have not met the national average. However, others are not improving. Far from providing a solution to disadvantage, a few chains may be exacerbating it. Our analysis highlights the pressing need for further monitoring and transparent provision of publicly available data in order to ensure accountability.

To this end, we hope that the information in this report makes a contribution in its publication and analysis of data on longer-established academy chains. In particular, they offer a benchmark which could be updated annually (though doing so will require continuity in data availability from the DfE when new performance measures are introduced). In future years, the number of schools in each chain that meet the criteria for this analysis will inevitably increase, and so the analysis will become more robust.

But also, it is imperative that appropriate (transparent) mechanisms are in place for removal of schools from sponsors. It is important that the same rigorous standards are applied to sponsor chains as to maintained schools and local authorities. Given the present length of academy funding agreements, the lack of direct inspection of chains, and the lack of data in the public domain, it appears unlikely that Regional School Commissioners will have the capacity to do this effectively. Our findings provide evidence to support the call for Ofsted to be given a remit for inspection of sponsor chains: such a move would be reassuring to parents, and ensure independent scrutiny. We also share the Academies Commission's⁷⁴ concern that seven years is too long for unsuccessful sponsors to be left with a school if improvement cannot be demonstrated. The Academies Commission observes that US charters are between 3-5 years, with charters removed if contractual commitments have not been achieved; a far more rigorous approach to accountability. It may be also that more can be done to support struggling chains: the DfE's Sponsor Forum and expert service for novice sponsors⁷⁵ represent positive steps here, but evidently a more targeted and substantive approach will be required to provide adequate support in such cases.

⁷⁴ Academies Commission (2013)

⁷⁵ DfE (2014c)

Our findings also suggest there needs to be further clarification of sponsor responsibility. For some of the chains in our sample, it was not clear from school websites who the sponsor is, and sometimes multiple organisations are listed. This goes some way to explaining the difficulty we have had in certain cases in being able to contact sponsors, or to find organisations/individuals who take responsibility for school performance within a chain. Accountability through Ofsted would help here. But there is also an onus on the DfE to ensure clarity of criteria and adequate vetting in sponsor approval.

Our recommendations are set out at the beginning of this report.

Finally, we would like to reiterate the frequently made point that schools cannot compensate for society, and that it is crucial that a range of measures are taken to tackle economic disparities and bring hope to disadvantaged communities.

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ARK Schools

ARK Schools is part of the international children's charity ARK, which runs a range of health, welfare and education projects. Its first academy opened in 2006, and it has expanded to 23 primary and secondary academies the vast majority sponsored, along with some free schools. In comparison with other large chains it has a higher proportion of newly opened academies (i.e. ones that were not previously 'failing' schools). Five ARK academies form part of this analysis. They have a very high percentage of disadvantaged pupils (almost 70%), and almost a third of pupils entered with attainment below Level 4 – a much higher percentage than the other high-attaining chains, and more than twice the national average.

ARK academies were in the top five chains on all measures of disadvantaged pupils' attainment in 2013, and were also above the national figure for pupils who were not disadvantaged. Use of equivalent qualifications was low. However, attainment for disadvantaged pupils in 2013, while still above average, was lower than in 2011. Only one of the five schools showed an improvement for these pupils over this period.

ARK stood out for the high proportion of pupils with low prior attainment who achieved 5A*CEM; this was higher than any other chain in both 2011 and 2013.

Barnfield Education Partnership Trust

Barnfield Education Partnership Trust originated from a further education college in Luton. The federation includes a converter primary school as well as two sponsored secondaries, a studio school, a free school and provision for early years. This analysis focuses on the sponsored secondary schools. The percentage of disadvantaged pupils is high (45%).

Barnfield was well above average on all measures of attainment and progress for disadvantaged pupils in 2013. Attainment was also above average for pupils who were not disadvantaged. It was particularly successful with pupils with low prior attainment, achieving far better than the national average.

In February *Barnfield* was on the list of capped chains which cannot expand further, but this was because of financial concerns rather than concerns about educational impact.

City of London Corporation

City of London Corporation has three sponsored academies in London. Only one of these was formerly a 'failing' school; the others were new schools, the first of these opening in 2003. Two are included in this analysis. At 70%, the proportion of disadvantaged pupils (2013) was higher than in any other chain.

While previous results were low, both academies have improved dramatically since 2011. They are one of the top chains on all measures of disadvantaged pupils' attainment and progress. Use of equivalent qualifications is low, and *City of London* academies are in the top two for GCSE capped point score and EBacc. Attainment of pupils who are not disadvantaged has also improved, but using 5A*CEM, is still slightly below the national figure. The attainment gap using this measure is therefore very small (less than three percentage points). However, the percentage of those with low prior attainment achieving 5A*CEM was only just above average.

Harris Federation

Harris Federation is a chain with 25 primary and secondary academies, as well as some free schools, strongly clustered in and around South London. The vast majority are sponsored. The federation was founded by Lord Harris, a philanthropist, in 1990, and was originally based around one city technology college. It opened its first academy in 2003.

The chain continues to expand through further sponsored academies and some free schools. Eight schools were included in our analysis; these averaged over 50% disadvantaged pupils. However, the percentage with low primary school attainment was only just above the national figure.

Harris was top ranked for 5A*CEM and for GCSE capped point score (thus use of equivalent qualifications is low). The improvement between 2011 and 2013 was above average for schools with such the high level of initial attainment. Harris also achieved a high ranking on all other measures: attainment of non-disadvantaged pupils, pupil progress, and attainment of pupils who were below Level 4 at the KS2, where it far exceeded the national average.

The Mercers' Company

The *Mercers' Company*, a City of London Livery company, has a long history of involvement in education. It sponsors, with other organisations, three secondary academies; two are in the West Midlands and the most recent one in London. Only one of these was formerly a 'failing' school. The *Mercers' Company* do not consider themselves to be a chain, and multiple sponsors are involved. It would appear that for the two academies included in this analysis, Thomas Telford School, a successful CTC that is often reported as the 'top comprehensive in the country', is a key source of school improvement support. In these two academies, the percentage of disadvantaged pupils is below the national figure, and the attainment of pupils on entry was above the national average; almost 40% had achieved Level 5 (a higher proportion than in any other chain).

In 2013, the attainment of disadvantaged pupils was high on all measures, and both disadvantaged and other pupils' attainment was above average; the attainment gap was small. Pupil progress was also above average. However, a smaller than average percentage of those with low prior attainment achieved 5A*CEM.