'What works' and 'what makes sense' in Widening Participation: an investigation into the potential of university-led outreach to raise attainment in schools

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Abstract

The issue of social class related inequalities in access to Higher Education (HE) has been high on the political agenda for nearly two decades. In spite of significant funding, channelled through university-led outreach activities to encourage disadvantaged young people into university, the social gap in HE participation persists. As a result, universities are under increasing pressure to provide hard evidence of 'what works' in terms of the outreach they deliver under the Government's Widening Participation (WP) agenda. Recent large-scale research identifies prior attainment at Key Stage 4 (GCSE) as the main barrier to HE access for disadvantaged students, and as a result the Office for Students (OfS) now require universities to raise students' pre-entry attainment. This research examines the potential for university-led outreach activities to help disadvantaged students over this attainment hurdle.

Two of the three research questions posed draw on big data collected through HEAT, a system whereby universities in England record data on the students engaged in their outreach activities, tracking their subsequent progress in terms of school attainment and eventual HE entry. Research question one examines the extent to which outreach delivered in the past has been targeted towards the 'right' students, most in need of assistance with this level of attainment. I find a considerable amount of resource has been mis-targeted. In the second research question, I devise a quasi-experimental method that makes the best use of HEAT's collective tracking data to explore whether outreach activities are able to raise students' attainment. Results show a positive impact on attainment, although this is accompanied with a 'health warning' regarding the important unresolved issues of epistemology associated with my approach.

The third research question moves away from HEAT's quantitative data and draws on qualitative methods to understand the specific activities universities are delivering to raise attainment, and how these might be expected to work. Content analysis of institutional Access Agreements provides a good starting point, and from this I generate a typology of attainment-raising activities being delivered by universities. This line of enquiry is extended through interviews with WP managers from 30 universities where Academic Tutoring delivered by student ambassadors emerges as the most common attainment-raising activity. This choice is seemingly driven by the demanding requirements on universities to show hard evidence of impact on exam results. However, closer examination of the processes and mechanisms through which Academic Tutoring activities are expected to work are not sufficiently theoretically convincing.

I conclude the research with a series of recommendations for policy. These include lessening the strict requirements on universities to demonstrate impact when it comes to raising attainment in schools. This may encourage more creative activities, less reductionist in their approach than Academic Tutoring which appears to replicate what is already happening in schools. I also suggest that HEAT should be utilised for its monitoring capacity rather than being a 'scientific' predictor of impact evaluation. Government should investigate using HEAT as a mechanism to provide the OfS with data on the types of students receiving outreach and where they live in the country. Further research is also needed to better understand the circumstances under which Academic Tutoring outreach activities, which are already being delivered by universities, may be able to add value to the complex issue of raising attainment in schools.

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List of Abbreviations

AA	Access Agreements
APP	Access and Participation Plans
BIT	Behavioural Insights Team
CfE	Centre for Evaluation
DBIS	Department for Business, Innovation and Skills
DCLG	Department of Communities and Local Government
DCSF	Department for Children, Schools and Families
DfE	Department for Education
EEF	Education Endowment Foundation
EPQ	Extended Project Qualification
FEC	Further Education College
FSM	Free School Meals
HE	Higher Education
HEAT	Higher Education Access Tracker
HEFCE	Higher Education Funding Council for England
HEI	Higher Education Institution
IAG	Information and Guidance
IDACI	Income Deprivation Affecting Children Index
IMD	Index of Multiple Deprivation
KS	Key Stage
LSYPE	Longitudinal Study of Young People in England
NAO	National Audit Office
NCOP	National Collaborative Outreach Programme
NPD	National Pupil Dataset
NNCO	National Networks for Collaborative Outreach
NSP	National Scholarship Programme
NSS	National Student Survey
OFFA	Office for Fair Access
OfS	Office for Students
POLAR	Participation Of Local Areas
PSM	Propensity Score Matching
QTS	Qualified Teacher Status

RCT   Randomised Controlled Trial

RDD   Regression Discontinuity Design

RQ   Research Question

SMC   Social Mobility Commission

UCAS   Universities and Colleges Admissions Service

WP   Widening Participation

YPR   Young Participation Rate

Chapter 1: Introduction

In recent years the Government's 'what works' agenda has gained considerable momentum in all areas of social policy, based on the seemingly sensible notion that policy should be evidence-based and informed by research (HM Government, 2013). This has obvious appeal in a climate of austerity as it provides policy-makers with confirmation that money is being spent on effective initiatives. Initiatives to widen participation (WP) in higher education (HE), although increasingly funded by universities themselves, have not escaped this growing pressure to show evidence of impact (OfS, 2018a). Concerned with the social class related differences in HE participation, WP has been high on the political agenda for over two decades (NCIHE, 1997; DBIS, 2016). Since its inception part of the solution has been for universities to deliver targeted outreach activities to encourage students from disadvantaged groups into HE.

This research focuses on the extent to which such outreach activities can raise the attainment of disadvantaged students while they are still in school, as a precursor for widening access to HE. Analysis of national datasets has shown this prior attainment to be the principal predictor to HE entry (Crawford, 2014). Rather than it being an issue arising at point of application, disadvantaged students are less likely to hold the grades necessary to enter. As a result the university regulator now requires universities to raise students' attainment through their outreach, alongside the more traditional aim of raising their aspirations to attend university (OfS, 2018a; OfS, 2018b). This research first analyses large-scale quantitative data to examine whether outreach delivered in the past might have raised the attainment of those students who participated. Following this, qualitative data sources, Access Agreements and interviews with WP managers, explore the specific types of outreach activities universities are delivering to raise attainment now, and how and why they expect them to work. Thus the research informs the debate on 'what works', first by addressing the question directly using big data and second by taking a 'what makes sense' approach to the role of university-led outreach in raising attainment as a precursor to widening access. Next some of the challenges involved in showing the impact of WP outreach are discussed, these have influenced the direction of this research.

1.1 Showing impact in WP

The Office for Students (OfS), the newly established regulator of HE in England, demand that universities evaluate their widening participation outreach activities (OfS, 2018a). This requirement is not new: the Higher Education Funding Council (HEFCE) and the Office for Fair Access (OFFA), the public bodies that preceded the OfS, had also challenged universities to show the impact of their

outreach interventions (OFFA, 2015a; HEFCE, 2015a). Concern about whether universities' outreach activities are effective in encouraging disadvantaged students to enter HE can be traced back even further to 2006 when Gorard and Smith famously criticised the sector for failing to provide evidence of impact:

"In summary, there is limited evidence about the effectiveness of different pre-entry interventions with young people. Much of the research in this area has focused on students' perceptions of interventions, rather than tracking them into HE." (Gorard and Smith, 2006, p35).

In reaction to this call for 'tracking' participants of outreach to find whether they eventually entered HE, the Higher Education Access Tracker (HEAT) was developed. First established in 2008 through a partnership of 21 universities in the South East of England, HEAT was awarded £3 million by HEFCE in 2014 to roll out the tracking service to all universities nationally. One of the intentions of the service has been to create a national dataset which tracks outreach participants longitudinally (HEAT, 2018), possible as all universities commit to recording their data in the same way. This national dataset can then be used to explore whether efforts to widen participation have been effective.

As a researcher for HEAT this author has privileged access to HEAT's dataset, a dataset which already consists of over 120,000 outreach participants who have been tracked into HE. And so it was on this area of research that the idea for this thesis was conceived: to examine what works in WP by looking at 'what has worked'. With data collected on the types of activities in which students had participated (e.g. summer schools, mentoring and campus visits) it was originally the intention to use quasi-experimental statistical techniques to test the packages of outreach that have been most effective – thus finding those that 'work'. However, this "silver bullet" approach was not fruitful; with disappointment I could find very little evidence to show which packages of outreach were more effective than others. On reflection this was due to issues of data quality as well as matters relating to epistemology. In relation to the latter, my initial approach may have been overly positivist, but as Lingerfelter (2016, pi) puts it, it is 'awfully tempting to do so'.

Perhaps the lack of findings is not surprising as showing what works in education has long proven complex and challenging, hampered by unresolved debates over appropriate research methods and methodologies (Pampaka *et al*., 2016). Yet the vision of finding 'what works' remains strong in Government (HM Government, 2013), with the so called 'gold standard' method being the Randomised Controlled Trial (RCT). RCTs have been promoted by the Department for Education (DfE), particularly through the Behavioural Insights Team (BIT) and the Sutton Trust's Education Endowment Foundation (EEF) who continue to fund projects based on this method. Experimental and quasi-

experimental methods have also been endorsed by OFFA as providing the most robust approach to evaluating widening participation interventions in their recently published *Standards of Evaluation* report led by the University of Warwick (OFFA, 2017a). Although OFFA have since been replaced by the OfS, the rhetoric remains the same (OfS, 2018b).

But even these 'rigorous' methods have been unable to deliver on finding any evidence of effectiveness of interventions for widening participation (Younger *et al.*, 2018) and what works remains elusive in the sector. However, this is repeatedly blamed on a lack of robust evidence rather than any doubt over the suitability of the methods themselves. Even though the call for experimental and quasi-experimental methods remain dominant, some oppose the suitability of these methods when demonstrating effectiveness in education (Lingerfelter, 2016), with others contesting whether evidence-based practice can ever be applied in education (Biesta, 2007; Thomas, 2012; Hammersley, 2005). These same issues of epistemology have been raised in relation to the use of RCTs and tracking data in evaluating widening participation outreach interventions (Harrison and Waller, 2017a).

In spite of the unresolved debate around what counts as credible evidence, there is much activity within the WP research community seeking to provide working solutions to the perceived lack of evidence through several on-going high-profile Government funded research projects. These include two OFFA commissioned projects 'Understanding the evaluation of outreach interventions for under 16 year olds' led by Dr N Harrison from the University of the West of England and 'Understanding the impact of outreach for young people who are the first in their family to go to HE' led by Dr A Mountford-Zimdars and Professor D Myhill from the University of Exeter. And then there is the HEFCE commissioned National Collaborative Outreach Programme (NCOP) evaluation led by the Centre for Evaluation in conjunction with the Behavioural Insights Team, University of Sheffield and the London Schools of Economics and Political Science. Similarly, the soon to be established Evidence and Impact Exchange will receive funding from the OfS to use evidence to develop an understanding of work within the sector that address barriers to HE access and success (OfS, 2018c). Rather than add to this race for evidence of efficacy in WP, for this research I have chosen to take a step back and tackle the 'what works' question indirectly, drawing on the HEAT dataset to investigate the practical responses employed by universities. Although HEAT's tracking data might not be able to tell us what works directly, as I had first hoped it would, there is, nevertheless, much it can tell us about the ways universities are delivering their outreach in practice.

Exploring how universities are delivering outreach in practice is all the more pertinent when the wider inconsistencies and contradictions with WP at a policy level are considered. Broadly, the

uncomfortable tension between the economic and social justice aims of WP policy (Archer, 2007; Sheeran *et al*., 2007) means that WP activity can be disjointed when delivered in practice, often having to operate 'around contradictory claims' (Stevenson *et al*., 2010, p107). This lack of clarity has created a space for universities to implement WP in accordance with their own institutional priorities and agendas. The focus on institutional rather than sector-wide priorities has been exacerbated by the increasing pressure on universities to operate within a competitive market system (McCaig, 2015). Government require universities not only to widen participation amongst disadvantaged pupils across the sector but, at the same time, to ensure that they meet targets for recruiting disadvantaged students to their own institutions. Universities already meeting these access targets have additional targets from Government around retention and success, problematic for some universities with socio-economically diverse student populations (DBIS, 2014). Taken together, these imperatives have created a competitive environment for outreach where there is little to differentiate it from recruitment activities, particularly in terms of which students are selected to participate in these activities (Rainford, 2017; Harrison and Waller, 2017a; 2017b).

Add to this complexity the instability in the wider HE landscape, including the notorious rises in tuition fees and changes in student number controls (McCaig and Taylor, 2017), and no wonder the HEAT dataset is unable to tell us what works in WP. However, there is much it can tell us about delivery in practice that will add to the wider debate, and it is this that is explored in this thesis. Recent evidence has shown that prior attainment at age 16 is a key determinant of later HE progression (Crawford, 2014), and so HEAT data are used to look back at the extent to which this type of outreach has been delivered in the past, before moving on to examine what HEAT's tracking data can tell us about the impact of these activities. Having gone as far as the HEAT data can take us, other sources and types of data are drawn upon, including original primary data, to take a closer look at the nature of outreach that is being delivered with the aim of raising attainment in schools. Recent media reports have shown there to be opposition from some universities over this requirement (Coughlan, 2016; Canning, 2017), and so the research investigates how universities are responding to this change in policy focus through their outreach.

In order to fully understand the reasons for widening participation policy and research today, a review of the policy is given next, explaining how it has evolved in the context of the English HE system.

1.1 A brief summary of widening participation policy in England

In one of his first speeches as Director for Fair Access and Participation, Chris Millward set out the OfS's intention to improve equality of opportunity in HE (OfS, 2018d). To achieve this the new

regulator pledges to tackle the underrepresentation of certain groups of individuals in terms of access to, and success within HE (OfS, 2018a). But intentions to widen participation in this way are not new.

Over two decades ago, in 1997, the Dearing report was influential in highlighting the continuing inequalities in HE participation, backed up with arguments about a lack of equality in the opportunities available to certain groups of the population and the resulting wastage of human capital (Barr and Glennerster, 2014). In the same year, Tony Blair came to power with three priorities for the country: "Education, Education, Education", and, led by Dearing, the New Labour government set an ambitious goal of 50% participation in HE among 18 to 30 year olds by 2010 (Smithers, 2001). To ensure this increase in participation was focussed towards lower socio-economic groups, from 2002, all universities were required to develop and publish a Widening Participation Strategy, formalising widening participation as part of university business. These strategy documents have evolved since 2002 – known as Access Agreements under OFFA and now Access and Participation Plans under the OfS - but they remain the main mechanism whereby universities set out their plans, and seek approval from the regulator, to widen participation to HE.

Although New Labour may have placed widening participation high on the political agenda in the early 2000s, by this time significant changes had already taken place within the HE system setting the infrastructure for future change, specifically the shift from an 'elite' to a 'mass' HE system in England (Trow, 1974; Scott, 1995). This saw the number of universities in the UK grow rapidly: in the 1960s the number more than doubled, from 22 to 46 (Perkin, 1969). The Further and Higher Education Act in 1992 which allowed all polytechnics to become universities saw this number rise to 88 by 1994. Today there are 167 Higher Education Providers in the UK (HESA, 2018a). As a result student numbers in the UK have also risen significantly from 400,000 in the 1960s (Greenaway and Haynes, 2003) to over 2.3 million in 2016/17 (HESA, 2018b). Although this expansion did increase access for people from disadvantaged groups in absolute terms, as there were more opportunities to progress, in relative terms the extent to which they are underrepresented remains mostly unchanged (Boliver, 2010, HEFCE, 2013a).

