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Social mobility or social reproduction? A case study of the attainment patterns of students according to their social background and ethnicity.

Matthew Collins¹, Gemma Collins² and Graham Butt³

Abstract

This paper explores levels of achievement amongst boys who attended a selective school in Birmingham, UK through consideration of their social background and ethnicity. It seeks to answer three main questions. Firstly, to what extent does academic attainment vary between students from different socio-economic groups and ethnic backgrounds? Secondly, what are the possible reasons for these variations? Thirdly, what can selective schools do to close the gaps in attainment between these groups?

The study explores quantitative data of student attainment (n=625) to map areas of comparatively low achievement across the city of Birmingham. This map identifies areas of high vulnerability (HV) to poor performance, specifically by identifying the postcodes of neighbourhoods containing students who are most likely to underachieve. Qualitative data was also gathered amongst students (n=121) who were embarking on their General Certificate of Secondary Education (GCSE) studies. All were asked to single out factors that might affect their academic performance. These findings were then cross-referenced with the postcode study to help analyse possible reasons for under performance.

The main finding of this research was that the study school experiences a distance-decay effect in relation to examination success. Boys from Black and Minority Ethnic (BME) groups generally performed worse than White British (WB) boys, while students from deprived areas of the city were also less likely to succeed. Students from poorer communities tend to live in environments of relatively low aspiration, although one inner city area was identified as anomalous with regard to the achievements of its students. We conclude that social reproduction, rather than social mobility, is occurring within the case study school and suggest a range of

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initiatives to raise the levels of achievement of those who are most socially disadvantaged.

Introduction

Students who attend schools in the UK appear to be lagging behind those of other economically developed countries in terms of their social mobility. As Coughlan (2011) observes, commenting on a report from the Organisation for Economic Co-operation and Development (OECD 2010) which identified how well students from poor backgrounds achieved academically,

‘The UK performs poorly in an international league table showing how many disadvantaged students succeed "against the odds" at school Among leading economies, the UK is in 28th place out of 35. The study comes amid concerns in the UK about a lack of social mobility - with concerns that there remains too strong a link between social background and educational achievement.’

In part, such findings have prompted the UK's Coalition government to comment, not least through publications such as *‘Opening Doors, Breaking Barriers: A Strategy for Social Mobility’* (HMG 2011). In the foreword, Deputy Prime Minister Nick Clegg states,

‘In Britain today, life chances are narrowed for too many by the circumstances of their birth: the home they’re born into, the neighbourhood they grow up in or the jobs their parents do. Patterns of inequality are imprinted from one generation to the next.’

Although making no explicit statement about the effects of schooling on social mobility, this statement highlights how the negative effects of the British class system, and its geographical expression with respect to areas of deprivation, appear to endure. Clegg’s use of the phrase ‘life chances’ may suggest new directions for how we choose to classify disadvantaged members of society, focussing on aspects of their social geography as well as their heritage. A child’s postcode may largely determine their access to quality schooling, but it may also serve as a crude signifier of the aspirations and achievements of the wider community. Such communities either thrive or decline, both economically and socially, as a result of the life chances offered to their residents.

The aim of this study was to examine whether students attending a single sex, selective school from poorer areas of Birmingham displayed higher rates of underachievement when compared with their more affluent peers. This case study was designed to determine the extent to which academic

attainment varies between students from different socio-economic groups and ethnic identities. By examining the possible reasons for these variations issues of social mobility, or social reproduction, could be explored - leading to a series of recommendations for action. At the time of data collection (Summer 2011) these issues were especially pertinent, as a wave of riots was spreading across the UK's major cities. As Prime Minister David Cameron stated at the time, to a hastily reconvened parliament,

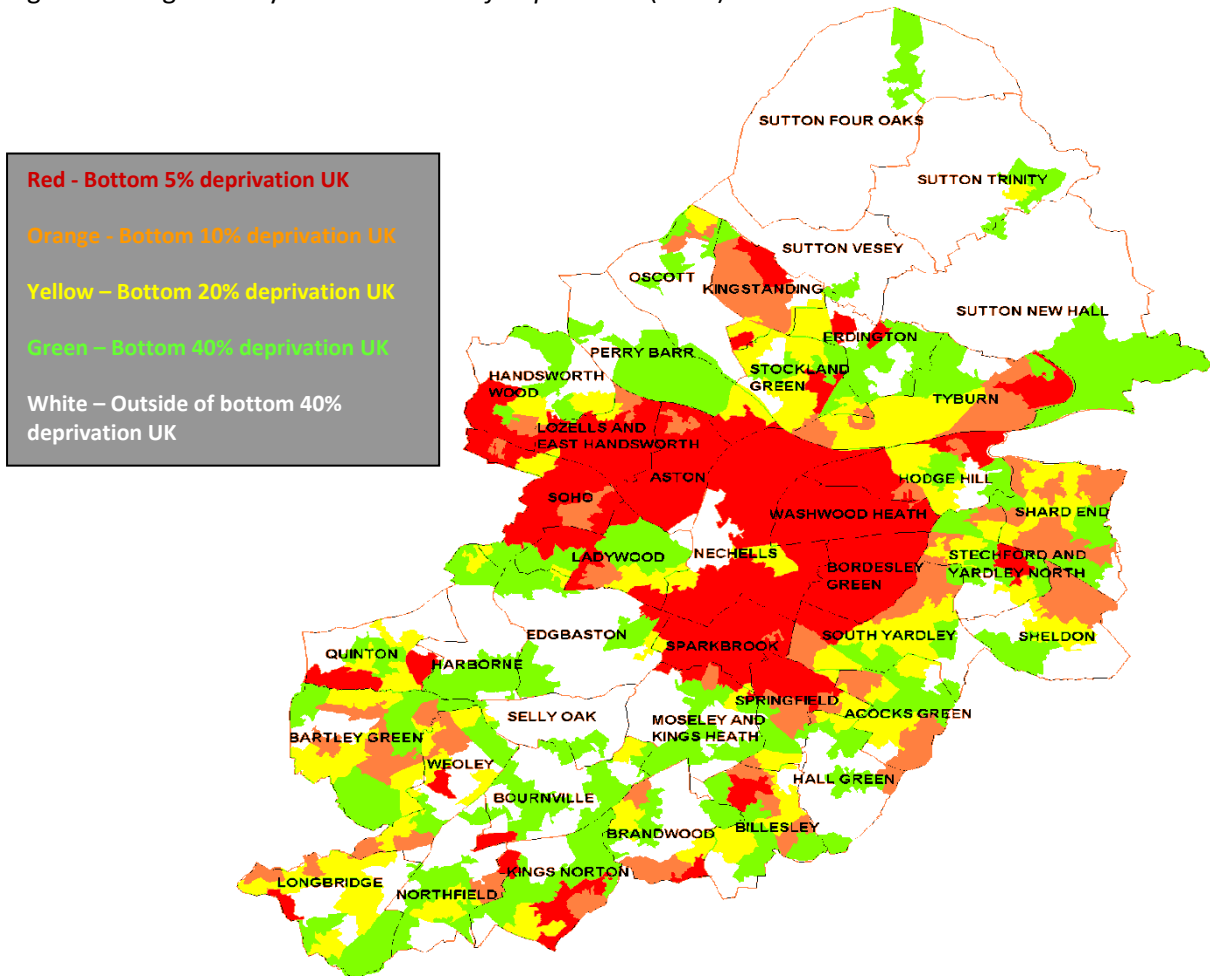
'we need to live in a society where our schools are engines of social mobility' (Prime Minister's Questions, August 11th 2011).