Furthermore, the increase in university places had to be funded and, in spite of a promise not to increase student fees in New Labour's 2001 (re)election manifesto, the Higher Education Act introduced in 2004 saw an increase in student fees, set at rates that were variable across institutions, with the highest fees allowed being £3000 per year. Contrary to expectation, most universities opted to charge £3000. In response to concerns about the impact of the new fee regime on widening participation students, New Labour invested significantly in initiatives aimed to widen HE participation

(Whitty *et al.,* 2015; Doyle and Griffin, 2012), the flagship programme being Aimhigher, a project with a budget of £136 million in its first year and nearly £1 billion over its seven year lifespan (2004 to 2011) (Harrison, 2012). Aimhigher became the biggest government funded outreach activity programme in the world (Atherton, 2012). Delivered through regional partnerships covering the whole country, Aimhigher delivered activities in schools and colleges with the aim of 'increasing the number of young people who have the abilities and aspirations to benefit from HE' (HEFCE, 2004, p7). In spite of its numerous supporters (Baxter *et al.,* 2007; Hatt *et al.*, 2008; Moore and Dunworth, 2011), Aimhigher was heavily criticised as expensive and showing little impact (Gorard *et al*., 2006) and the programme was closed in 2011. Of course, this may have been more about austerity than effectiveness. Moreover, the programme leaves a strong legacy in current widening participation practice, with the types of outreach activities delivered through Aimhigher still delivered today by independent HEIs.

2010 saw a great deal of change in the HE sector as a whole. The country was declared in recession and a new Conservative-led Coalition government was elected. The Browne Report was published with one significant recommendation adopted by the new government: the introduction of an increased maximum fee of £9000, not paid up-front by the student but recovered later through an income-contingent loan, highly contested in parliament and provoking fierce resistance from students (Burke and Hayton, 2011). In spite of this change the government claimed commitment to widening participation introducing the National Scholarship Programme (NSP) in 2010 providing fee waivers for academically able students from poorer backgrounds (HEFCE, 2011). However, the programme was short lived and in 2013 it was announced that the NSP would be cut for undergraduate students from 2015/16. In 2014 the Government announced the development of the National Network for Collaborative Outreach (NNCO) with an annual budget of £11m (HEFCE, 2014a), stating that in spite of reductions in public spending, widening participation initiatives would remain a priority. This initiative aimed to ensure that all schools and colleges in the country would have a single point of contact for outreach. However, in March 2016 it was announced that the NNCO programme would be replaced with a new initiative, the National Collaborative Outreach Programme (NCOP). NCOP invites university led partnerships to target outreach activities towards areas where HE participation is lower than expected given average Key Stage 4 (GCSE) attainment rates (HEFCE, 2016a) and has been designed to meet the government's most recent goal to double the proportion of young people from disadvantaged backgrounds in HE by 2020 (DBIS, 2016). With a budget of £90 million in its first two years, NCOP brings significant funding to widening participation, but the government's short term policymaking approach has received criticism for creating an environment for universities where direction is constantly shifting, putting momentum at risk (Havergal, 2016). Another change in tack came in 2017 when OFFA asked HEIs to set out in their Access Agreements how they plan to increase

their work to raise attainment in schools and colleges (OFFA, 2017b), and this requirement has been reiterated in more recent OfS guidance (OfS, 2018b). This new requirement will form the central focus in this thesis. In addressing 'what works', this is done with a view to understanding how university outreach might work to raise attainment in schools, thus enabling later progression to HE.

Following this broad introduction to widening participation the next section looks more closely at the progress that has been made in widening participation to HE since investment started in 1997. Government data are presented to show how participation in HE has changed over time, in the context of the policy changes that were described above.

1.2 Participation in HE – recent government data and statistics

The following charts examine participation in HE for England, from the academic year of entry 1998/99 to 2011/12. Although now seven years old, this is the most recent data published by the regulator – the Higher Education Funding Council (HEFCE). More recent data published by the Universities and Colleges Admissions Service (UCAS) show the continuation of these trends into 2017/18 (UCAS, 2017). However, here the charts below are used for their ability to show time series data covering a period during which widening participation received significant funding and policy attention. Data include the country's young population only, known as the Young Participation Rate (YPR). The YPR calculates the proportion of people who entered HE at the age of 18 or 19 from the total number of 18 and 19 year olds in England and has become the standard measure for HE participation used in government data. Focusing on this age group allows the inclusion of students who progress to HE immediately after leaving school or college as well as those who decide to take a gap year. It does, however, discount anyone who entered HE after the age of 19.

Figure 1.1 shows that the overall YPR in England increased from 30% in 1998/99 to 38% in 2011/12. This means that in 2011/12 38% of young people in England aged 18 entered HE within two years. These data reveal that Prime Minister Blair did not achieve 50% participation by 2010/11 (although this target was based on those aged up to 30), but nonetheless, a proportional increase of +26% did take place between 1998/99 and 2011/12.

The two points at which progression fails to increase at a rate consistent with that seen in previous years can be traced to changes in the funding of tuition fees. 2004 saw the introduction of variable fees, with the highest allowed being £3000 per year, although these were not implemented until 2006/07. The below-trend increase seen in the 2011/12 cohort comes in anticipation of the introduction of £9000 from 2012/13 onwards.

Chapter 1: Introduction

Figure 1.1: Trend in young participation rate in HE for England (1998/99 – 2011/12)

Source: HEFCE (2013a)
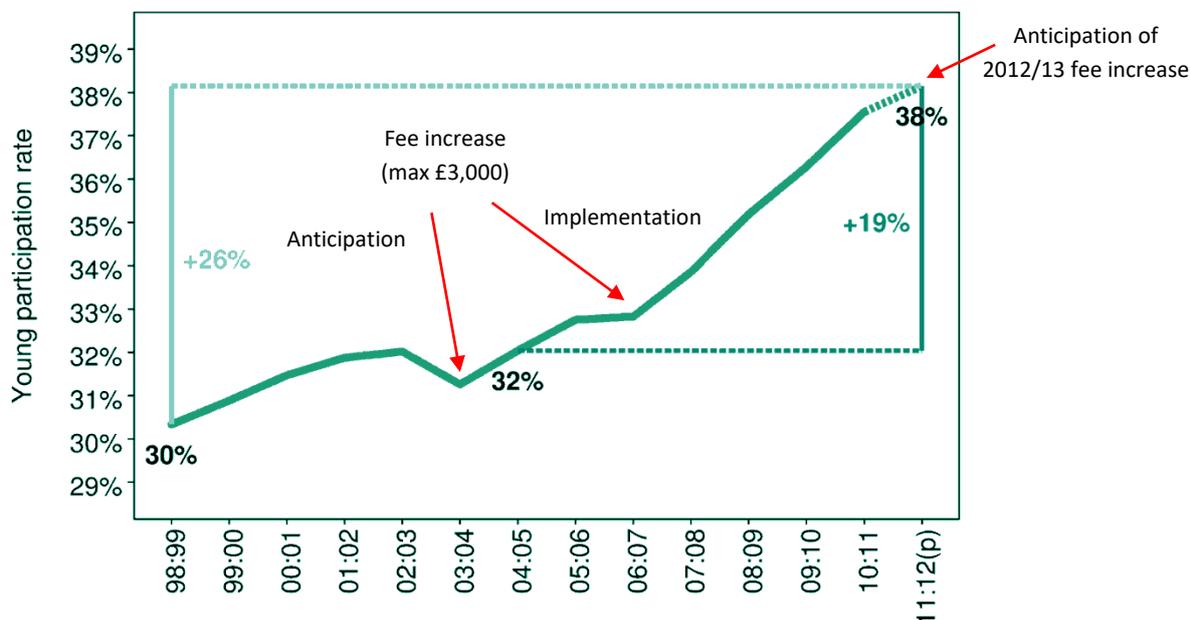
It is noteworthy that in spite of the instances of tuition fee rises since 1998, progression to HE has continued to grow. This suggests that students have not been discouraged by the increasing cost of university and provides evidence for what Biffl and Isaac (2002) call 'price inelasticity', where the value of a degree has clearly been so well marketed that demand is not moderated by increases in price. There are other drivers to buoyant progression despite costs, for example, young unemployment rates (Harrison, 2019) and the removal of student caps allowing more university places.

Figure 1.2 shows changes in HE participation amongst disadvantaged students only. The concept of disadvantage will be explored throughout this thesis but here, HEFCE's classification is used (POLAR[1]). Like the national rate, the YPR for disadvantaged students has also increased, from a lower starting point of 13% in 1998/99 to 20% in 2011/12. Proportional increases are above the national average shown in Figure 1.1, at a significant +52%. This increase has not occurred evenly over the fourteen year reporting period, with a much larger increase after 2004/05, where participation rates increased by six percentage points, compared with the period up until 2004/05, during which participation rates increased by one percentage point. 2004/05 saw the creation of the Aimhigher programme which ran until 2011. Although practitioners struggled to demonstrate the impact of Aimhigher, the data below do show increased participation amongst disadvantaged students over the initiative's lifespan and therefore, it is arguable, that Aimhigher was to some degree successful in achieving its purposes. It is

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[1] The participation of local areas (POLAR) classification groups areas across the UK based on the proportion of the young population that historically have participated in higher education (HE) (OfS, 2019).

noteworthy that the increases in student fees marked on Figure 1.1 appear to have had less impact on the increasing progression rates of students from disadvantaged backgrounds than on the national rates. This is supported in research by Harrison *et al.* (2015) who interviewed a range of students about their attitudes to HE debt and found that disadvantaged students were more likely to think positively about the debt, viewing it as a worthwhile by-product of gaining the qualifications necessary to progress to a high level job.

Figure 1.2: Trend in the young participation rate for the most disadvantaged areas determined by HE participation rates (POLAR3 classification)

Source: HEFCE (2013a)
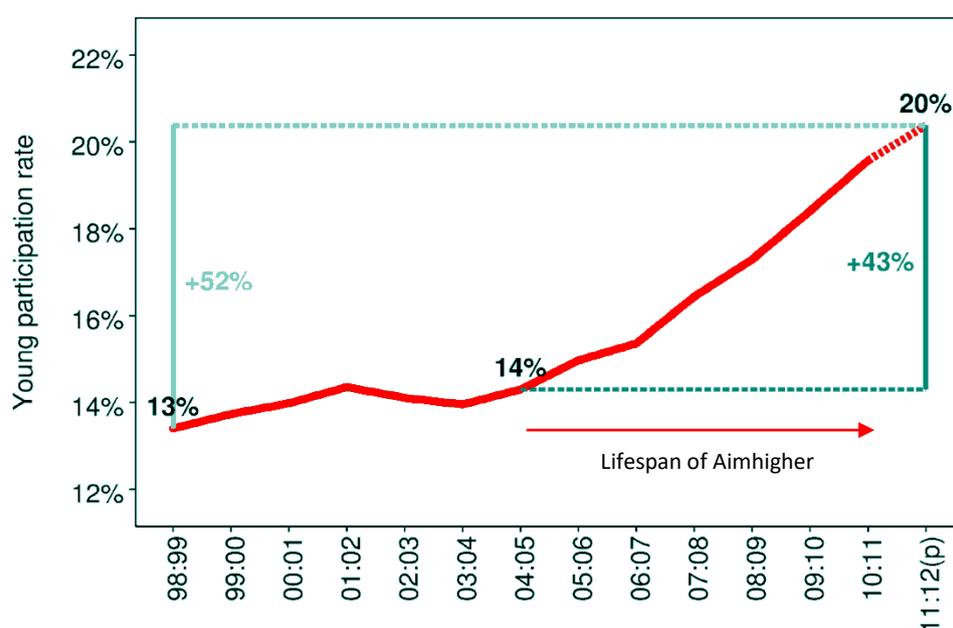
Such positive and encouraging trends in the HE participation of disadvantaged students are dampened somewhat when examined in the context of progression for groups of students from other backgrounds. Figure 1.3 shows the YPR broken down for students belonging to five quintiles, each quintile (from top to bottom of graph) reflecting increasing levels of disadvantage. The YPR for the first quintile or most disadvantaged students (represented by the red line) is consistently lower than the YPR for the fifth quintile or least disadvantaged students (represented by the purple line). Thus there is a clear difference in progression rates for young students when split by disadvantage. In addition, the gap in participation has shown no sign of reducing over the reporting period, in spite of the huge investment in widening participation seen since 2004. In reality, the gap has actually increased, from a 38 percentage point difference between the most and least disadvantaged groups in 1998/99 to 40 percentage points in 2011/12. These government data therefore demonstrate that,

in spite of the policy focus and substantial investment in widening participation (Leathwood and O'Connell, 2003), disparities in the HE enrolment of students from more and less disadvantaged groups still remain large today (HEFCE, 2013b).

Figure 1.3: Trend in young participation rate for areas classified by HE participation rates (POLAR3 classification)

Source: HEFCE (2013a)
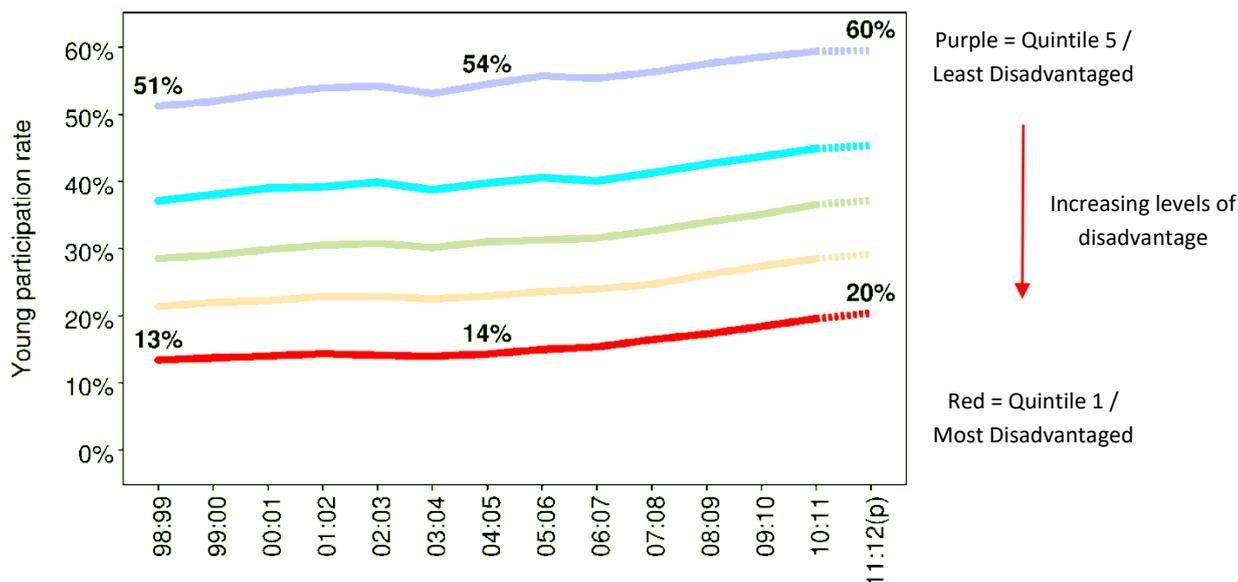
To summarise, widening participation has remained high on the policy agenda since 1997, championed by successive governments for over two decades and we now find ourselves in a time when widening participation is embedded within the practice of universities in England. There have been positive changes since the significant investment in widening participation made by New Labour, with more young people from disadvantaged backgrounds benefiting from HE. However, the proportion of the most advantaged young people progressing to HE has also increased over this time and so the social gap in HE has persisted. This is in spite of targeted outreach initiatives and the significant funding outlined above.

That progression and success in education are lower for lower socio-economic groups is not something that starts at the time of applying to HE, with differences in academic performance at all stages of education well documented (Feinstein, 2003; Floud *et al.*, 1956; Halsey *et al.*, 1980). The paragraphs below discuss the lower attainment of children from low socio-economic backgrounds when in school and start to explore possible reasons for these differences. For the first time, then, this discussion ventures into the complex debates behind *why* disadvantaged people are less likely to progress to HE; debates that are critical to this thesis. Research into why the social gap in HE progression exists is

essential for widening participation work in general as findings inform the nature of the activities carried out by universities to encourage participation. Research addressing this debate will be covered in detail in the Literature Review. However, the paragraphs below provide a summary of key findings and relate these to the implications for outreach delivery.

1.3 Socio-economic disparities across all educational stages

The disparities in educational attainment between students from differing socio-economic backgrounds emerge very early in a child's life (Sullivan *et al.*, 2013). Research has found that children from poor backgrounds demonstrate lower levels of cognitive development from the very young age of three, with the gap widening by the age of five (Goodmand and Gregg, 2010; Dickerson and Popli, 2016). These differences continue into primary school where smaller proportions of children from low income families reach the expected level at Key Stage 2 and the same when they reach Key Stage 4 in secondary school. The lower attainment of disadvantaged students at school is known as the 'poverty gradient' (Gorard, 2012). Research by Crawford (2014) demonstrating poorer attainment for disadvantaged children during secondary school, argues that lower achievement at Key Stage 4 is the most significant predictor in determining whether a student will progress to HE. Similarly Croll and Attwood (2013) and Chowdry *et al*. (2013) find academic attainment at school the greatest explanatory factor for the social disparity in HE participation rates. Both studies found that when academic attainment and other factors (e.g. ethnicity) were controlled for, the social gap in HE participation nearly disappeared. These findings are vital from a policy perspective as they support the need for interventions to raise participation in HE targeted towards students whilst still in school, to help overcome the attainment hurdle.

There has long been extensive debate as to the reasons why people from lower socio-economic backgrounds perform less well in school, and this will be explored thoroughly in this thesis. Government have quickly pointed to the low aspirations of working class people to explain their poor educational performance and subsequent reduced life chances (Archer *et al.*, 2014). The 'problem' of 'low aspirations' has featured heavily in the policy discourse of the previous New Labour government (DfES, 2003; 2004; 2005), the subsequent Coalition government (DfE, 2010) and the current Conservative government (Cameron, 2015). Although the idea of a lack of aspiration has been criticised as a convenient explanation for the lower educational outcomes of disadvantaged people, placing the blame on individuals rather than wider structural inequalities (Berrington *et al.*, 2016; Whitty *et al.*, 2015; Brown, 2013a; Francis, 2006), it has formed the basis of much widening participation outreach activity. During these activities universities work with disadvantaged students

in schools, to raise their aspiration to attend HE. These aspiration-raising interventions make up the core delivery of widening participation outreach offered in England (Harrison and Waller, 2017b).

However, the benefits of such aspiration-raising activities are debated. First, there is research that questions the idea that parents from low socio-economic backgrounds do have lower educational aspirations for their children. A study by Lupton and Kintrea (2011) found no evidence of this and analysis of the Millennium Cohort Study found aspirations to attend university equally high amongst mothers of young children from all social groups (Hansen, 2014). It is, however, acknowledged that these aspirations may decline in accordance with what is realistic as the child grows up (Chowdry *et al.*, 2013; Sullivan *et al.*, 2013), and fails to achieve the qualifications required to enter HE. Second, research by Gorard and See (2013) found insufficient evidence that interventions designed to improve attitudes towards education will lead to increased attainment. These findings make it difficult to justify outreach focusing solely on raising aspirations, and have led to recent shifts in guidance from Government to not only focus on raising aspirations, but also raising attainment (OFFA, 2017b; OfS, 2018b).

The above paragraphs have broadly introduced widening participation, discussed the evolution of government policy and how this has influenced changes in the numbers and backgrounds of students progressing to university. I have also touched on research explaining the socio-economic disparities across all levels of education, up to and including HE, and shown how these findings have shaped the nature of outreach activities delivered as part of universities' widening participation programme of events. Next I move more closely to the aims of this thesis, and discuss the evaluation of outreach activities. Bearing in mind the unstable funding climate, it is now more important than ever to provide evaluative evidence demonstrating the effectiveness of outreach activities. Evidence of the benefits of widening participation will help justify the funds made available by Government and universities to widen participation.

1.4 Evaluating widening participation outreach: the rise of tracking

Demonstrating the effectiveness of widening participation outreach activities is no easy task. It was the lack of evaluation showing the clear impact of the work being done that sealed the fate of Aimhigher. Whilst in opposition, the Minister for Universities and Skills, David Willets commented on the 'rather disappointing record of Aimhigher, which has not yet succeeded in spreading university opportunities on the scale that we might have hoped for' (Willetts, 2008). Efforts were made to evaluate Aimhigher, but the methods used have been criticised for focusing on inappropriate student outcomes such as attitudes to HE rather than actual progression (Gorard and See, 2006; Chilosi *et al.*,

2008). The analysis conducted in this thesis will be able to draw on HEAT's longitudinal tracking dataset, including the hard student outcomes of attainment and later progression to HE.

That HE progression was not routinely measured during AimHigher is understandable because the tracking of participants into university brings with it a raft of problems. First, universities delivering outreach must collect individual student participant details for everyone with whom they engage, a process that requires a great deal of ethical consideration. Second, students must be tracked through the data systems of a number of education bodies, from school to college to university, none of which are linked. Finally, accessing some datasets, particularly university admissions (UCAS) and entrant (HESA) datasets can be expensive and complex (Doyle and Griffin, 2012).

Towards the end of the Aimhigher programme, lessons had been learnt with regard to the types of data needed to carry out evaluation and some partnerships became better at collecting the necessary data to report on the educational outcomes of those who participated. From this emerged some small-scale regional tracking of outreach participants, with most reporting high rates of progression to HE (Ireland *et al.*, 2006; Allerston *et al.*, 2006). However, HEFCE concluded that, on the whole, Aimhigher partnerships were weak at collecting the student outcome data needed to evaluate their work (HEFCE, 2010). These failings supported the need for a *national* drive towards the recording of outreach participants, tracking them from the first time they participate in an activity, throughout their educational journey into HE, to assess differences in outcomes. This provided the context for the establishment of HEAT as a tool enabling the tracking of individuals from outreach intervention into university and thus providing an important dataset to assess the impact of widening participation (HEFCE, 2015b). Next HEAT is discussed in more detail, including what it does, and explain the key role it plays in overcoming the challenges of evaluating outreach both locally and nationally.

1.4.1 The Higher Education Access Tracker (HEAT)

The Higher Education Access Tracker, abbreviated to HEAT, is a collaborative project through which English universities work together to evaluate their widening participation activity. HEAT provides a central database for member universities to record their outreach data in a consistent format so as to allow the aggregation of data from all institutions at a national level. This dataset consists of quantitative longitudinal tracking data, where individual participants are recorded by members and then tracked centrally by HEAT through their student journey. HEAT tracks students through a number of administrative educational datasets held by government departments to capture their performance at key educational milestones, including school attainment at Key Stage 2 (taken at the end of primary school), Key Stage 4 or GCSEs (typically taken in year 11 when aged 15 or 16), progression to Level 3

(post age 16 education) and the following achievement at Level 3, and then enrolment and success in HE. As data are pieced together from several sources the tracking process is depicted as a jigsaw in Figure 1.4. It should be noted that the UCAS data, illustrated in red on Figure 1.4 are not available at time of writing.

Figure 1.4: HEAT Evaluation Measures – A jigsaw of progression outcomes

The HEAT membership currently consists of 85 HEIs; this includes the majority of large non-specialist
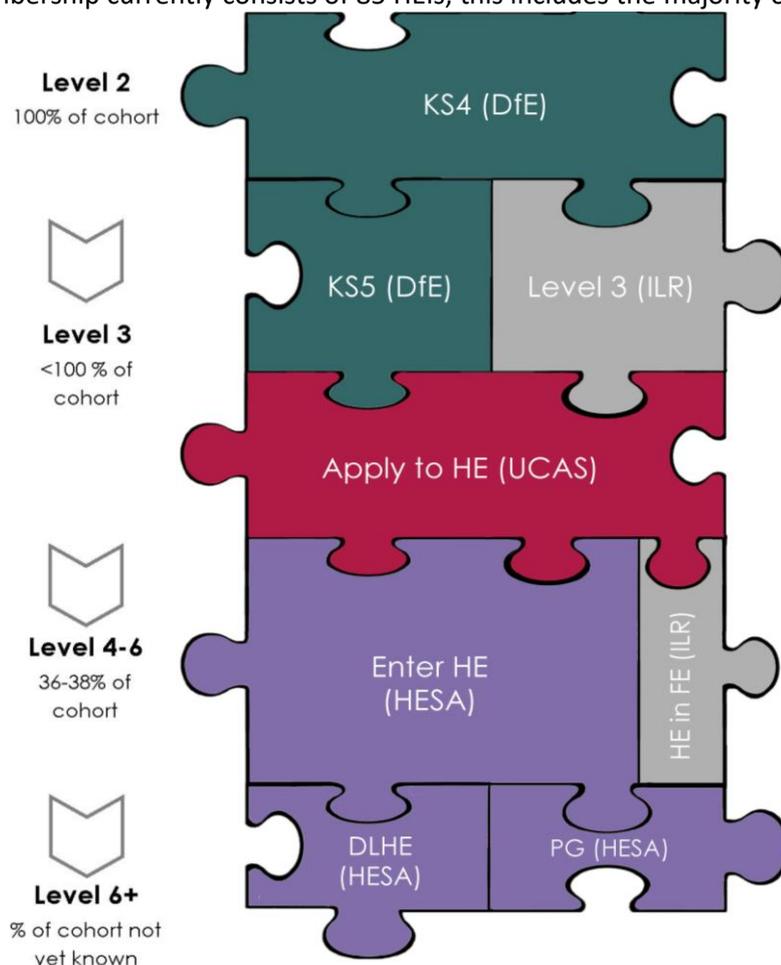
HEIs in England (76% of those submitting Access Agreements for the entry year 2018/19) with a representative mix of different mission groups and tariff bands. Aggregating HEIs' outreach data has the benefits of creating a dataset with a large sample of participants, drawn from a wide geographical area which is compiled in the same format over a long period of time. In addition, there are a great deal of historical data from Aimhigher partnerships that have already been aligned with HEAT's data schema on which to base the present investigation.

Yet coordinating a national dataset that can be used to evaluate outreach activities is challenging, largely due to the silo style of working in which universities operate, particularly since Aimhigher was terminated. The very independent nature of universities, with different traditions and missions for the

future, has resulted in considerable variation in approaches to outreach (Cotton *et al.*, 2013). Although legacies from the Aimhigher programme have resulted in some common programme structures including the types of outreach activities delivered, since 2011 universities have had autonomy over the way they deliver their outreach activities (Hatt *et al.*, 2005; Chilosi *et al.*, 2009), with little funding or incentive to encourage collaboration (Atherton, 2012). As a consequence, the ways in which different HEIs approach widening participation, including the types of students whom they target, can be relatively varied, causing further challenges when evaluating outreach on a national scale. That universities in England have autonomy is a tradition throughout the HE sector, and indeed such freedom with regard to academic research has helped create the conditions for a world leading HE system. However, this luxury is not one that can be afforded when collecting data on widening participation on which to build a national evidence base of what is effective across *all* of the work being carried out. To achieve the collection of these data universities must follow prescriptive instructions set out by HEAT, ensuring that all institutions collect the same data in the same way, much like a census, so that they can be aggregated centrally.

Nevertheless a national dataset that has been generated from the contributions of separate HEIs will inevitably come with nuances, and so, any limitations of the HEAT data will be explored thoroughly in the thesis and measures to overcome them incorporated into the research design. In addition, as part of this thesis the HEAT longitudinal tracking of students will be supplemented with other research methods so that any findings are triangulated using a mixed methods approach.

1.5 Conclusion

This chapter has set out the arguments for widening participation and discussed the reasons behind the social gap in HE participation seen today. A brief discussion of the history of widening participation policy and changes in the HE sector more generally was provided to place the current situation in context. In spite of nearly two decades of investment in widening participation, the social gap in HE participation has persisted and commentators have argued that weak evaluation has led to a poor understanding of the parts of outreach that are effective. Alongside this, new evidence showing the importance of prior attainment at school in determining progression to HE has led universities to focus their outreach efforts more heavily on this area, rather than aspiration-raising alone.

The data collected through HEAT has the ability to tell us a great deal about the potential of university outreach to raise student attainment in schools. With privileged access to these data, the first part of this thesis will draw heavily on HEAT data before moving on to primary data collected from qualitative sources. To ensure that the specific research questions identified in this thesis are in line with the

aims of government widening participation policy, the next chapter, the Literature Review examines WP policy critically, placing it in the wider context of social mobility and considering the complex theoretical debates surrounding widening participation in HE.

Chapter 2: Literature Review

Chapter 1 described how the difference in higher education (HE) participation rates of upper and lower social groups has remained stubbornly persistent (summarised in Figure 1.3) in spite of two decades worth of investment from the public purse (HESA, 2014; HEFCE, 2013a; Harrison, 2012). In this chapter I start by considering the history of widening participation, reflecting on the government's conceptualisation of the policy and how this has been translated into practice. I then explore the interplay between socio-economic background and prior attainment in restricting access to HE. In doing this I turn to Bourdieu's capitals to explain how socio-economic inequalities can be reproduced over generations and examine the role of education in mediating or maintaining this social order. I then move on to examine the limited existing evidence of 'what works' in widening participation, something that cannot be done without also considering the key issues and challenges in evaluating widening participation practice. I conclude by showing how the analysis presented in this thesis is able to make a contribution to the research area, outlining the specific research questions that will be addressed in the analysis chapters.

2.1 Setting the scene for understanding 'what works' in widening participation

Consecutive governments have presented widening participation in HE as a way to enhance both social justice and economic prosperity for Britain (Wilkins and Burke, 2015; David, 2012), with emphasis shifting from one to the other depending on the ideology of the government in power (Harrison and McCaig, 2015). Since 2011 and the time of the Coalition Government, both themes have been brought together in policy rhetoric under the notion of Social Mobility which it has been promised by successive governments is the route to a fairer society (Cabinet Office, 2011; 2012a; May, 2016; Goldthorpe, 2013; Vignoles, 2013). For the government, social mobility is based on creating meritocratic pathways for people with ability to access all opportunities the job market has to offer (Brown, 2013b).

The Social Mobility Commission (SMC), the independent body set up to advise government on social mobility, discusses the important role of university outreach in enhancing the nation's social mobility. It states that if we are to reduce socio-economic inequalities in HE access 'universities must work together and focus outreach on schools and places where HE access lags behind' (SMC, 2015, p8). Evidence from the HEAT collaboration of 85 universities shows that this is already taking place, and rather, what is needed now is to establish the components of outreach delivery that are most effective

in raising HE enrolment amongst the students least likely to attend university, or in other words, 'what works' in widening participation.

As discussed in Chapter 1, uncovering 'what works' in widening participation has proven problematic and the sector has come under criticism for failing to produce robust evidence of effective practice (Gorard and Smith, 2006, Major, 2015). This lack of concrete evidence is frustrating for practitioners and policymakers alike and in 2014 HEFCE provided £3 million to expand the Higher Education Access Tracker (HEAT) service in order to provide 'the underpinning, individualised data…to conduct rigorous and robust evaluation' (HEFCE, 2015a, p36), the data on which this thesis will be based.