These concerns have not gone away. The UK government's interest in the connection between education and social mobility was again highlighted in Nick Clegg's speech to a conference organised by the Sutton Trust in May 2012. Here he identified that 'one in five pupils were on free school meals but only one in 100 Oxbridge entrants were, and 7% of children attend independent schools but public schools provide more than half the chief executives of Britain's top companies and 70% of high court judges' (cited by Jowit 2012).

The case of Birmingham

Birmingham, like many major settlements in the UK, provides an illustrative case study of how life chances are reflected within a city's social and economic geography. Distribution patterns of deprivation are readily apparent in Birmingham City Council's *Index of Deprivation* (2010) map (fig. 1), where percentage scores indicate levels of deprivation against normalised UK data.






Fig 1: Birmingham City Council's *Index of Deprivation* (2010)

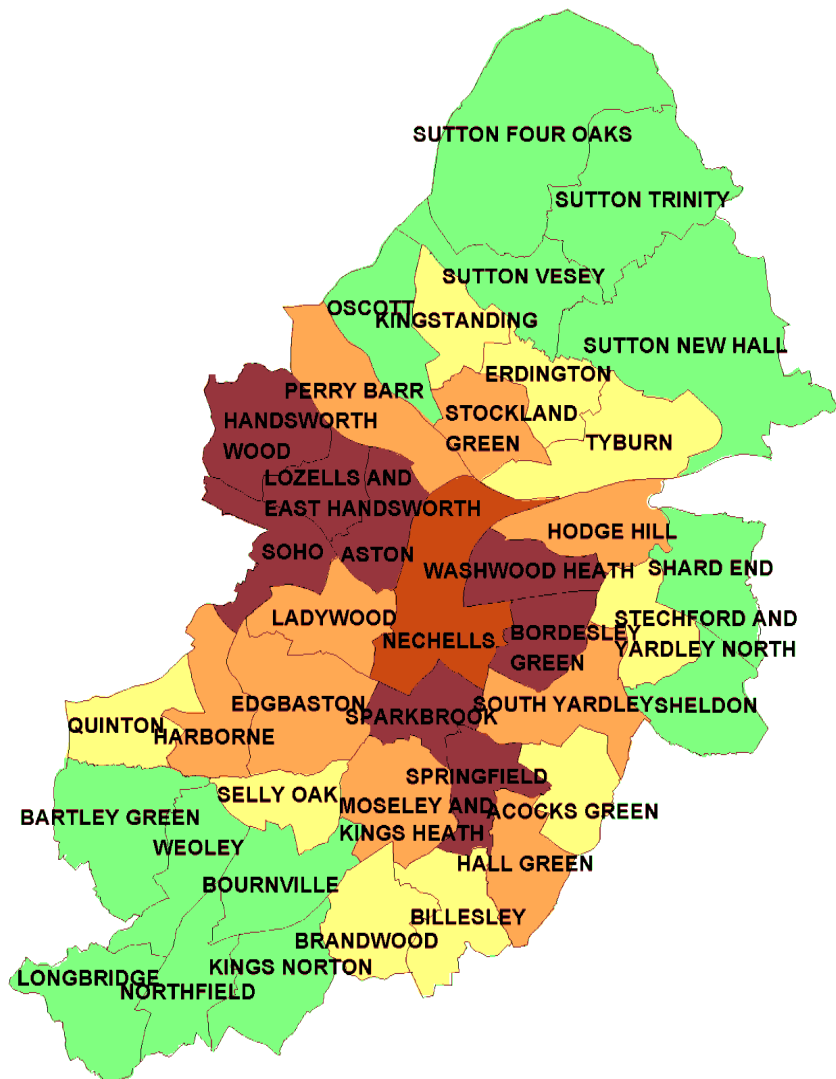


This map, based on average earnings, indicates the core-periphery nature of the city's distribution of deprivation - inner-city areas are characterised by deprivation, whereas suburban areas are more affluent. The reasons for these divisions are myriad, historical and not for debate in this work - however, we note that the disparities are stark and that the patterns displayed are largely mirrored when mapping levels of attainment in the city's schools (ref?).