However, using HEAT data to address 'what works' directly is not the aim of this research, for reasons touched upon in Chapter 1. When asking 'what works' in widening participation the debate moves quickly into the thorny political area of trying to explain the enduring socio-economic inequalities in education in British society. Whitty *et al*. (2016) warn that the government's 'what works' agenda promotes the naïve belief that educational research can provide solutions to fix complex problems such as socio-economic disparity, and attempting to meet these expectations runs the risk of oversimplifying or narrowing the perspective of the issue. The research presented in this thesis thus attempts to balance the need for evidence based practice whilst being careful to ask the 'right' questions and avoid approaching a complex issue with an oversimplified or overly positivist response. The specific research questions are provided at the end of this chapter, with a detailed account of the way widening participation policy has evolved given next. This discussion describes the political motives for widening participation in England, setting the policy in the context of wider changes to the HE landscape.

2.2 The evolution of widening participation policy

Although widening participation was officially set in motion following the publication of the Dearing Report in 1997 (NCIHE, 1997), it was the changes that had taken place across the sector before this point that made future widening participation possible. The Robbins report, published in 1963, marked the start of the expansion or 'massification' (Giannakis and Bullivant, 2016; Trow, 1974; Scott, 1995) of higher education, on the grounds that a growth in student numbers would bring benefits to the economy (Barr and Glennerster, 2014). With the focus on increasing participation, little was done to encourage the progression of people from lower social classes. Although participation did widen in this period through rapid expansion and the integration of polytechnics, it was not a particular aim of HE policy at the time (Egerton and Halsey, 1993; Reay *et al*., 2001; Blackburn and Jarman, 1993). This situation remained unchallenged, from 1979 to 1997, when a Conservative government was in power

with a laissez-faire ideology to managing public sector services, believing that establishing market discipline would drive up the efficiency of services (Apple, 2014). A market-based approach which promoted consumer choice and competition was extended to hospitals and schools as well as universities. The social inequalities that resulted from such an approach were seen as an inevitable and an unavoidable by-product of an economically efficient system (Loxley and Thomas, 2001; Giddens, 1998; Peck and Tickell, 1992; Driver and Martell, 2000) and higher education policy documents of the time were void of concerns over social justice (Ross, 2003). Thus *increasing* participation in higher education has long been a policy aim for successive governments across the political spectrum, but *widening* participation officially started under the Labour Government in 1997 when Lord Dearing commented that a student's access to HE is largely determined by the socio-economic status of their family (NCIHE, 1997). From this starting point widening participation has risen to become a central consideration within HE policy, with dedicated chapters in higher education white papers from 2003 to 2011 (DfES, 2003; DBIS, 2009; DBIS, 2011).

2.2.1 New Labour policies (1997-2010)

New Labour came to power in 1997 with 'Education, education, education' as its three priorities, set out by Tony Blair in his now famous prime ministerial candidacy speech (Blair, 2001). Although Lord Dearing started work in 1996 and was therefore originally commissioned by the previous Conservative Government, his report chimed heavily with New Labour by focusing heavily on widening participation. As Robertson (1999, p133) reminds us 'enquiries never take place in a neutral political space' and Trow (1998, p114) adds that they are 'constrained by their necessity to be relevant'. Dearing's ideas were in harmony with Labour's ideology, seeing widening participation in higher education as essential for enhancing social justice (Wilkins and Burke, 2015). However, also emphasising the need to ensure economic competitiveness, New Labour stressed the role of widening participation in up-skilling the country's workforce to meet the needs of the economy (Doyle, 2003) and in 2001 the government set a new target to increase HE participation amongst 18–30 year olds to 50% by 2010. To achieve this target, and compete in the global economy, New Labour introduced vocational HE qualifications in the form of 'two-year work focused foundation degrees' (DfES, 2003 p57) and work-based study options including apprenticeships, advanced apprenticeships and new technical qualifications and opportunities to study whilst living at home (DBIS, 2009).

Focusing on the social justice element of widening participation, New Labour provided funds to universities, guided by HEFCE, to work to reduce the socio-economic inequalities in those accessing higher education (Lewis, 2002). The majority of funds were channelled through one major national

initiative, Aimhigher, described in Chapter 1. Activities took the form of summer schools, experience of life on a university campus, master classes, subject tasters, guest lectures and mentoring (Doyle and Griffin, 2012). In addition to Aimhigher, New Labour also introduced further regulation to increase the accountability of universities with regard to the proportion of widening participation students admitted to their own institutions. From 2002, widening participation indicators or 'benchmarks' were published annually showing the socio-economic composition of each individual university's student body. Some universities perform poorly against their benchmarks, particularly Russell Group institutions (Pugh *et al.*, 2005), and for the first time government were holding individual institutions to account for the types of students they recruited. As a result we saw New Labour's definition of widening participation begin to develop into two policies, one concerned with closing the socio-economic gap in HE participation across the sector as a whole and the second with ensuring that students from all socio-economic backgrounds are distributed fairly across England's universities (OFFA, 2015b). Whitty *et al.* (2015) describe this as a two pronged policy approach with the first called Widening Participation and the second Fair Access. The difference between the two being that widening participation promotes progression to any university whereas fair access focuses on promoting progression to specific universities, and is largely designed to ensure that the most selective universities are admitting sufficient numbers of students from disadvantaged backgrounds (Cabinet Office, 2012b). In spite of having separate aims, widening participation and fair access are often conflated in government literature (Bekhradnia, 2003). Since the days of New Labour, fair access has developed into a serious concern largely due to research showing that disadvantaged students are far less likely to attend selective institutions (Boliver, 2013; Mangan *et al*., 2010).

In spite of their pledge to widen participation in higher education, New Labour could not ignore building concern from the sector over the future funding of HE. The rise in student numbers that had taken place up to this point had rendered the current state subsidised model unsustainable (Parry and Fry, 1999; Robertson, 1999), and as a result the Teaching and Higher Education Act was passed in 1998 which controversially abolished the traditional student maintenance grant and called on students to contribute up to £1000 towards their tuition fees. The Higher Education Act of 2004 saw the next increase in student fees, set at rates that were variable across institutions, with the highest fees allowed being £3000 per year. Nearly all universities opted to charge £3000. This era also saw the start of market-based reforms to the sector which encouraged competition by comparison of universities, largely as a result of the increase in student fee contributions (Marginson, 2006). Examples include the introduction of the National Student Survey (NSS) in 2005, and the consequent ranking of universities on their student satisfaction. Such reforms were argued to increase efficiency and accountability of public sector services (Pollitt and Bouckaert, 2000) while ostensibly maintaining

equality of opportunities. In this respect New Labour did distance themselves from Labour's traditional redistributive policies and adopted a neoliberal approach to social policy that shared similarities with Conservative strategies (Coates and Adnett, 2003). Yet within this competitive environment, government was demanding that universities collaborate and work together to widen access under Aimhigher, a dualism that may have been difficult for universities to manage.

To ensure the increase in fees did not put off disadvantaged students from applying to university, the Office for Fair Access (OFFA) was set up requiring all universities charging annual fees of £3000 to produce an Access Agreement setting out their plans for student financial support, as well as for outreach and retention activities (DfES, 2003). For the 2009/2010 academic year, students from England and Wales were also entitled to a grant of up to £2,906. Here we see creeping change in the sector, where higher education became increasingly expensive for the students, but widening participation policies were put in place by government in attempt to protect those on low incomes. At this point the definition of widening participation also changed, becoming concerned with far more than just access to HE when New Labour extended the policy to also consider the success of students whilst in university and thereafter in the job market (HEFCE, 2001). This was the result of concerns that students from lower socio-economic backgrounds 'end up at the lower end of the labour market and are twice as likely to enjoy low starting salaries as any other group' (Robertson and Hillman, 1997, cited in Greenbank, 2006, p146). As a consequence the interventions designed to achieve widening participation were extended accordingly: 'Outreach' activities concerned only those pre-entry activities aimed to encourage progression whereas 'retention' and 'student success' activities are designed to ensure equity in the outcomes of those widening participation students who do enter university (Lewis, 2002). This delineation is of particular relevance to this research which focuses on the effectiveness of *outreach* in widening *access* to higher education, with success later in the student lifespan beyond the scope of my data.

In spite of the government's laudable aims, the way the widening access policy has been translated into practice, largely via outreach delivered under Aimhigher, is far from straightforward. Universities delivered outreach activities in schools and colleges that drew on Dearing in their aims and objectives. Dearing suggested that people from lower social groups were failing to access higher education because of their low attainment, low aspirations and poor decision making with regard to their futures (p101-113). Although early government policy did recognise the 'critical' role of *attainment* in determining progression to HE (DfES, 2003, p69), this was seen as beyond the remit of universities' outreach activities and so activities under Aimhigher were initially designed to raise the *aspirations* of already suitably qualified pupils from lower socio-economic groups to enter higher education (Lewis,

2002). These aspiration-raising activities represented much of the early work carried out under Aimhigher and have proved to be enduring in widening participation policy, still recommended by the OfS as one of the primary aims of outreach interventions (OfS, 2018a). This is in spite of the approach being heavily criticised for its inability to engage with the most disadvantaged groups in society. Aspiration-raising activities tend to be targeted towards students who are already achieving academically and as a result easily motivated, leading to 'cream-skimming' students who may well have been destined for HE anyway (Taylor, 2000; Coates and Adnett, 2003). But perhaps more concerning is research by Slack (2003) who showed that aspiration-raising initiatives can have a detrimental effect, as those who are not suitably high achievers within the schools in which universities deliver their outreach tend to be excluded, reinforcing rather than overcoming social class divisions (Jones and Thomas, 2005; Slack, 2003).

A tension was thus emerging between the government's overarching aim of widening participation policy as one of 'social justice', which demanded equality of access to HE, and the 'meritocratic' interpretation of the policy when translated into practice which saw opportunities provided only to those with the 'ability' to utilise them (McCaig and Bowers-Brown, 2007; Laffin and Thomas, 1997). For New Labour social justice was based on creating equality of opportunity rather than ensuring equality of outcome, allowing the market to create meritocratic pathways where those with merit are selected for the best jobs. However, for meritocracy to work, education must be perceived as a means of mitigating social inequalities rather than reproducing them (Lane and Birds, 2013). This philosophy underpins widening participation and the social mobility it is meant to bring but ignores how the persistent social class gap in educational achievement at school acts as a major impediment to meritocracy (Perry and Francis, 2010). The social reproduction theories of Bourdieu (1986) (discussed later in this literature review) will be used to explain how education systems themselves reproduce historic patterns of inequality across generations. One could argue we have had equality in opportunity in the UK with regard to education since the 1944 Education Act, which is frequently seen as the first State led attempt to interrupt the social inequalities in education by making free compulsory schooling up to the age of 15 available for all, including the poor (Blackburn and Marsh, 1991). However, it can be argued that people from lower social classes are less capable of drawing on the full raft of educational opportunities that are now available (Sen, 2009; Perry and Francis, 2010) owing to a paucity of Bourdieu's capitals that have value within this field.

These ideas will be revisited later in this chapter but at this point I simply observe the ambiguity of widening participation policy, both how the policy is articulated by government and how it is implemented by universities (Jones and Thomas, 2005). The traditional approach to widening

participation falls into the 'deficit model', whereby those underrepresented in HE are seen as lacking the characteristics needed to succeed and outreach activities are designed to raise their aspirations so to meet middle class expectations (Gewirtz, 2001; Read *et al*., 2003; Burke, 2012; Marshall and Case, 2010; Gamarnikov and Green, 1999; Leathwood and Hayton, 2002). This focus is arguably too narrow, leading to an over-simple policy response to the social gap in HE participation that does not acknowledge the complex cultural and social barriers influencing attainment before point of entry to HE. Furthermore, these policies 'have little or no impact on institutional structures and culture' (Jones and Thomas, 2005 p617) but rather the role of universities is to reach out to target groups without making any internal changes to accommodate students from different backgrounds. Nonetheless, deficit narratives that place blame with the individual are popular with governments as they remove responsibility from the state, placing the onus on the citizen (Raco, 2009; Spohrer *et al*., 2018).

Up to this point widening participation and higher education had enjoyed significant policy attention and state funding. However, the issue would soon be eclipsed by the imminent global economic crisis, the aftershocks of which would hit Britain's government finances hard (Thomas *et al*., 2010). In 2008 the UK was declared as officially in economic recession. Naturally, the next government HE white paper, *Higher Ambitions,* published the following year reflected this, announcing the end to state funded expansion of HE, but maintaining a strong emphasis on widening participation and fair access, grounded firmly in the benefits such policies would bring to the economy. In spite of this public commitment to widening participation and fair access, ultimately, the question of how to pay for the increasing demand for higher education could not be ignored. In 2010, to limit government spending on higher education, student number controls were re-introduced including fines for any institution that over-recruited (Thompson and Bekhradnia, 2011). Here emerged yet another tension between, on the one hand, the need to reduce public funding and, on the other, to widen access. Even with the policy attention given to widening participation, this move may have prompted universities to be more restrained in terms of offering places to widening participation students, less likely to take a risk on an applicant with slightly lower grades (Whitty *et al*., 2015). More significantly than this however, in 2009 the government commissioned Lord Browne to review the funding of higher education in a post-recession climate. Although commissioned by New Labour, Lord Browne's panel did not report until autumn 2010, by which time a Conservative-led Coalition government was in power. The contentious and vote-losing issue of solving student finances was thus ignored in the General Election agenda, and the challenge was left for the arriving government.

2.2.2 Conservative-Liberal Democrat Coalition policies (2010-2015)

The future place of widening participation within higher education was uncertain until the Coalition government published their flagship white paper (DBIS, 2011), responding to Lord Browne's report on higher education funding and student fees (Browne, 2010). In order to address the 'large budget deficit we [the government] were left with' (p2) the document set out plans to triple the student fee from £3000 to £9000 for some institutions. The increased personal contribution made by students towards their tuition fees has been said to have intensified the marketization of higher education and the 'student as consumer' model of delivery (Tomlinson, 2017). The white paper, aptly titled *Students at the Heart of the System* attempts to create a market out of higher education through reforms that position the student as a customer. However, some argue that the marketization of education perpetuates the social class gap in attainment as middle class parents have 'stronger purchasing power' due to their various social and cultural capitals within the field of education (Perry and Francis, 2010, p2; Ball, 2003). These ideas are explored thoroughly later in this literature review.

In spite of its consumer-orientated approach to higher education, the *Students at the Heart of the System* white paper retains an emphasis on widening participation with chapter five devoted to the issues of social mobility and widening access. The white paper stresses the need to promote fair access to the most selective universities for 'bright young people from disadvantaged backgrounds', a change in tone from the pre-2011 government widening participation rhetoric of 'raising aspirations for all' (McCaig, 2015 p6). Having previously opposed an increase in student fees, the Liberal Democrats successfully negotiated several allowances to promote widening participation and fair access (Whitty *et al*., 2015). A National Scholarship Programme (NSP) was introduced providing fee waivers for students from poorer backgrounds (HEFCE, 2011) and the powers of OFFA were increased to ensure commitment from universities to widening participation and fair access (DBIS, 2011). To achieve this, those universities charging over £6000 in fees were required to demonstrate how they would invest a portion of their additional fee income to support the access and retention of students from under-represented groups, communicating this to OFFA in formal Access Agreements (McCaig, 2015).

In response to concerns that the increase in student fees would deter efforts to widen participation, the government stated that HEIs must now 'take more responsibility for increasing social mobility' (DBIS 2011, p4) (although there is little guidance on how), stressing the important role of universities' widening participation initiatives. But government then put in place a number of policy changes that ostensibly undermined the ability of universities to do this: first, student fee increases which, arguably, could have acted as a deterrent for economically disadvantaged students. Second, it was announced

that no extra student places would be found so widening participation must therefore operate within the restricted number of student places already available. Third, institutions were then allowed to recruit an unlimited number of high achieving students (equivalent to AAB and above at A-level) (DBIS, 2011). This, it was claimed, would increase competition between institutions for these high achieving students, but, as overall student places were frozen, this meant fewer places available for non AAB+ students. However, the most significant change was the announcement that Aimhigher was to be abolished, falling victim to the government's austerity measures.

The closure of Aimhigher in 2011 prompted a number of significant changes in the way universities conducted their widening participation business. Regional partnerships of universities that were in existence throughout the Aimhigher model were no longer required to collaborate and so approaches to widening participation and fair access became more variable across the sector, depending on the mission and tradition of the university (Atherton, 2012). Within three years of closing Aimhigher and the subsequent decline in collaboration, the National Network for Collaborative Outreach (NNCO) was set up in 2014, a two year project designed to encourage collaboration. However, this fluctuating nature of government policy making has been criticised, with the abolition of Aimhigher resulting in a loss of expertise across the country (Morgan, 2015). Furthermore, increased emphasis on Access Agreements promoted an increased focus on the performance of individual universities in reaching their widening participation recruitment performance indicators. These consist of three key performance indicators (KPIs) published annually by HESA (HESA, 2019) providing publically accessible data on the social profile of students within each university. Although universities are not penalised for failing to make progress in their KPIs, they are used by institutions when setting targets in their Access and Participation Plans (formerly Access Agreements) (Harrison and McCaig, 2015). The impetus for universities' widening participation work thus became far narrower, centred around how they could work to meet their own targets that underpin these agreements, rather than work collaboratively with other universities to raise participation within the sector as a whole (Atherton, 2012). The lack of specific guidance on how widening participation should be implemented on the ground has led to considerable variation in practice across the sector.

2.2.3 Conservative policies (2015-present)

In 2015 a Conservative government was elected and financial cuts to widening participation budgets were deep. In the spending review in October 2015 the Chancellor announced that he would terminate maintenance grants for the poorest students, replacing them with loans, which would save £2 billion a year. This followed an earlier announcement that the National Scholarship Programme

(NSP) - providing fee waivers for students from poorer backgrounds - would cease for undergraduate students from 2015/16. Significantly, the fund HEFCE pay to universities to support their widening participation work, was cut by half in 2015/16 and then cut entirely the following year (DBIS, 2015). The financial burden of outreach and all widening participation related work was thus to fall on the universities themselves, which were still obliged to meet targets set by OFFA (DBIS, 2015). Tuition fees now make up largest income stream for universities (50% in 2016/17 compared with 24% in 2004/05, taking the place of the reduction in funding body grants – 39% in 2004/05 to 14% in 2016/17) (HESA, 2017; HESA 2005), and so it could be argued that universities are more likely to design widening participation strategies that act as a mechanism to maintain their own student numbers, thus securing future income. With their recruitment in mind, universities may concentrate their widening participation outreach on school students already in sixth form who have the academic potential to progress to their own courses (Harrison and Waller, 2017a; 2017b; Rainford, 2017). Changes in the sector are thus encouraging universities to target the 'low-hanging fruit' in their outreach, far removed from the overarching aim of addressing the social gap in HE participation for reasons of social justice. Whether this situation is borne out in practice will be explored using HEAT data in the first of this thesis' analysis chapters.

In May 2016 government published their latest white paper *Success as a Knowledge Economy*. Notably, this is the only White Paper of those reviewed here, published since 2003, that does not have a section dedicated to widening participation and/or fair access. As a consequence there is little policy rhetoric on the subject to analyse, with no discussion of widening participation as a driver for social mobility or guidance to universities in how they conduct and target their outreach. Rather, social mobility is covered only in relation to wider changes in the sector. The paper does, however, set out the government's latest target: to 'double the proportion of people from disadvantaged backgrounds entering university in 2020 compared with 2009' (DBIS, 2016, p14). Unlike New Labour's target which included learners up to the age of 30, the Conservatives focus on young people leaving school (up to 19 years old). Here there has been a narrowing of the definition of widening participation and the groups able to benefit.

With this target in place, and alongside the deep cuts to widening participation budgets so recently felt, government announced in March 2016 that money would be made available for universities through the two year National Collaborative Outreach Programme (NCOP), with the possibility that funding would be extended for a further two years if the project could be shown to be effective (HEFCE, 2016a). As part of NCOP, partnerships of universities and colleges were invited to bid for money to target intensive outreach towards areas where HE participation is lower than expected given

the GCSE results. It seems that the targeting of students whose attainment at GCSE is already sufficiently high to enter university goes back to former 'cream skimming' practices and fails to make allowances for the complex relationship between attainment and socio-economic background. According to HEFCE, this 'targeted and tailored' approach will help reach the government's participation target.

At the same time as HEFCE launched their NCOP initiative, momentum was building within the Department for Education that universities should start to play an increasing role in raising the attainment of students in school. The 2016 Green Paper, *Schools that work for everyone* announced that '…universities could and should play a direct role in raising attainment in schools to widen access, and for this to be made a condition of their fair access requirements' (DfE, 2016a, p18). Following this, OFFA asked universities to set out how they would increase the work they were doing to raise attainment in schools and colleges (OFFA, 2017b, p1). This was the first time universities had been asked by government to focus specifically on raising attainment in schools.

In 2018 the OfS was created as the new regulator for the HE sector in England. The OfS inherited the duties of HEFCE and OFFA but rhetoric from the new regulator around widening participation remains strongly committed (OfS, 2018a). The OfS are continuing to ask universities to play more of a role in raising attainment in schools through their outreach (OfS, 2018b) as well as extending funding provided to HEIs under the NCOP initiative for a further two years until 2020.

To summarise, the funding and shape of widening participation has changed significantly over the past two decades. It has moved from record high levels of Government funding during the days of Aimhigher (2004-2011) to budget cuts with a tendency towards short-term policy making and funding available today. As a result we are left with no long term strategy for widening participation and for this reason there is a great deal of uncertainty over the future of universities' outreach work. Although this is unfortunate it does highlight the need to critically evaluate the ways in which universities are conducting their outreach, and the impact this outreach might have had, in order to shape the future of widening participation delivery. Drawing on data available through HEAT, the first two analysis chapters in this thesis explore the lessons that can be learnt by looking back at delivery historically.

Next the interplay between attainment and socio-economic background in restricting HE participation is explored, with a view to better understanding why lower socio-economic groups tend to be under-represented in HE. However, before this it is necessary to discuss a view to widening participation and social mobility that is not considered in government literature, a view that questions whether social mobility really can lead to social justice.

2.3 Social mobility as social justice

It must be observed at this point that HEAT was, between 2014 and 2017, part funded by government and, as an employee of HEAT, so was this researcher. While this researcher, with her social science background would undoubtedly support the notion that higher education is desirable and valuable it could be argued that widening participation is simply concerned with moving a few people up the ladder of an enduringly inequitable social system (Reay, 2013). More radical commentators such as Reay (2012; 2013) call for increased value to be placed on vocational qualifications and occupations, for parity in pay between the highest and lowest earners in the country and equality amongst the social classes. In a special issue on education and social mobility in the *British Journal of Sociology of Education*, A.H. Halsey, Emeritus Professor at Nuffield College, Oxford reminds us that there is more to 'fairness' than social mobility (Halsey, 2013) and it should not be reduced to measuring the chances of people from working class backgrounds entering professional occupations. In the same issue Diane Reay, who, like Halsey came from a working class background to become an Oxbridge professor includes the following quotation from ethical sociologist R.H. Tawney:

'…individual happiness does not only require that men [sic] should be free to rise to new positions of comfort and distinction; it also requires that they should be able to lead a life of dignity and culture, whether they rise or not.' (Tawney, 1964, p108 cited in Reay, 2013).

Drawing on Tawney's quotation above it could be argued that widening participation and the social mobility it is meant to bring encourages a deficit view of working class occupations (Valencia, 1997; Brown, 2013a). Social mobility does nothing to resist the increasing 'demonization' of working class culture in Britain, described by Owen Jones in his book *Chavs,* as a stereotype used by government to avoid genuine engagement with the problem of social inequality (Jones, 2011). Where social mobility does happen it can be just as painful. Lynsey Hanley (2015) talks autobiographically about her own mobility journey, after being the first in her family to attend university she was left not knowing fully where she belonged, and is a candidate for the condition Richard Hoggart identified in his 1957 influential work *Uses of Literacy* as "uprooted and anxious". This indicates that even the most successfully socially mobile may feel a sense of displacement and identity confusion as a result of leaving a social environment in which they are comfortable.

However, as researching the efficiency of widening participation outreach activities is the goal of this thesis, central assumptions are that widening participation is a worthwhile social policy that will indeed boost social mobility through improved job opportunities. This claim is not unreasonable as research from countries socio-economically similar to the UK including Norway, Iceland, Sweden and

Finland shows higher levels of social mobility within these populations. For example, research in the UK has found that 50% of children will end up in the same class position as their parents while the comparable figure for the Scandinavian countries is less than 20% (OECD, 2010a; Trades Union Congress, 2010). It has also been suggested that it is the education systems in these countries that have made the difference in regard to the achievement gap (Sutton Trust, 2011). OECD analysis lends support to the Sutton Trust's findings, showing that 'cross-national differences in inequalities of performance [across the world] are associated more closely with the characteristics of the education system than with underlying social inequalities or measures of economic development' (OECD, 2010b). From this research it is reasonable to assume that education policy can make a difference to socio-economic inequalities and boost social mobility (Green, 2011). It is in these ideas that this thesis is grounded and thus it is justified and worthwhile exploring the effectiveness of widening participation outreach activities. The next section returns to a discussion of HE and the complex relationship between school attainment, socio-economic background and HE participation.

2.4 The role of prior attainment in restricting HE participation

It is no surprise that the most disadvantaged students are less likely to attend university when the stark disparities in school attainment for the poorest children when compared with the richest are considered. Although in the UK we have had equality of opportunity in terms of education since 1944, when the Education Act brought free compulsory education for all, unfortunately research consistently shows that this equality of opportunity does not translate into equality of outcomes and that educational attainment is stratified by social class. This is a phenomenon that has troubled sociologists for decades (see Halsey *et al*., 1961; Jackson and Marsden, 1966; Glass, 1954; Whitty, 1974; Hartas, 2011). There is wide academic discussion about the terminology used and the term 'lower social class' is often exchanged for disadvantage, deprivation or poverty and may be measured in a number of ways, including household income, eligibility for Free School Meals (FSM), parental occupation or education and home postcode or area-based measures of disadvantage. Whichever measurement is used, this gap in attainment remains visible and has become known as the 'poverty gradient' (Gorard, 2012). It is this pattern on which most policy debates about the need to raise the educational outcomes of disadvantaged students are based.

Gaps in educational outcomes have been shown in children as young as three years old (Dickerson and Popli, 2016; Goodman *et al*., 2009), the gap then widens between the age of three and five so it is well established by the time the child starts school. Analysis of household income in the UK by Waldfogel and Washbrook (2010) shows that low income children are nearly one year behind their

peers on vocabulary tests at the point of school entry. Gaps then continue throughout primary school (Sullivan *et al*., 2013; Anders, 2012) and become widest and most damaging in terms of influencing future progression options in secondary school at age 16 (Crawford, 2014). The implications of poor attainment at this age can last a lifetime, with grades and subject choice being the main determinants of participation in post age 16 learning, then subsequent entry to HE (Crawford, 2014; Chowdry *et al*., 2009; Anders, 2012), the type of university chosen (Boliver, 2013) and from there entry to the professions (SMC, 2016). Crawford (2014) estimates that 95% of the social gap in HE progression can be explained by differences in attainment at age 16 (GCSEs). This means that when students with similar levels of prior attainment are compared, the social gap for those going to university nearly disappears. Chowdry *et al*. (2009) found that A-level grades were also important but these have more of an organising effect, deciding where a student would go to study rather than whether they would go at all.

It is next considered whether universities may contribute to the underrepresentation of disadvantaged students in HE through discriminatory admissions processes. This was the focus of a government commissioned but independent inquiry, the Schwartz Report, which in 2004 concluded that admissions processes were not to blame for the social gap in HE access, and where poorer students with adequate entry grades do apply to university, they were equally likely to gain a place as their more affluent peers.

However, if access to the most selective universities is considered in isolation, the data tell a different story. Boliver (2013) used UCAS data from 1996-2006 to examine access to Russell Group universities and found that, at that time, access was far from fair with applicants from state schools being much less likely to receive an offer in comparison with their equally well qualified peers from private schools. After examining UCAS admissions data for 2008 Noden *et al.* (2014) drew the same conclusion. This will inevitably have undesirable consequences for social mobility as further research shows that graduates from more prestigious universities are more likely to go on to secure professional occupations and earn higher salaries (Power and Whitty, 2008; Hussein *et al*., 2009).

This debate notwithstanding, the evidence on the poverty gradient is clear: the social gap in attainment exists before school starts but continues to grow, and actually worsens across progressive stages of education. This is in spite of a compulsory schooling system designed to reduce inequalities by family background through providing opportunity for all (Gorard, 2010a). It is concerning to note that the differences observed cannot be explained by differences in ability across social groups. Research by Feinstein (2003) found that children with high cognitive test scores from disadvantaged

backgrounds start to fall behind less able children from more advantaged backgrounds from the age of three and a half years. This suggests that the meritocracy on which social mobility is based is failing and that environmental factors during the pre-school phase of a child's life contribute to their lack of development, rather than their poor achievement being a result of inability.

These findings provide empirical evidence on where efforts to widen participation should be based. It follows, therefore, that the most valuable outreach interventions should be targeted towards raising attainment by age 16 to ensure young people have sufficient grades to enter university, rather than focusing on the under-represented sample of low income students who have already gained sufficient grades to enter sixth form. The targeting of the outreach activities that have been delivered in the past will provide the focus of the first research question in this thesis, and the analysis presented in Chapter 4. However, these findings contest the logic behind the insistence of consecutive governments to focus widening participation outreach on raising the aspirations of already suitably qualified students, for example through the NCOP project. Although raising attainment is now also a requirement, there has been relatively little guidance from, first OFFA, and now the OfS on exactly how universities are expected to engage in this. Thus it seems the specific role of universities in widening access is becoming less clear.

With the aim of casting some light on how universities may be able to add value, the chapter moves on to review sociological research seeking to explain why the poverty gradient exists. To better understand the complex educational decision making processes of young people Bourdieu's work is introduced and discussed. Educational sociologists frequently draw on the work of French Sociologist, Anthropologist and Philosopher, Pierre Bourdieu to explain the lower educational outcomes of the lower social classes. Bourdieu theorises that, within the field of education, economic, social and cultural 'capital' are commanded by the middle classes, and transferred across generations in order to maintain social order (Reay, 2004; Nash, 1999; 2002; Francis and Mills, 2012; Archer *et al.*, 2014; Davies *et al.*, 2014; Whitty *et al.*, 2015).

2.5 The interplay between attainment and social class – Bourdieu's perspectives

Raising HE participation amongst lower socio-economic groups or lower social classes has been a consistent aim of widening participation over the past two decades and can be found in numerous government policy documents (NCIHE, 1997; DfES, 2003; DBIS, 2009; 2011; 2014; 2016). But what is meant by social class? And who are the intended recipients of widening participation policy? The following paragraphs discuss social class according to Bourdieu whose conceptualisation encourages

us to consider the range of components that make up social class and thus challenges the idea that social reality can be easily measured or quantified.