The geographical distribution of deprivation is closely paralleled by the distribution of Black and Minority Ethnic (BME) groups across the city. This is demonstrated by Birmingham City Council's Map of *Ethnic Origin by Ward* (2001) (Fig. 2)

Fig 2. Birmingham City Council's Map of *Ethnic Origin by Ward* (2001)

Key	% from BME Group
	Below 10.0%
	10.1% to 20.0%
	20.1% to 40.0%
	40.1% to 60.0%
	60.1% and above



Just as the deprivation map shows a definite core-periphery relationship so does the spatial distribution of the BME population, many of whom live in the poorest areas of the city.

The case study is of a selective state school ('grammar school'), which accepts boys of high academic ability following an entrance test at the age of ten (girls are admitted at sixth form level - age 16-19). Here the school is anonymised as 'Metropolitan Beacon School'. Like other UK grammar schools it has no specified catchment area, but draws students from Birmingham and its surrounding locale - especially Sutton Coldfield, in north Birmingham, where the school is located. Some 45% of the school's student population come from a BME background, many living in the inner city. The ethnic composition of the school's student population has increased rapidly, from around 30% just five years ago.

Grammar schools, following the commencement of the tripartite school system in the mid-1940s, have often been regarded as institutions which have traditionally offered educational opportunities for academically gifted, working class children. This, the supporters of grammar schools would argue, has led to increased social mobility as poorer children are lifted from their disadvantaged backgrounds. As recently as 2009 Sean Fenton, Chairman of the National Grammar School Heads' Association, stated that 'Grammar schools exist to serve social mobility'. Opponents of such schools (many of whom would also challenge the recent growth of Free Schools and Academies) argue that there is little tangible evidence that grammar schools either raise educational standards, or increase social mobility (Elliott 2009). Whilst acknowledging the existence of 'outstanding selective schools and poor comprehensives', Elliott (2009) highlights the impact of grammars in skewing the intake of neighbouring comprehensive schools thereby affecting their performance levels. He also notes that 'countries said to have the greatest social mobility, the Scandinavian nations and Canada, are all fully comprehensive'. Hutton (2012) concurs, underlining that countries where private and selective education are more prominent (such as the UK and US) have lower levels of social mobility, despite their higher spending on education (see also Blanden et al 2005a). Indeed, Hutton (2012) asserts that,

'Private schools play a pivotal role in suppressing mobility; however good state schools become, private schools' well-understood job is to stay a step ahead and deliver economic and social advantage'

In Birmingham, with its polarised socio-economic demographics, institutions that can increase social mobility are crucial in helping to develop less divisive, more cohesive communities. However, the

scale of social mobility in the city is arguably modest. In the case of Metropolitan Beacon School local students from more wealthy, middle class backgrounds tend to attain better examination results compared with boys from areas with higher rates of deprivation and greater proportions of BME residents. In theory, grammar schools exist as meritocratic institutions where hard work and innate academic ability results in high levels of achievement - whatever the background of the student. But it is possible that such schools are actually functioning as instruments of social reproduction, rather than social mobility.

Education and Social Mobility

Social mobility describes the movement of people's social status or position over time, often serving as a measure of equality of life opportunities (Blanden et al 2005b). Although more commonly referring to changes in income levels between generations - as a result of shifts in occupational status - social mobility can also describe movements in both health and/or educational status.

In the UK social mobility appears to be significantly lower than in many other economically developed countries, and declining (Blanden et al 2005a). Mobility levels are below those in Canada, Germany and the Scandinavian countries, but of broadly similar magnitude to those in the US. Countries with higher income inequality tend to have lower social mobility (Wilkinson and Pickett 2009, OECD 2010, Crawford et al 2011). It may also be possible that policies designed to compress wage distribution, decrease inequalities and improve social mobility have the effect of *reducing* economic growth. Although somewhat counter intuitive, this phenomenon is partly explained by the fact that policies aimed at improving the lot of the most disadvantaged in society appear to be more costly, and less effective, than those targeted at helping those who are already slightly *above* the bottom rung of society (Crawford et al 2011).

It is apparent that the rapidly increasing inequality in incomes experienced in the UK since the late 1970s is currently reflected in a *decrease* in social mobility, such that:

'Children born to poor families are now less likely to break free of their background and fulfil their potential than they were in the past' (Blanden et al 2005b, p.18).

With its stated desire of achieving national economic success through enhancing social mobility, the British government has begun to focus attention on the drivers of mobility (see Crawford et al 2011) - not least, the impacts of education on intergenerational movement. It is important to consider all aspects of educational provision with respect to social mobility: from primary and secondary schooling, to further education, vocational education and apprenticeships, to training, lifelong

learning, widening participation and higher education. Over the last decade the expansion in numbers 'staying on' in schools at 16, and those attending universities, appears to have benefited children from affluent families more than those from poorer backgrounds⁴ - a further signifier of declining social mobility in the UK compared to other developed countries (OECD 2010, Hutton 2012).

The connection between social mobility and education is not a simple one. It appears that children from affluent families succeed in achieving their educational goals not simply because their parents have a higher income, but also because of a range of social and cultural factors that support their progress (including, for example, levels of parental expectations for their children). Hutton (2012) reminds us that it is not simply a lack of money that undermines poorer parents' capacity to engage with enrichment activities for their children - it is the irregular and anti-social hours which they are often forced to work. The educational background of parents, and their income levels, are clearly influential in helping to shape children's academic attainment - but they are not the only factors in determining social mobility (Blanden and Gregg 2004). Students' decision making about their educational pathways is also important. Teachers' interventions, which help to shape students' decisions at key points in their school careers (particularly at age 14, 16, and 18), appear more significant in impacting educational outcomes and social mobility than those which simply aim to improve learners' skill levels (Crawford et al 2011).