Bourdieu's work on social class introduced three types of *capital* as being fundamental to social class divisions (Bourdieu, 1997). *Economic capital*, which is easily convertible, *social capital*, which is comprised of social networks or connections and *cultural capital*, which can be seen as cultural competences which may be embodied. The term 'capital' is therefore used by Bourdieu to describe the resource that one commands in order to dominate, or resist domination within social relations(Bourdieu, 1986). Capital has been described as an 'organising principle' whereby actors are positioned within a social space according to their levels of economic, cultural and social capital (Anheier *et al*., 1995).

These three forms of capital combine to produce an individual's *habitus*, with this being an individual's learned set of preferences or predispositions. Transmitted through upbringing and usually held for the life-course, this disposition is subconscious and orients one's behaviour and social activities (Davies *et al*., 2014). Habitus informs an individual's sense of what is possible and reasonable given their position in the social structure (Egerton and Roberts, 2014). The term *field* refers to the formal and informal norms governing a particular social sphere of activity. In the context of this study, the field of interest is education. While fields are fairly autonomous, they may also be interconnected with other fields. Fields are characterised by their own regulative principles and people's positions within a particular field stem from a combination of their habitus and the capital they can mobilise in that field. Within the field of education, it is the social activities, cultural standards, dispositions and expectations of the middle classes that are valued and presented as the model for success (Whitty *et al.,* 2015). The corollary of this is that young people from lower socioeconomic groups may feel less instinctively 'comfortable' within the field of education.

Different people hold different volumes of different capitals within different fields. For example, Anheier *et al*. (1995, p863) argues that the 'nouveau riche' (their words) may possess high levels of economic capital but lower levels of cultural capital whereas established business leaders (i.e. not necessarily nouveau riche) rely on high levels of social capital within their business networks, and academics often hold high levels of cultural but low levels of economic capital. However, it is the combination of all three types of capital that are available to individuals that determines their social position relative to other individuals (Bourdieu, 1989), or in other words, determines their social class. People with similar levels of combined capital occupy the same social group and Bourdieu argues that, as a result of this grouping, tend to develop similar behaviours and tastes which further establish

networks (Bourdieu and Wacquant, 1992). Furthermore, capitals can be inherited so some are born richer in all three types of capitals, although as argued later they can also be acquired throughout one's life. All three types of capital are likely to play a role in determining an individual's participation in higher education and, as Bourdieu and Passeron (1977; 1979) found in the French higher education system economic, cultural and social capital all act to enable and restrict access to education (Whitty *et al.,* 2015; Reay *et al.,* 2001). Next the three forms of capital and the ways in which they may act to influence HE participation and choice of HE institution are considered.

Economic capital is arguably the most straightforward of these concepts, often taking the form of financial possession, and commonly measured through household income (eligibility for Free School Meals (FSM) is often used by the Department for Education as an indicator for disadvantage). Whilst it could be argued that low economic capital should not necessarily impact educational attainment adversely, thanks to free compulsory schooling in the UK, in reality, this is not the case. At the root of this is the drive to increase consumer choice within the education landscape, often presented as a neo-liberal interpretation of fairness and efficiency (Apple, 2001). However, research shows how fewer choices exist for families with lower economic capital (Whittey et al., 1998; Ball, 2003). Low-income families cannot afford to live in neighbourhoods that would place them in the catchment area for such institutions (Lynch and Moran, 2006) or the paid private tuition that can help prepare their children for the types of exams that will enable them to enter universities (Smyth, 2009). According to Kirby (2016) private tuition has risen by over a third in the past decade, with approximately 25% of state educated 11-16 year olds receiving private tuition in 2016. According to the research, those who receive private tuition disproportionately come from advantaged backgrounds, probably due to the financial cost involved. Thus economic capital can have a profound impact on young people's ability to gain the attainment required to enter university.

In relation to higher education attendance, a fear of debt is often hypothesised to act as a deterrent to participation for students from lower socio-economic groups (Gorard *et al.*, 2007; Wilkins *et al.*, 2013; Whitty *et al.*, 2015). However, there is limited evidence that this is the case. Applications and admissions data from England for the periods in which university tuition fees have grown rapidly show no decline from young students from lower-income backgrounds (ICF, 2014). This could be because of the favourable nature of the loan scheme which poses no up-front costs and gives assurance to potential students that if their incomes never reach a certain level they are exempt from repaying the loan. Furthermore, OFFA (2010) found that financial incentives that could mitigate indebtedness, such as student bursaries, have been largely ineffective in influencing demand by students from low-income backgrounds. This suggests that impending debt from higher education has not been a major

barrier thus far. Neither should a student's economic capital impact the type of HE institution they choose as currently the majority of institutions charge the maximum fees, this is in spite of government attempting to introduce variable fees since 2004 (DfES, 2003). There is, however, some evidence to show that working class students may choose to study at universities that are in close proximity to their home (Mangan *et al.,* 2010; Simões and Soares, 2010), possibly due to their concern over the cost of leaving home to become a student.

In addition to economics, Bourdieu conceptualises that the more complex sociological concepts of cultural and social capital are particularly relevant to success in the field of education. Cultural and social capital are less easily defined and far more difficult to measure than economic capital but, according to Davies *et al*. (2014), may be more influential in determining whether a person progresses to HE than economic capital, although each type of capital forms part of the story. It is also important to note that Bourdieu's capitals do not operate in isolation but can be exchanged for one another, for example economic capital can be converted to cultural or social capital through private schooling or good levels of telecommunications access at home, both enabling individuals to build social networks (Anheier *et al*., 1995; Demack *et al*., 2012). As university comes at a cost in England, higher education is a further example of converting part of one's economic capital to cultural and social capital, albeit with state assistance. According to Bourdieu the financial cost of 'buying' cultural capital depends on the chances that it will yield further economic capital in the longer term (Bourdieu, 1986). This suggests that, without government control, university fees could rise until the graduate wage premium no longer makes investing in higher education worthwhile. According to Bourdieu, exchanging economic capital for education is a 'solid investment' (Bourdieu, 1986, p54), with the long term benefits comprising increased amounts of all three types of capital. However, Bourdieu was not writing at a time when the cost of HE was quite as high as it is today.

The following paragraphs provide a more in-depth discussion of Bourdieu's concepts of cultural and social capital, including the idea of *habitus* that is similar to, but conceptually different from, cultural capital. The influence of these concepts on educational decision making will then be considered. These insights into social class are important in explaining why people from lower social classes tend to achieve lower educational outcomes (such as school attainment) as well as a lower likelihood of progressing to HE. Alternatives to Bourdieu's work are also given. These propose that Bourdieu's arguments tend to be too deterministic or static, something that is problematic when there is evidence to show people are able to transform their social class and that HE offers a vehicle through which to achieve this (Byrom and Lightfoot, 2013).

2.5.1 The importance of Cultural and Social Capital

Cultural capital refers to the culturally valued habits, skills and styles that can be used as currency to position an individual within a social hierarchy (Swidler, 1986). In this respect cultural capital is removed from monetary value and instead relates to culture that is often passed down through families. Bourdieu (1977, p495) defines cultural capital as 'instruments for the appropriation of symbolic wealth socially designated as worthy of being sought and possessed'. In the field of education, young people from middle class backgrounds are exposed to what is all too frequently perceived as a more acceptable or desirable form of cultural capital at home, through interactions with their parents, and the home learning environment organised by their parents (Gaddis, 2013). Cultural capital can thus help these young people develop a habitus or a self-confidence capable of navigating the education system. Conversely, young people from low social groups are less likely to be exposed to what is necessary to build the sort of cultural capital associated with the middle classes and are therefore placed at a disadvantage when they do not display the appropriate habitus in school. Lacking cultural capital that is valued within the field of education may negatively shape the attitudes and dispositions of these young people towards school, forming part of their habitus, which ultimately affects educational achievement and attainment.

Here it is important to note the difference between Bourdieu's constructs of cultural capital and habitus. Reay (2010) argues that one of the critical characteristics of habitus is that it is embodied. According to Bourdieu (1990, p70), habitus is expressed through durable ways 'of standing, speaking, walking, and thereby of feeling and thinking'. Reay explains that habitus is interconnected with cultural capital, with habitus lying beneath cultural capital 'generating its myriad manifestations' (Reay, 2010, p 436). Reay also comments on the close relationship between habitus and field. Quoting Bourdieu and Wacquant (1992, p127), 'when a habitus encounters a field of which it is the product, it is like a 'fish in water': it does not feel the weight of the water and it takes the world about itself for granted'. However, when a habitus encounters a field that is unfamiliar, the result can be destabilising or antagonistic.

Before beginning an examination of the influence of cultural capital on educational outcomes it is also important to separate Bourdieu's notion of culture from ethnicity. British society is often described as 'multicultural', with a plural identity that celebrates different ethnic cultures (Parekh, 2000) and, after all 'ethnicity is something to do with 'culture'' (Modood, 2004, p88). But HE access for ethnic groups is a separate issue than that for socio-economic groups. Indeed, widening participation to ethnic minorities has made considerable progress over the last decade and young people from nearly all

ethnic minority backgrounds are now significantly more likely to go to university than White young people (Crawford and Greaves, 2015). Whereas the social class gap in HE participation can be mostly explained by differences in prior attainment at school, the gap between ethnic minorities and White students cannot. For example, pupils of Black, Pakistani and Bangladeshi ethnic origin tend to perform worse in national tests and exams taken at school than their White British counterparts and yet they are, on average, more likely to attend university. It is not the case that these high participation rates translate into success when at university but as this thesis is concerned with access, the underachievement of ethnic minority university students is beyond my remit. Researchers have proposed that ethnic minority families have higher aspirations and expectations when compared with their White counterparts in an attempt to explain the higher participation rates for ethnic minority students (Crawford and Greaves, 2015), although data available to show this are limited, and as discussed later, the term aspiration is contested. However, more recent migrants to this country are shown to have the highest HE progression rates, perhaps because they migrated to give their children more opportunities.

This trend does not sit easily with Bourdieu as it is unlikely that ethnic minorities possess the dominant middle class cultural capital he talks about as needed to succeed in education. Indeed, Erel (2010) states that migrants' cultural capital is determined by their country of origin, and whether this is valued in the destination country depends on how good a fit that culture is. So why have ethnic minorities been successful in accessing HE? Yosso (2005) suggests that ethic minority groups do hold valuable cultural capital that can go unrecognised, capital that is often in the form of aspirations and attitudes. These aspirations are transferred from migrant parents who are successful in giving their children high educational ambitions (Modood, 2004). It is unlikely that the culture held by different ethnicities would have been a factor for Bourdieu who, writing in France in the 1970s-90s, would have observed a more ethnically homogenous society. Nevertheless Bourdieu's theories may be of relevance in explaining ethnic minority participation in HE.

Returning to my discussion of social class and the dominant forms of cultural capital that are valued within the field of education, these are associated with practices often connected with a middle class habitus. Talking about speech, Bernstein (1977) argued working class and middle class children are taught different 'codes' at home, and similarly Bourdieu observed that these codes take the form of preferences, attitudes and behaviours, with those that are typical of the middle classes favoured in school environments. Thus these behaviours become the dominant forms of cultural capital. According to Bourdieu and Passeron (1979) these include 'highbrow' activities such as art, classical music and literature (DiMaggio, 1982) but these have been extended by Prieur and Savage (2011) to

include scientific, technical and media 'current affairs' (Davies *et al.*, 2014) and playing sport, a musical instrument or attending theatre or cinema (Demack et al., 2012) to reflect modern society.

Other researchers (Farkas *et al.*, 1990; Lareau and Weininger, 2003; Lee and Bowen, 2006; Dumais and Ward, 2010) argue that parent/school interaction is an important feature of the cultural capital embodied within a middle class habitus. Well educated and informed parents have a greater level of understanding, knowledge and interest that enable them to 'play' the education field (Reay, 2004). This sense of entitlement allows these parents to successfully negotiate the system so that they send their children to the best schools and take up the best opportunities. The emphasis placed by government on parental involvement in school and their children's education makes differences in cultural capital of young people more visible (Reay, 2004). These elements of the middle class habitus combine to encourage achievement in middle class children, leading to the intergenerational transmission of that habitus. Thus, education is said to reproduce inequalities based on social class because those who already possess the dominant culture are further rewarded with higher levels of educational achievement and attainment, maintaining their position in the social order (Naidoo, 2004).

This is not surprising as upward social mobility relies on successfully competing in a hierarchy of academic qualifications, and therefore the key to being upwardly mobile is to 'stay ahead of the crowd' (Brown, 2013b). Reflecting on Bourdieusian analysis of social class, this competition typically favours those from higher social classes due to their material and cultural assets within this field. The neoliberal school system in England is one that valorises choice but fails to support those people who are less able to exercise their right to choose wisely (Ball, 2003; Reay, 2012). Returning to Bourdieu's capitals, parents who hold high levels of the dominant form of cultural capital are likely to take a more engaged and well informed approach to their children's education, often reproducing their own experience. In doing this such parents exercise their right to choose in a way that gets the best for their child, often unintentionally at the expense of other children whose parents' lack the required cultural capital in this field. Thus a system based on choice and, in theory, equality of opportunities has produced a fiercely competitive marketplace for those opportunities, something that Weis *et al.* (2014) describe as producing a type of 'class warfare'. The research consistently shows that middle class parents mobilise their cultural, social and economic capital to invest and strategize in their children's education, thus ensuring they have a better chance than other people's children (Reay *et al.,* 2013). These cultural factors accumulate throughout school life, ultimately causing the inequalities in HE access for working class children that the widening participation agenda is set up to tackle.

This competition to stay ahead is also visible in *which* university a student attends. Like people, institutions have a habitus that can act to alienate or exclude those who have an individual habitus that does not match that of the institution (Reay *et al.*, 2009). Qualitative research suggests that some working class students may be put off from applying to more prestigious universities altogether due to fears that they will not 'fit in' (Forsyth and Furlong, 2013; Leathwood and O'Connell, 2003; Read *et al.,* 2003), even if they do have the necessary grades to enter (Reay *et al.,* 2001). This is in spite of being aware that they would get a higher graduate premium if they studied at a higher status university. Authors have drawn on the idea of habitus to argue that class identity influences educational decision making (Reay *et al.*, 2005; Reay *et al.*, 2010) with students' choice of university shaped by notions of familiarity and comfort linked to places where they feel there are 'people like us' (Bourdieu, 1990b). This, combined with the tendency for working class young people to achieve lower A-level grades has meant that these students in the UK have concentrated in less prestigious post-1992 universities.

However, dominant forms of cultural capital are always specific to the field in question. For example, it is key to Bourdieu's definition of cultural capital that the cultural wealth possessed must be worthy of being sought, something that will change depending on the social space or field being occupied. And the social spaces occupied by British people are huge. Working class actors still hold high levels of cultural capital within their own fields, for example Nayak's (2006) ethnographic study of working class males in the North East of England show social worlds built around clubbing, drinking and watching football. But the dominant form of culture within education favours middle class values and so the culture described in Nayak's study holds little currency in educational success. Reay *et al*. (2001) describe someone without the favoured values and norms as 'an outsider' (p870), less well able to negotiate that new and unfamiliar social field.