Consideration of the connections between community, culture, poverty, ethnicity, gender, and educational achievement are all pertinent to any case study of young peoples' social mobility. In *Learning to Fail* Fran Abrams (2010) reports on the aspirations, work chances and educational experiences of young people in poor communities around the UK. As a city where wards which exhibit extremes of either poverty or affluence may be located side by side, Birmingham offers exciting opportunities for researching how and why attainment levels are distributed geographically.

⁴ Blanden et al (2005a) illustrate this as follows: 'Young people from the poorest income groups have increased their graduation rate by just 3 percentage points between 1981 and the late 1990s, compared with a rise in graduation rates of 26 percentage points for those with the richest 20% of parents' (p.20). Interestingly, Danny Dorling (2012) notes that New Labour's final period in office corresponded with the number of working class students attending university increasing at a rate higher than those of *middle* class students, proof (according to Hanley 2011) that 'investment in people works' and that policies such as the Education Maintenance Allowance (EMA), Sure Start and Excellence in Cities were a success. Nonetheless Crawford et al (2011) caution that the effectiveness of such policies still need to be assessed through 'solid evaluation strategies'.

In her study, Abrams (2010) confirms previous findings that 'people in poorer areas are less geographically mobile than others' (2010, p11), therefore spatial patterns of urban deprivation and low educational attainment often display considerable inertia. Young people's search for work is frequently restricted to their local area, resulting in the perpetuation of limited aspirations and educational stagnation. In this way,

'attitudes and beliefs within networks (did) tend to keep families together and strengthen social networks. However, those networks reinforced people's sense of economic alienation' (Abrams 2010 p19).

By the late 1990s the traditional manufacturing and assembly industries of Birmingham, as well as their supply companies, had all but disappeared. This left large areas of economic and social stagnation in central and south Birmingham which, during the recent recession, have yet to show signs of recovery. Poverty in the UK is largely relative - most families can afford, or have provision for, basic food and shelter - however, the consumerist nature of UK society stimulates particular economic demands amongst its young people. Many 16 year olds, perhaps driven by a desire to lead more materialistic lifestyles, leave school before the age of 18 hoping to earn money. The geographic closeness of 'haves' and 'have-nots' in Birmingham, and many other large UK cities, arguably fuels this phenomenon. It can be hypothesised that students fail partly because of the influences of the communities that surround them, because of cultural differences, and because their outlook and philosophy may run counter to that of their school environment.

Issues of ethnicity are pertinent, given that the majority of 'low achievers' at Metropolitan Beacon School are from BME backgrounds. Because of the ethnic diversity of the study school, and our pursuit of the links between diversity and levels of academic attainment, conceptions of 'race' and ethnicity are central to this research. Troyna's (1987) historic collection of studies, in *Racial Inequality in Education*, argue that the education system in the UK has traditionally sustained and even extended gaps between different ethnic groups with respect to their academic success and mobility. Moodley's (xxxx) work is particularly interesting, as she? questions how we define equality in education and the extent to which schools have delivered the prospects of social mobility:

'The liberal promise of equality of opportunities for minorities has remained unfulfilled in multi-ethnic societies. Equality of outcome has therefore become the rallying cry for the disadvantaged'. (p155)

The research reported here adopts a 'geography in education' perspective (Weeden 2011, Bradford 1990, Taylor 2009). The significance of place, space and scale, particularly when considering geographical patterns of attainment, is high – but the use of a spatial analytical framework, as Weeden (2011) reminds us, is 'frequently omitted from the discussion of educational issues' (p.17). Taylor (2009) has helpfully modelled geographical approaches to educational research, but alerts us to,

'the differences between education researchers being fluent in the language of geography and education researchers having the tacit knowledge to practise and 'do' geography' (p.651)

Our increasing interest in research that interfaces both geography and education must move us beyond the mere use of spatial language, to the development of a deeper geographical understanding of processes. Taylor (2009) notes that few researchers currently investigate educational issues using spatial frames of reference - even those who have explored differentials in attainment - usually eschewing a geographical perspective (see Gorard 2009, Davies et al 2008). Bradford (1991) is unusual in considering the impacts of residential segregation on school's academic performance, pointing out the importance of disentangling the effects of social geography from the value added to students' attainment by the school.

Research Design and Methodology

Both quantitative and qualitative data was gathered during this research and, where appropriate, a mixed methods approach to data collection was adopted (Burke Johnson and Onwuegbuzie 2004, Leech and Onwuegbuzie 2009). Data was assembled in two phases. First, raw GCSE grade data for the previous 5 years' students was mapped against their residential postcodes. Analysis of the spatial distribution of attainment partly determined the line of enquiry pursued in the second phase of the research, where a questionnaire was employed.

For the quantitative research into the spatial distribution of levels of attainment, postcoded GCSE results from the last five Year 11 groups of students at Metropolitan Beacon School were analysed. All 625 students were ranked using their final GCSE grades. It was decided to rank students by the number of A grades, then number of B grades, etc. they achieved. Although not perfect - as a student who achieved A grades in 4 subjects, but 5 D grades, would finish above one of his peers who had achieved 3 As and 6 Bs - this method provides a workable approximation of overall levels of

attainment. Additional analysis of the data also indicated that the type of anomaly identified above was rare, and that the rankings produced were fair and justified.




The lowest achievers were classified as boys whose levels of attainment fell within the bottom 30% of the entire student population. These were students (n=186) who were certainly at risk of failing to gain entry into the school's sixth form at age 16. The 'cut off' percentage generated a sizeable, but also manageable, sample to study as part of the second phase of the research. Criticism of this sampling method might consider that by not engaging with the students' targets for attainment the research failed to take account of projected performance. Each year the Fischer Family Trust (FFT) generates targets for school students in England and Wales for every subject. These targets were based on Key Stage 2 and 3 data, but since the abolition of national Standard Assessment Tasks (SATs) at Key Stage 3 they are formulated using only primary school data. This core data can, in itself, be misleading - it employs only English, Maths and Science scores to determine targets in other subjects – but has the advantage to the user of being a simple statistical measure. Before this data reaches schools it becomes further manipulated into targets which take account of nine factors that could affect student performance. This CVA system considers factors of gender, age, special educational needs, ethnicity, deprivation (according to postcode) and first language. The most able boys who attend Metropolitan Beacon School from Sutton Coldfield are given targets of A and A* grades, whereas those from the more socially deprived areas of (say) Alum Rock or Aston are typically given targets of A, B and sometimes C grades because of their socio-economic and cultural backgrounds. It is expected that these targets are shared with the students.

There is an argument that academic achievement should not be assessed against raw attainment levels, but through attainment compared to previous CVA targets. This approach was rejected because although CVA is a useful measure of whether schools have 'added value' to the expected performance of their students, it is arguably of greater relevance to comprehensive than selective schools where the spectrum of attainment is usually much wider. At Metropolitan Beacon School boys enter with similar KS2 levels, the majority achieving level 5 in Maths, English and Science. The entrance examination is a further filter, which demonstrates that successful students are within the top 15% academically of all those that sit the test. Therefore, academic performance at GCSE should not vary greatly at Metropolitan Beacon School as the range of intellectual ability of its students is narrow. It is the possibility of *external* factors exerting influence on GCSE performance at the school, rather than innate ability, which this research focuses upon⁵. The CVA predictions set a level of

⁵ We do not discount the influence of internal factors on performance, such as whether students feel supported by their school community. However, this is not the prime focus of this research.

expectancy according to factors such as postcode and ethnicity, effectively making a prejudicial judgement about the attainment outcomes of individual students according to their background. This may have the distinct disadvantage of embedding social reproduction within the school. Students write their target grades on the front of their books and in their planners. They are included in reports which are sent home to parents. Particular students have asked why their target grades are so low - the answer, which is often avoided by teachers, is because of their heritage and/or the community in which they live. In a grammar school setting, CVA targets can therefore create or reinforce low expectations for BME students from poorer communities. By sharing the CVA targets with students it may suggest that the school expects less of them than their equally able, but more economically privileged, peers. Recording performance against CVA targets in this research would simply replicate an inherent bias, clouding the analysis of whether social mobility occurs.

Postcodes for students falling in the bottom 30% of achievement were obtained from school records. A simple tally chart was created to record the number of students who fell into this '30% threshold' against the area of Birmingham in which they lived. The distribution of lowest achieving students was then mapped. Interestingly, this revealed that a considerable number of the lowest achieving students were living in the Sutton Coldfield area - which was not traditionally considered to contain 'problem postcodes'. As over half of the school's students live in the Sutton Coldfield area this was skewing the data – we therefore considered the *proportion* of students from different postcodes who fell within the 'bottom 30%' signifier. Three colours were used to map this distribution, using the ranges 'fewer than 35%' (also described as 'Low Vulnerability'), 'between 36 and 49%' ('Medium Vulnerability'), and 'more than 50%' ('High Vulnerability'):

-  Fewer than 35% of students from this postcode finished in the bottom 30%
-  Between 36% and 49% of students from this postcode finished in the bottom 30%
-  More than 50% of students from this postcode finished in the bottom 30%

By creating three bandings the Birmingham postcodes which contained students with the highest rates of underachievement were clearly revealed. This size and number of bands was chosen because analysis of the data revealed that relatively few postcodes existed where percentage figures

were under 25, or over 75, arguably making the construction of additional bands unnecessary⁶. Too many bands would make the map difficult to decipher, with our chosen banding having the benefit of simplicity and clarity.

The intention was to illustrate the general patterns of distribution of low achieving students, with deeper analysis of the data to follow. The patterns of under achievement across Birmingham appear stark, particularly when performance within neighbouring postcodes is compared. The reasons for these disparate patterns of achievement clearly needed pursuing. A questionnaire was constructed consisting of eighteen questions focussed around six main themes (see Fig.3). Each theme contained a 'factual' question where, in most cases, students were given a list of possible answers to choose from. This was followed by at least one supplementary question, which sought their opinion. This took the form of picking the most suitable answer from a list, or using a writing frame to structure a response. Geography of education research has explored the significance of the relationship between school performance data and location, identifying community effects (pupil ability, family background) and school effects (teacher quality, school management) (Weeden 2011). Here the effect of the type of neighbourhood in which the student lived is seen as important (see Gibbons and Telhaj 2007, Webber and Butler 2007), whilst the ability of schools to select students and of parents to access preferred schools is also key (Gordon and Monastiriotis 2007).

The purpose of the questionnaire was to gain both qualitative and quantitative information regarding factors which the students thought might affect their performance at school. The first question in each topic was designed to obtain statistical evidence - such as estimating journey times to school, or recording the number of languages spoken at home.

⁶ A postcode marked 'red' (High Vulnerability) could have some 50% of its students in the bottom 30%, or up to 100% (which is actually the case in one postcode). It might therefore be argued that a means of distinguishing variation between these two extremes should be offered. However, the main purpose of the map was to show broad trends in geographic distribution. By including too much detail such a map would fail in its purpose of clearly demonstrating differences in attainment levels.

Fig. 3 - Summary of questionnaire




The second question was designed to obtain the students' opinions. Issues such as the impact of travel time to school, and the aspirations that exist in their home communities, were deemed important. The intention was to collate qualitative responses to the postcode map to gain a better understanding of the issues students faced.