This raises the question of whether or not, according to Bourdieu, it is possible for people to change their social position within a certain field. Critics of Bourdieu argue that his conceptualisation is too inflexible, ignoring human agency and human determination; leaving no scope for actors to resist and 'transform' their position (Giroux, 1983; Jenkins, 2002). For Bourdieu, the social space 'ultimately remains one in which things happen to people, rather than a world in which they can intervene in their individual and collective destinies' (Jenkins 2002, p91). However, widening participation in HE is based on the premise that it *is* possible to transform one's position in the social hierarchy (Byrom and Lightfoot, 2013). For widening participation to be a success, marginal students who do not intend going to university must be persuaded that HE is of value and that they should attend in order to improve their educational outcomes and remould their habitus. This is the definition of a socially

mobile society. However, this idea seems at odds with Bourdieu's conceptualisation but Mills (2008) argues that Bourdieu has been misinterpreted as overly deterministic and recognises that participation in HE can act as a mechanism to reshape one's class, allowing students from lower socio-economic groups who have been the recipients of widening participation outreach to move away from their working class background (Reay, 2001). Whether Bourdieu's concepts allow this or not, they provide a useful framework for understanding potential barriers in education and resist the use of narrow measures of disadvantage commonly used to quantify social class in education research. These include the Free School Meal eligibility or pupil premium measures used by the Department for Education (DfE), or broad area historical HE participation measures such as POLAR (see Chapter 1) used by the Higher Education Funding Council for England (HEFCE), now the Office for Students (OfS), and the Universities and Colleges Admission Service (UCAS). Next Bourdieu's social capital is examined, including what it is and why it might be important in influencing access to HE.

According to Whitty *et al.* (2015) Bourdieu defines social capital less well than he does cultural capital. Social capital is defined as 'the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition' (Bourdieu, 1986, p148). Fundamentally, the concept describes the social networks available to people which can be used as a resource to increase one's power or social status within a field (Bourdieu and Wacquant, 1992). Social capital is conceptually different from cultural capital in that the former relates to *who* one knows through their social networks and the latter to *what* one knows or their accumulation of knowledge and skills. Importantly to outreach which seeks to raise both types of capital in young people, it is easier to transmit cultural capital than social capital. Outreach activities might reasonably be able to increase the forms of knowledge in young people that are valued within a given field, thus raising their cultural capital. To provide a young person with a new social network on which they can draw, thus increasing their social capital, is a more challenging task that is likely to be more difficult to create artificially, where it does not naturally occur within families.

Another prominent thinker on social capital is the American sociologist James Coleman who defines the concept as 'the social networks, and relationships that are of value for the child's growing up' (Coleman, 1987, p36). Coleman stresses the value in the practices developed through belonging to certain social groups, for example those developed in private schools, although equally strong social networks also exist in state schools, or villages in developing countries (Youttananakorn, 2006), the social networks formed in school have been shown to enable HE participation. Observing the relationship between high levels of social capital and school attainment in certain schools in America, Coleman comments on the importance of close relationships between parents and schools in order to

build a strong sense of community that fosters the attitudes, behaviours and beliefs that encourage achievement in school (Coleman, 1987). Here social capital and cultural capital are linked. A recent report by the Children's Commissioner for England made media headlines for claiming that better educational outcomes of children living in the south of England is partly due to better levels of parental engagement, with southern parents more likely to take an active interest in school life than those living in the north (Children's Commissioner, 2016). Although this argument chimes with the familiar deficit perspective favoured by government for placing blame with parents, it also resonates with Coleman's comments on the importance of strong parent school ties.

Although both Bourdieu and Coleman view social capital as a way to gain social advantage through the building of networks, Coleman's ideas are far more optimistic with regard to the potential of family life and education as engines of social mobility (Lareau, 2001). Here Coleman and Bourdieu's conceptions of the social world differ as, unlike Bourdieu, Coleman believes the building of social capital is a possibility for all and therefore does not consider or acknowledge the processes of social domination and power that operate to limit opportunities for certain social groups whose members lack the dominant forms of capital within the field in question. For Coleman, everyone can go as far as they wish in education; and in British education this is true, in theory. But as the data show us, HE participation is far more likely for those whose parents went to university, suggesting social background is a limiting factor for academic achievement.

So far this chapter has provided a discussion around how high levels of middle class social capital promote academic achievement. However, this may not always be the case and Putnam (2000) distinguishes between two types of social capital: bridging and bonding. Bridging social capital describes the relationships that can be formed across diverse social groups whereas bonding social capital describes the strong connectedness that operates within closed social networks of family and friends. Therefore, like the middle class habitus embodied by students more likely to succeed in education, a student must have the right type of social capital shared across the right social networks. For example, high levels of bonding capital from a group with a low tradition of HE participation are no more likely to lead an individual towards HE progression than an individual with less bonding social capital. More positively, bridging social capital can enable individuals to 'get ahead' in society by being involved in networks with cross-cutting ties (Putnam, 2000). An example of this in relation to widening participation may arise when pupils from disadvantaged schools receive outreach activities delivered by HE staff and students.

Both cultural capital and social capital are abstract concepts of social class that are intangible and therefore inherently difficult to measure. In view of the differences between Bourdieu and Coleman with regard to social capital, it is likely that everyone may have a different perception of the concept. However, a number of attempts have been made to measure the impacts of both types of capital on educational decision making and outcomes to try to identify what it is about social class that makes the difference. The power of parental education levels to reproduce success in the education of their offspring is recognised not only in the measurement of cultural capital through the habitus transmitted from parent to child, but also in the measurement of social capital through the social networks to which well-educated parents have access. A wealth of studies have found a very strong association between parental education and progression of their offspring to higher education (Sullivan *et al*., 2014; Davies *et al*., 2014; Gayle *et al*., 2002; Anders, 2012; Anders and Mickelwright, 2015). As a result, children whose parents do not hold a university degree have become a target group for widening participation outreach activities (Spiegler and Bednarek, 2013). Social capital is equally difficult to measure; quantifying the social networks of young people and their parents is no easy task. However, the characteristics of the school a child attends and the neighbourhood in which they live can provide a useful indication of their likely peer group.

Examples of the ways in which all three types of capital are translated into tangible items for measurement are given next, when the existing research which seeks to explain the socio-economic inequalities in educational outcomes is reviewed. It is important to note that not all measurements for social class discussed next are available for use in the analysis presented in this thesis. But of those data variables that are available, best efforts will be taken to include a broad range of measures that consider all types of Bourdieu's capitals.

2.6 Practical expressions of Bourdieu's theory

If we were able to understand the precise nature of the social and cultural capital middle class parents provide their children within the field of education, universities could develop outreach interventions accordingly. So what daily practices cause the attainment gap? Is it down to specific parenting style or techniques such as reading at home or doing extracurricular activities at the weekend (Jones *et al.*, 2013; SMC, 2015)? Or has intergenerational material poverty really left some families with low educational aspirations as politicians suggest (DBIS, 2010)? Or perhaps is it children's peer groups and social networks within schools that make the difference (Gorard, 2010a)? All of these theories seem possible, unfortunately this research will not reach a conclusive answer as to why the stratification of

attainment at school exists in England; the situation is complex and as yet there is no definitive conclusion (Gorard, 2010a).

Figure 2.1 summarises these ideas, some of which have already been discussed in relation to Bourdieu and others are presented over the following pages, although the explanations given often overlap and are more confused that the diagram suggests. Some variables are both indicators for social class and also cited as possible predictors (e.g. household income) whereas others are cited only as predictors (e.g. factors associated with parenting). Although I have talked about looking for the causes of the social class achievement gap, it is important to note that the studies examined next are only able to show association, and often cannot establish a causal link. Next the role of aspiration in academic achievement is considered, this is a deficit idea that is persistent within widening participation narratives.

Figure 2.1: Possible explanations for the causes of socio-economic inequalities in educational outcomes and their impact on progression to HE
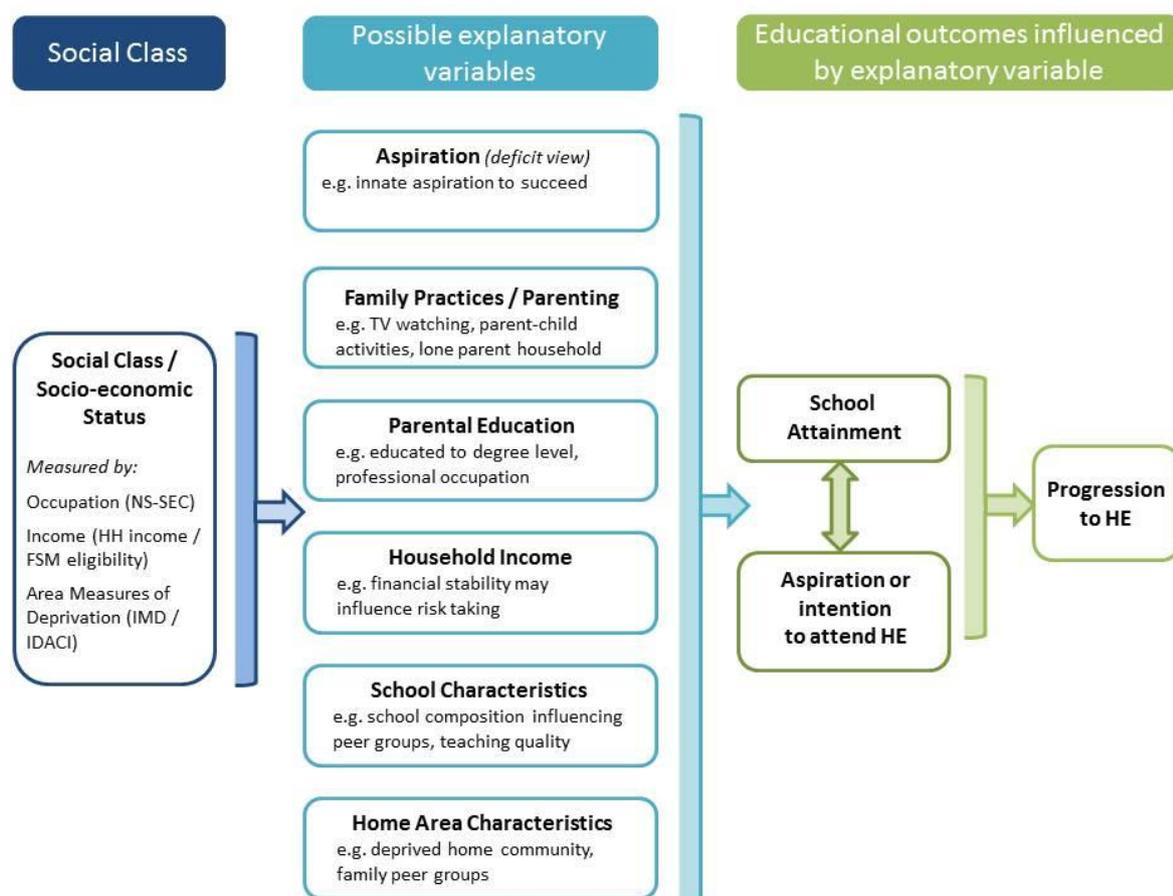
2.6.1 The role of aspiration

The 'low aspirations' of the poor have been put forward so frequently in political discourse to explain socio-economic inequalities in educational attainment that it is now political orthodoxy (Berrington *et al*., 2016; Whitty *et al*., 2015; Brown, 2013a; Francis, 2006). The 'problem' of low aspirations, particularly among working class families, has been a recurrent theme within education policy since New Labour (1997-2004) who stressed the importance of 'raising' people's aspirations, based on the plausible idea that aspirations towards education and future careers will increase motivation and commitment to education, resulting in improved grades at school and the subsequent progression to university (Goodman and Gregg, 2010; Schoon and Polek, 2011). Although some research has shown that students with higher aspirations to attend HE do go on to achieve better in school (Perry *et al*., 2017; Chowdry *et al*., 2009), the link between aspiration and achievement is far from clear and the extent to which aspirations really do impact attainment are still unknown. Gorard *et al*. (2012) question the causal relationship behind aspiration to attend HE and attainment at school stating that 'aspiration can be both a predictor of educational achievement and an outcome of it' (p14). This is indicated in Figure 2.1 by the two way arrow linking attainment and aspiration. Furthermore, there is no evidence that interventions to raise aspirations have an impact on attainment (Cummings *et al*., 2012), although this is largely due to a lack of robust evaluative data (Gorard *et al*., 2012).

In spite of this criticism over the emphasis placed on aspirations in political discourse, the theme was taken forward by the Coalition government who, in their schools white paper of 2010 *The Importance of Teaching* stated that 'In far too many communities, there is a deeply embedded culture of low aspiration that is strongly tied to long-term unemployment' (DfE, 2010, p4). In 2013 David Cameron claimed in a speech that we must help people from poorer households to 'raise aspirations and get them to think that they can get all the way to the top' (Dominiczak, 2013). The now Prime Minister Theresa May, when acting as work and pensions spokeswoman in 2009 said 'solving poverty is also about aspiration and skills rather than giving people extra financial help'. With slightly softer rhetoric, since becoming Prime Minister, May emphasises the importance of ambition and opportunity, talking about her vision to make Britain 'truly meritocratic', 'a country where everyone has a fair chance to go as far as their talent and their hard work will allow' (May, 2016).

The rhetoric of aspirations is also found in educational policy documents, including *Positive for Youth* (2011, 2013), *Aspirations and attainment amongst young people in deprived communities* (2008), *Unleashing Aspiration* (2009) and *Opening Doors, Breaking Barriers* (2011). Spohrer *et al.* (2018) conducted a discourse analysis on UK educational policy documents and found aspiration was often

framed as being the responsibility of the individual, to transform themselves and their attitudes, and to take opportunities. This type of deficit thinking is popular with governments as, in theory, they lower people's expectations of what the state could and should provide for them, thus it could be argued that positioning lower social classes as lacking in aspiration suits governmental political agendas (Raco, 2009). For these reasons, the poverty of aspiration discourse (Baker *et al.*, 2014) has been seized upon by politicians to explain why poorer children do less well in school and are less likely to go on to HE. Indeed, as already discussed, to raise aspirations has been a main objective of widening participation since the inception of Aimhigher in 2004. This legacy continues today. Harrison *et al.* (2015) surveyed 57 widening participation managers working in different universities and all claimed that the activities they delivered in schools had the primary aim of raising the aspirations of disadvantaged students, with only two-thirds also seeing their role as raising the Key Stage 4 attainment of disadvantaged students in order that they could progress to HE.

Yet some researchers have rejected the assumption that the poor have low aspirations (Archer and DeWitt, 2016; Green *et al.*, 2018), believing them to be irrelevant in driving educational success. Atherton *et al.*, (2009) found that students aged 11 and 12 generally held high aspirations to attend university, irrespective of socio-economic status, as did Baker *et al*. (2014) for students aged 14 and St Clair *et al.* (2013) for students aged 13 and 15. Parents' aspirations for their children to attend university were also shown to be high across all social groups. Analysis of the Millennium Cohort Study found aspirations to attend university equally high amongst mothers of young children from all social groups (Hansen, 2014). However, research by Chowdry *et al.* (2009; 2013) found that while younger students do appear to have high aspirations for their future, these aspirations may be adjusted over time, constrained by the realities of the opportunities available to them. Using Longitudinal Study of Young People in England (LSYPE) survey data, consisting of 16,000 young people, the authors show that at age 14 many young people aspired to go to university, and even in the lowest socio-economic quintile, half of the 14 year olds surveyed held this aspiration. However, by age 18 only 13% continued to aspire to do so. A later study by the same authors showed that by their late teens, students know whether their earlier aspirations can be reached as they have, or have not, achieved the grades that make university a viable option, leading them to amend their earlier aspirations accordingly (Chowdry *et al.*, 2011).