Area of Research	Examination (fact-based) question	Supplementary (opinion-based question)
Journey time to school	How long does it take you to get to school? <i>tick box options given</i>	If your travel time was less than 15 minutes to what extent do you think your academic performance would change? <i>tick box options given</i>
Languages spoken at home	At home and amongst your family are any other languages spoken apart from English? <i>Yes/No</i>	To what extent does having another language spoken at home affect your understanding of school work and teacher instructions? <i>tick box options given</i>
Parental contact and support of the school	Have your parents missed one or more Parents Evenings since you joined the school? <i>Missed one or more/No</i>	For what reasons have your parents missed Parents Evening? <i>writing frame supplied</i>
Home resources	Do your parents help you with homework when you get stuck? <i>Yes/No/Sometimes</i>	If you answered no, please explain why. <i>writing frame supplied</i>
Home Community	To what extent do your friends outside of school value education? <i>Tick box options given</i>	What things do you do outside of school that cut down the amount of time you can spend on homework? <i>Writing frame supplied</i>
Personal feelings about school	To what extent do you enjoy school? <i>Tick box options given</i>	Why do you come to school? <i>Tick box options given</i>

The questionnaire concentrated on six main areas, but these may not reflect the main reasons for the observed geographical distribution of attainment. Questions (say) about whether students were from a single parent family, or about their parents' occupations, or their future plans after leaving school, were not directly pursued - although students were at liberty to raise these in their responses. There are, of course, potentially a myriad of factors which affect levels of academic success amongst students. Our findings are of direct relevance only in the context of the case study school; further extrapolation must be handled sensitively.

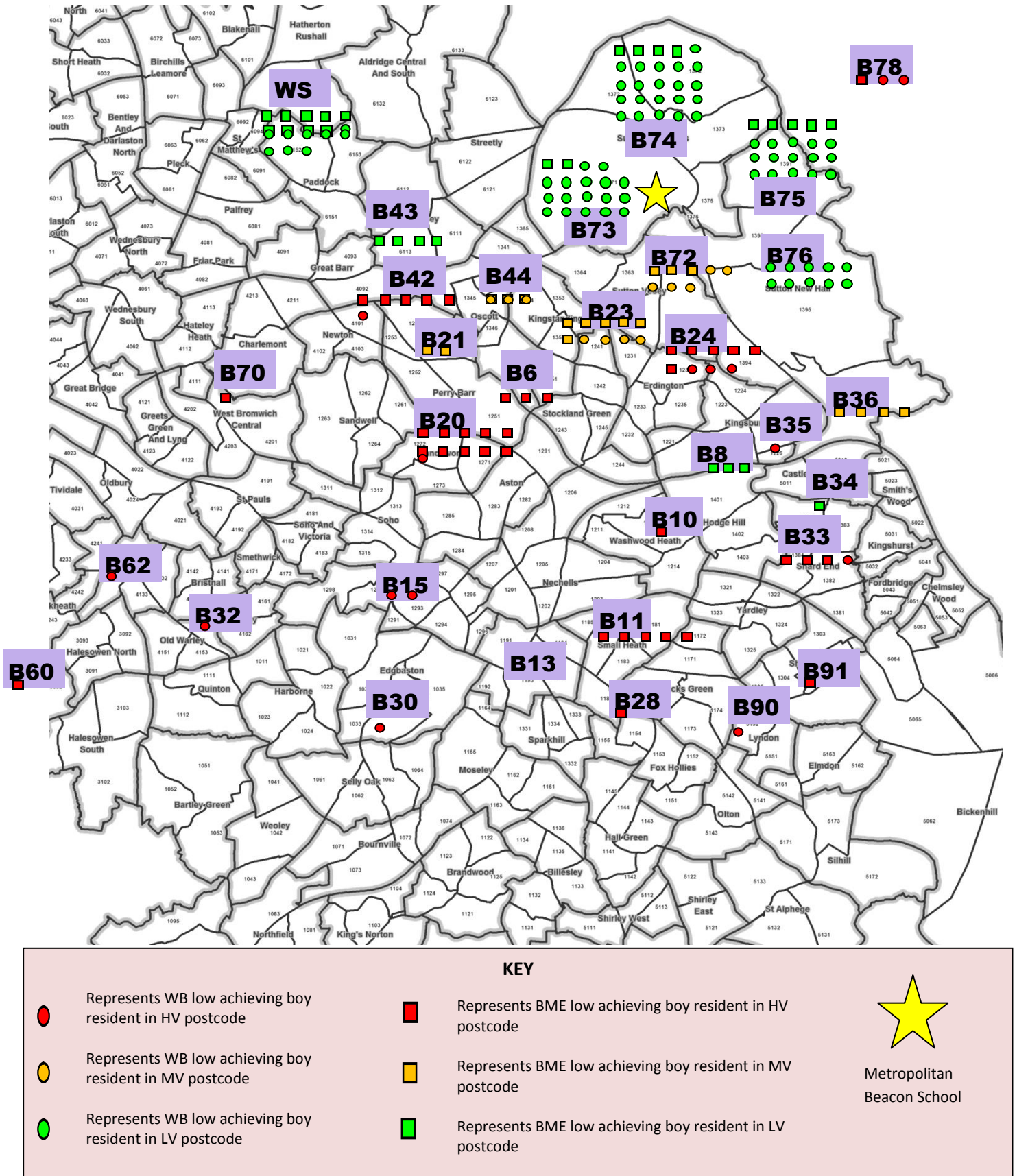
Presentation and analysis of data

Postcode	Area	No. (Raw)	% proportion	No. BME	% BME
B6	<i>Aston</i>	3	100	3	100
B8	<i>Washwood Heath/Ward End/Saltley</i>	3	30	3	100
B10	<i>Small Heath</i>	1	100	1	100
B11	<i>Sparkhill/Tyseley</i>	5	62.5	5	100
B13	<i>Moseley/Billesley</i>	3	42.8	3	100
B15	<i>Edgbaston/Lea Bank</i>	2	66.6	0	0
B20	<i>Birchfield/Handsworth Wood</i>	11	100	10	91
B21	<i>Handsworth</i>	2	40	2	2
B23	<i>Erdington/Short Heath</i>	10	47.6	6	60
B24	<i>Erdington/Tyburn</i>	9	69.2	6	55
B28	<i>Hall Green</i>	1	100	1	100
B30	<i>Bournville/Stirchley</i>	1	100	0	0
B32	<i>Bartley Green/Quinton</i>	1	100	0	0
B33	<i>Kitts Green/Steckford</i>	4	80	3	75
B34	<i>Shard End/Buckland End</i>	1	25	1	100
B35	<i>Castle Vale</i>	1	50	0	0
B36	<i>Castle Bromwich</i>	4	36.3	4	100
B42	<i>Perry Barr/Great Barr/Hamstead</i>	6	75	5	71
B43	<i>Great Barr/Hamstead</i>	4	33.3	4	100
B44	<i>Perry Barr/Kingstanding/Great Barr</i>	6	40	3	43
B60	<i>Bromsgrove</i>	1	100	1	100
B62	<i>Halesowen</i>	1	100	0	1
B70	<i>West Bromwich</i>	1	100	1	100
B72	<i>Sutton Coldfield (Centre/Maney)</i>	8	38	3	34
B73	<i>Sutton Coldfield (Boldmere/New Oscott)</i>	19	26.7	2	20
B74	<i>Sutton Coldfield (Four Oaks/Little Aston)</i>	25	26	4	15
B75	<i>Sutton Coldfield (Trinity/Falcon Lodge)</i>	20	30.7	5	23
B76	<i>Sutton Coldfield (Walmley)</i>	10	28.5	0	0

B78	<i>Tamworth</i>	3	100	1	33
B90	<i>Solihull/Shirley</i>	1	100	0	0
B91	<i>Solihull/Olton</i>	1	100	1	100
WS	<i>Walsall</i>	18	31	9	45
Key		Total		BME	% BME
	Postcode of High Vulnerability (HV)	Students		Students	of total
	Postcode of Medium Vulnerability (MV)	186		87	46.7
	Postcode of Low Vulnerability (LV)				
No. Raw	Number of students who finished in lowest 30% of GCSE scores from that postcode				
% proportion	Proportion of students from that postcode that finished in the lowest 30% of GCSE scores				
No. BME	Number of BME students that finished in lowest 30% of GCSE scores from that postcode				
% BME	Proportion of those in lowest 30% from that postcode that are BME				

The results of the postcode study can be seen in Fig 4, below:

Fig. 5 – Distribution of High, Medium and Low achievement students by postcode



The findings of this study create a clear geographical pattern across Birmingham of the distribution of low attaining students at Metropolitan Beacon School from which a number of conclusions can be drawn.

1. Metropolitan Beacon School experiences a distance-decay effect with respect to examination results

The areas geographically closest to Metropolitan Beacon School reveal the smallest percentages of low achievers. These areas include all the Sutton wards (with the exception of Sutton Maney), which have figures of less than 30%, as well as Walsall and northern Great Barr. The HV postcodes are those furthest away from the school, often in the more deprived areas of inner city Birmingham. However some distant areas, which ostensibly exhibit few socio-economic problems (such as Solihull and Bromsgrove), also produce low achievers.

Travel time can impact on students' educational progress in a number of ways. Extended travel decreases the availability of homework time, may reduce hours of sleep (as students have to get up earlier to arrive at school on time), and cause lateness with concomitant punishments. Longer journeys may cause tiredness, which will impact on focus and productivity. Students who travel further are less likely to take part in after-school or weekend sports matches. For the same reasons they may not be able to attend extra revision sessions, Science Club or music lessons. By not getting involved in these extra-curricular activities a student's perception of the school might be solely as a place of work, rather than one where a wider range of interests are pursued. Findings from the Scottish Government's website *Review of Research on School Travel (2002)* found that 'Long travel times in an uncomfortable bus or an inability to participate in extra-curricular activities reduce academic achievement'.

The questionnaire responses of boys who live further away from school supported these notions. Of the ten students that live over 45 minutes away, 90% felt that living closer to school would result in an improvement in their academic progress. Four of these students felt that their academic performance would increase 'significantly'. Grammar schools tend to have large catchment areas which, they would argue, serve to reduce discrimination against students who may not have a selective school in their locality. Clearly increased travel times to and from school may present obstacles to students' educational progress.

2. Boys from Black and Minority Ethnic groups perform worse than White British boys

As can be seen from Figure 4, the postcodes with the highest proportion of BME students are also those of highest vulnerability in terms of examination grades achieved. Overall 46.7% of students in the bottom 30% are BME boys, who are more likely to underperform at Metropolitan Beacon School in comparison to their WB peers. Some areas with very high BME populations - such as Aston, Handsworth and Birchfield - have rates of between 90% and 100%, making them the most vulnerable areas of the city. In the context of poor examination performance we considered the number of languages spoken at home to be a possible indicator of a larger educational issue.

If English is rarely used in the domestic setting and the student is constantly assimilating two languages, difficulties may occur. The inability of parents to speak English can mean that letters and reports from school remain unread, parental support for students completing their homework is unforthcoming, and Parents' Evenings are missed. Questionnaire responses revealed that of the 70 students from LV postcodes surveyed, only 13 (18.5%) spoke another language at home. Of the MV and HV postcodes 20 out of 51 (39%) spoke another language at home. We suggest that these figures are not coincidental, although the students themselves overwhelmingly stated that their understanding of lessons was in no way affected by their use of another language domestically. The bigger issue may lie with parental support, which is possibly hindered by a lack of English.

3. Students from deprived areas of the city are less likely to succeed at Metropolitan Beacon School

Comparing the postcode map and table (figs 4 and 5) with the economic deprivation map (fig.1) reveals clear similarities. Some of the poorer areas of the city also record the highest percentages of low achieving students. These include Birchfield (100%), Aston (100%), Sparkhill (62.5%), Stirchley (100%), Handsworth Wood (100%), Hampstead (72.5%) and Erdington Tyburn (69.2%). Every boy who completed Year 11 in the last 5 years at Metropolitan Beacon School from Birchfield, Aston and Handsworth Wood (n= 14), finished in the bottom 30% of their year group (the majority of these students were also recorded as falling into the bottom 10%, and did not enter the sixth form at Metropolitan Beacon School). One of these boys had joined the school in Year 7 with the highest entrance test score of his entire year group and left, five years later, with the worst GCSE results of his cohort. This suggests a strong link between deprivation and academic underperformance at Metropolitan Beacon School. The issues associated with deprivation, whilst shared by some, are often personal and in some cases unique - however the questionnaires revealed common themes. In the HV postcodes there was a significant lack of parental help with homework. When asked why,

students replied with statements such as 'They wouldn't understand it' and, in one case, 'They couldn't help me with my primary school work, let alone GCSE.' The number of students whose parents and/or siblings had attended university was also much lower in these areas of the city. If parents have little experience of the UK education system, either at school or university, it can be difficult for them to support their child. These issues were far less prevalent in the LV postcodes, where parents were generally far more knowledgeable about educational matters and had often been to university.

4. Students from poorer communities may live in an environment of low aspirations

There appear to be significant variation in the aspirations of the communities in which boys attending Metropolitan Beacon School lived. When asked 'In the area that you live in do many people go/have gone to university' only one of 28 students from a HV postcode said yes. Every other student replied 'no', or 'don't know', with one adding 'Dude, this is Tamworth' - perhaps reflecting a certain malaise, realisation of lack of academic aspiration, or cynicism about his community. There were also differences in the responses of boys living in HV and LV postcodes when asked about the aspirations of their friends outside of school. Whilst in the HV areas many students had friends 'like them' - aspiring to university, and working hard academically - this was often not the case in the LV postcodes. Here friends were leaving school at 16, or did not see the point of education. Many students gave answers such as 'They don't work hard and don't really like school'. Although there was little difference in the responses to the 'Why do you go to school?' question (with all students seeming to be motivated by the prospect of achieving good grades and career opportunities) external friendship groups may have an influence on these students' lives. If friends play down the value of education then, as Bleach (2000) argues, 'An image of reluctant involvement is cultivated which also influences their attitudes to other boys' endeavours' (p46).

Issues of aspiration and parental / community support are difficult to pursue. It is hard to honestly establish students' aspirations when they know they are *expected* to talk positively about the prospects of university and building a good career. However, the questionnaires do reveal key differences between the HV and LV students in terms of friendship groups and parental involvement in target setting and homework completion.

Recommendations

To equalise educational opportunities, and thereby increase the possibilities of social mobility, we suggest that schools who accept students from less affluent communities might consider the

following recommendations. We realise that these may already be features of schools in challenging circumstances, but question whether selective schools (such as Metropolitan Beacon School) have necessarily sought to prioritise such actions in their attempts to raise achievement.

1. Provide school minibuses, or coaches, to pick up and return students who live at the furthest distance from school to/from home.
2. Increase the contact between the school and parents, offering coaching sessions on how parents can support their sons. This idea is based upon the information gained from the Birchfield Primary School case study in Green's *Raise the Standard* (1999).
3. Use motivated and communicative sixth formers as mentors to run 'drop-in' sessions for every subject at lunchtimes. Students needing help with homework could go to these if there are areas in which they need support. This would also model the behaviours of outstanding sixth formers to the younger children and provide student leadership opportunities.
4. Subject staff and Heads of Year could help identify students who need extra support and direct them to attend, which would help the less pro-active students. Extra-curricular afternoon and lunchtime sessions could foster situations where students would mix with peers that they would usually not have contact with.
5. Stagger the timings of games practices, etc. so that they do not all occur after school or on similar days.

Conclusions

The research reported here has sought to further understand the geographical relationship between academic achievement, socio-economic status and ethnicity. The first question examined the spatial distribution across Birmingham of 'low achievers' who attended the selective Metropolitan Beacon School. Postcodes around Sutton Coldfield revealed much lower percentages of low achieving students than those in central Birmingham, with particularly vulnerable postcodes being revealed around Handsworth Wood, Aston and Birchfield. This follows, almost exactly, patterns of known deprivation across Birmingham and mirrors concentrations of BME populations. The suggestion from our subsequent analysis is that social reproduction, rather than social mobility, is experienced by many students of the students from HV postcodes who attend Metropolitan Beacon School.

The second question considered the reasons why these patterns exist. Although travel time must not be forgotten as an issue that influences student performance, factors relating to parental support,

aspirations of peers and the community, as well as languages spoken at home appear to be significant contributors to underachievement.

Washwood Heath (B8) was an anomalous location in terms of student attainment. We conclude that areas where recent immigration has taken place may be less at risk from entrenched aspirational issues, which are arguably more prominent in long established, deprived communities. Clearly, educational issues connected to languages spoken at home, external peer pressure, and levels of parental support are difficult for schools to influence. Self evidently disparities in deprivation and aspiration have always, and will always, continue to occur. Social and economic geographies may change, but relative poverty is an inevitable result of the capitalist system (a condition that Hutton (2012) refers to as 'bad capitalism').

Unless schools do more to close the performance gap between students from different socio-economic and cultural backgrounds the prospects of social mobility will remain modest. Personalised support for the most vulnerable students - in the form of positive role models, modifications to curricular and extra-curricular activities, and raising staff awareness.

Identifying students in year 7 from high vulnerability postcodes and initiating monitoring and sensitive support for them, might stop the creep towards underachievement and poor behaviour. There are obvious ethical considerations: are we labelling students unfairly? Is this to the detriment of children from LV postcodes who do not receive as much support? Society in the UK continues to reproduce itself in terms of life chances. Social mobility may happen in small pockets, such as Washwood Heath, but failure is deeply embedded in other communities. By failing to address differential attainment many boys will, following their school experience, return to their communities at 16 as dispirited, disengaged, and potentially embittered young men.

As Hanley (2011) cautions:

'To deny the power of social mobility as an idea suggests that there will always be a working class and that its members should continue to know their place'

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