A key issue here is how aspirations are modified and adjusted as students progress through school, depending on what is realistic given the qualifications they have achieved. Baker *et al*. (2014) also showed universally high aspirations for attending university amongst 14 year old students, but when the same young people were asked whether they *expected* to go to university, results were far more

socially stratified. Thus young people from lower social groups may have aspirations to attend university but, even at a young age, they are aware these may never be realised. Khattab (2015) and Boxer *et al*. (2011) both show that where aspirations to attend HE amongst disadvantaged students may be high, their expectations are far lower. Where aspiration is defined as idealistic hopes for one's future, expectations are more meaningful, relating to plans that are realistic under the socioeconomic circumstances (Khattab, 2015). Research suggests that augmenting expectations may be a more fruitful approach for outreach practitioners aiming to widen participation to HE, than focusing on aspirations which has been the tradition. It is acknowledged, however, that the term 'aspiration' is used very loosely in the outreach community to cover a range of outreach activities (Harrison and Waller, 2018) and some of these may in reality deal with similar concepts such as expectations and providing accurate advice and guidance about future career pathways.

When young people were questioned as to the kinds of careers they hoped to pursue when they were older, so reflecting their career aspirations, the pattern was similar to that found when investigating aspiration to attend university. Aspirations to work in professional occupations were generally high for young students (aged 10-13), with few people aspiring to work in manual occupations (Archer *et al*., 2014; Moulton *et al*., 2016). By age 15 occupational ambitions were far more closely aligned with educational attainment, thus reflecting the moderating effect on expectations of what is realistic given a young person's educational trajectory (Croll, 2008). Anders (2017) also investigated the way young people's expectations to attend university change during adolescence and, like Chowdry *et al.* (2013), found that whilst expectations to attend university were high across all social groups at age 14, by age 17, lower socio-economic groups were more likely to have downgraded these expectations. However, unlike the findings of Chowdry *et al.* (2013), Anders (2017) concluded that this remained true even after controlling for prior attainment.

In spite of the debates surrounding the term aspiration, evidence does suggest that aspirations or expectations, in one form or another, do indeed play a role at certain points in a young person's life. These findings support the need for interventions aimed at maintaining or re-affirming these aspirations, or expectations, in young people from lower socio-economic backgrounds. Such interventions are commonly delivered by universities in their widening participation outreach work, and have the more specific aim of raising awareness of future HE opportunities and helping students make informed choices about their future (Hayton and Bengry-Howell, 2016).

Thus the links between poverty and aspiration are more complex than political rhetoric suggests and there is much concern in sociological literature that deficit beliefs like this promote a 'culture of

poverty' explanation for the social gap in educational achievement (St Clair and Benjamin, 2011; St Clair *et al.*, 2013; Reay, 2012; Archer *et al.*, 2002; Burke, 2012; Gewirtz, 2001). However, the widespread understanding that working class people have low aspirations is so commonplace in British society, it has become a cultural norm shared by both middle class and working class people (Connolly and Neill, 2001). It is also argued that this shared cultural norm has shaped and influenced the working class habitus so that working class children are encouraged to think differently about their education and therefore working class people become complicit in the common understanding of the causes of working class underachievement. This is an example of what Bourdieu would term symbolic violence. To Bourdieu, symbolic violence is 'the violence which is exercised upon a social agent with his or her complicity' (Bourdieu and Wacquant, 2002, p167). The violence is symbolic in that no coercive force is used, but is carried out subconsciously, through the meanings or values that are imposed on a social group. It is, however, violent as it can be powerful in restricting the attitudes young people have towards their education, influencing life pathways.

Bourdieu's perspectives on aspiration provide a useful lens through which to understand the empirical work discussed above. Bourdieu argues that 'agents shape their aspirations according to concrete indices of the accessible and inaccessible, of what is and is not "for us"' (Bourdieu, 1990a, p40), thus linking aspiration with an individual's habitus. Here Bourdieu's concept of habitus emerges as a moderator of aspiration, where lifestyles, values, dispositions and expectations combine to form aspirations towards education that are in tune with that habitus (Reay *et al.*, 2013). The 'possible selves' literature can also help explain the relationship between an individual's socioeconomic background and their ability to achieve in education. Originally introduced by Markus and Nurius (1986), possible selves are described as an individual's ideas about what they might become in the future, these visions of ourselves shape our motivation and ambition and determine our current behaviour. Stevenson and Clegg (2011) relate this theory of self-concept to HE participation, arguing that if we can imagine ourselves at university we will behave in a way that will action this event occurring. These ideas are also comparable with ideas of expectation: if a young person expects it is likely they will attain highly at school and progress to HE, this will have a motivational effect, leading to behaviour oriented around achieving that possible future self.

However, the possible selves we can envisage are shaped by a number of factors relating to our cultural context including family, friends and school, as well as past experience of education and psychological disposition (Kintrea *et al.*, 2015; Hodkinson and Sparkes, 1997). For example, Winterton and Irwin (2014) argue that in disadvantaged families, parents may have high aspirations for children to attend university, but they do not expect they will, perhaps linked to Bourdieu's (1990) ideas about

what is accessible for people 'like them'. Yet that the possible selves we can envisage are malleable is a promising theoretical avenue for widening participation outreach aiming to influence behaviour.

Ideas from the field of psychology can be developed by examining research into motivation (rather than aspiration), and the way this influences the achievement of young people, that can be applied to a widening participation context. Motivation theory attempts to explain the choices people make about what they want to achieve (their aspirations or goals), their persistence on these tasks and determination to carry them out (their motivation) and performance on these tasks (Eccles *et al.*, 1998; Pintrich and Schunk, 1996). Theorists argue that all three components: choice, persistence, and performance, can be explained by an individual's beliefs about how well they will do on the task and the extent to which they value the task, known as expectancy-value theory (Atkinson, 1957; Eccles *et al.*, 1983; Wigfield, 1994; Wigfield and Eccles, 1992). Self-efficacy is a similar concept, concerned with the judgements of personal capability to achieve a task and is thus closely related to feelings of expectations discussed above, for example whether you think it is *likely* you will be successful in achieving the task in hand (Bandura, 1997). Students with high perceptions of self-efficacy were more likely to persevere with a task than students with low self-efficacy perceptions (Bandura and Schunk, 1981). This chimes with research just discussed, where expectations and aspirations are high until they become unrealistic options for the future. At this point they become unlikely and aspirations are moderated. Clearly then, it is too simple to talk about young people's aspirations to attend university alone as this term forms only part of a complex model of achievement. However, the term aspiration tends to dominate government widening participation literature.

I will return to the psycho-social concepts introduced above in the final analyses chapter of this thesis (Chapter 7) but for now I focus on gaining a better understanding of the precise nature of the social and cultural capital middle class parents provide their children within the field of education. Whether this be through transferring of aspirations, expectations or motivation, all evidence points to the importance of family, friends and school in influencing the cultural and social capital to which young people have access. These are discussed next.

2.6.2 The role of family, friends and school

In an attempt to better explain the way economic, cultural and social capital manifests itself in the daily practices of families, a number of research studies have used survey data to explore relationships between parenting techniques and children's attainment at school. The importance of parenting on children's attainment is highlighted by the independent but government funded Social Mobility Commission (SMC) who report that 'parenting [is] the biggest driver of the child development gap'

(SMC, 2015 p9), a deficit model that is unsurprisingly endorsed by government which, following a DfE report drawing similar conclusions (Jones *et al.*, 2013), piloted a national trial of parenting classes (Paton, 2013a). This is in spite of the same report concluding that although negative parental behaviours can impact children's attainment, there is little evidence that any positive behaviours of parents in disadvantaged families reduces the relative effect of that disadvantage. Furthermore, research by Hartas (2011; 2012) indicates that the parenting techniques of working class parents have less influence on their children's educational outcomes than family income and parental education. 'Parents, no matter how good or effective they are cannot overcome structural problems of poverty to maximise their children's educational opportunities and life chances' (Hartas 2012, p3). In reality, a student's entry to university is not driven by simple daily parenting practices, but these practices are themselves caught up in a nexus of differences in status and power within an unequal social system. This rather casts doubt on the efficacy of any university-led widening participation outreach which, in essence is trying to 'fill-in' for parents where they lack the cultural capital to equip their children to successfully navigate the education system. If effective parents cannot alleviate the inequalities for their disadvantaged children, one would question whether an outreach intervention which tends to consist of no more than a one hour interaction per week for ten to twelve weeks (analysis presented in Chapter 7) can be successful here. In spite of this, I next examine current research into the family characteristics and parent child interactions that may help children to succeed in education, findings which would help the design and targeting of widening participation initiatives.

Sullivan *et al.*, (2014) tested an array of parenting techniques to explore any specific parental practices that may help children succeed. These included whether the child had regular mealtimes and bedtimes, the number of hours spent reading with children and whether the child was breastfed as a baby. All were found to correlate highly with attainment at age seven. The number of siblings was also explored with Sullivan *et al.* (2014) finding the third child to have poorer performance at age seven and a separate report by the DfE finding the same impact on Key Stage 1 (age seven) (DfE, 2013a). The DfE (2013) research did find that the more television the child watched daily, the worse their verbal ability scores tended to be, even after all other family variables were kept equal. In addition, having a mother who suffered from depression was associated with lower Key Stage 1 attainment as well as greater behavioural difficulties. Although all variables remain statistically significant even after parental education has been controlled for, Sullivan *et al.*, (2014) note that parental education remains the most strongly predictive variable. This suggests that one's habitus is not created through the tangible daily practices of families, but rather it is a sense of entitlement passed from parent to child allowing them to navigate educational pathways more easily. This means that success is not easy

to recreate where it does not naturally occur, problematic for widening participation outreach interventions which seek to do just that.

A number of studies have found no relationship between lone parent families and children's attainment when comparing children whose parents have similar levels of education (Sullivan *et al.,* 2014; Schoon *et al.,* 2012; DfE, 2013a). This finding was supported by the DfE research with lone parent families having no impact on school test scores. Berrington *et al.* (2016) actually found that when socio-economic status and attainment were equal, children living with a single parent have the highest odds of aspiring for university. Sullivan *et al.* (2014) also found no evidence to suggest having both parents at work was detrimental to children's attainment.

Baker *et al.* (2014) tested whether several variables measuring cultural capital affect children's aspiration to attend university at age 14 and found a number of factors including time spent on homework, regular routines in the home and levels of creative play to predict aspirations. However, after controlling for attainment, there was no statistically significant effect. The only relationship that remained significant after controlling for attainment was maternal education and parental interest in their children's subject choice at GCSE, although these two variables were not mutually exclusive and were themselves highly correlated. Davies *et al.* (2014) explored whether different aspects of cultural capital, engagement with 'highbrow culture' (p806), parent/school interaction and familiarity with current affairs, affected intention to progress to HE and found that each measure did have a positive impact. This remained the case even after students' attainment was taken into account. However, it is important to consider whether this is a simple effect or a proxy for an unobserved confounding variable.

Neighbourhood variables relating to the child's home area (e.g. the Index of Multiple Deprivation (IMD)) have also been shown to correlate highly with aspiration to attend HE (Kintrea *et al.,* 2015) as well as attainment at school (Sylva *et al.,* 2014) with Baker *et al.* (2014) finding IMD to remain significant in predicting aspiration to attend HE even after controlling for attainment. This indicates the importance of the home community in explaining young people's educational outcomes, and gives weight to the influence of place outside the immediate family home. Connolly and Healy (2004) also found the importance of locality in shaping young people's habitus when investigating the educational and career aspirations of young people living in Belfast. School factors such as good student-teacher relationships and children's enjoyment of school have also been shown to correlate with aspiration at age 14 to attend university (Baker *et al.,* 2014), further evidence that social networks outside the family home can also shape university aspirations. These findings illustrate the importance of

Bourdieu's social capital in predicting young people's educational outcomes. Social capital can be developed by young people through the social networks they develop in their neighbourhoods or at school, different from the cultural capital received from the family at home but nonetheless important. However, Gorard (2012) cautions against placing too much emphasis on the role of schools in improving or worsening the poverty gradient, believing that as the social stratification in attainment emerges before school starts, before age four, it cannot be generated by schools whose youngest pupils start at this age.

Thus in conclusion, the situation is a complex one, with middle class parents seemingly able to provide their children with a form of economic, social or cultural capital that is not easily articulated or quantified. What emerges here supports Bourdieu's ideas of education reproduced over generations with those children with parents who have degrees themselves far more likely to perform well at school, have high levels of knowledge about applying to university and then actually enter university (Davies *et al.*, 2014; Anders and Mickelwright, 2015; Marcenaro-Gutierrez *et al.*, 2007; Anders, 2012; Gayle *et al.*, 2003). When this type of cultural capital is further investigated, to explore the actual daily behaviours and traditions of these parents that may have an effect on their children's performance at school, very few practices emerge as significant after parental education is kept equal. Although a recent meta-analysis shows a positive relationship between parental involvement and their children's performance at school across a range of ages (Wilder, 2013), illustrating the important role of parental involvement and interest in children's education, none were able to identify the 'active ingredient' for success (Gorard and See, 2013).

It is important to note that the associations observed between parenting style and attainment or attitude to education can rarely be considered to be directly causal as the factors typically act as 'indicators' of unmeasured practices and aspects of family context. For the same reason, Gorard and See (2013) found no evidence that increased parental involvement led to an increase in attainment after reviewing 67 intervention studies; analyses often use survey data which, for the authors, do not satisfy criteria needed to show causality. The only thing on which there seems to be agreement is that inequalities appear early – from as young as the age of three – though this is perhaps a little too young for universities to focus their outreach.

The ways in which universities have used *some* of the information discussed above to design and target their outreach will be discussed next when examining the literature on what works in widening participation. The following paragraphs present the evidence that does exist which is largely based on evaluations of Aimhigher, the national widening participation initiative that ran under New Labour

from 2004 to 2011. There is little evaluation that is more recent as the majority of widening participation evaluation reports are commercially sensitive documents that go unpublished, these being owned by the universities that deliver the outreach and commission their evaluation. The following section thus provides a summary of the evidence that is available with the limitations of each piece of research discussed as we go along.

2.7 What works in WP: existing evidence

An outreach activity might be considered to have been effective, or 'worked' if the students who participated show a change in behaviour as a result of their participation. Research evaluating outreach activities tends to consists of data showing changes in 'soft' or 'hard' student outcomes. Soft outcomes include variables such as enjoyment of participation in outreach and interest or intention to progress to university whereas hard outcomes measure changes in educational pathways such as attainment and progression at school and application to, or actual entry to HE. The former are often collected through interviews and questionnaires with participants whereas the latter must be negotiated through administrative agencies such as the Department for Education (DfE) or Higher Education Statistics Agency (HESA).

A review of this research reveals that there is a large volume of evidence demonstrating that outreach conducted under Aimhigher had impact, most of which is 'overwhelmingly positive' (HEFCE, 2006, p47); for a summary of practitioner research see Moore and Dunworth (2011) and Doyle and Griffin (2012). Commentators have questioned whether evaluation should be conducted by practitioners who, themselves, have invested heavily in showing the success of the intervention often under pressure 'to produce results in accord with some predetermined plan' (Gorard, 2002a, p381).

Much of this evaluation of outreach has been criticised heavily, particularly in an influential report by Gorard *et al.* (2006, p116) who argue that 'most interventions have had no rigorous evaluation', often making unwarranted claims of causation. This criticism is not unique to widening participation, with the OECD informing us that 90% of education reforms are not properly evaluated (Whitty *et al.*, 2016). Gorard *et al.* (2006) condemn the research for failing to follow a medical model of evaluation which draws on experimental methods such as RCTs. A full discussion of the methods that are encouraged in the evaluation of widening participation outreach interventions is provided in the Methodology chapter next (Chapter 3). For now I simply refer back to educational sociologists Whitty *et al.* (2016) referenced at the start of this chapter for their caution over treating education research as a science. The authors warn that this approach to educational research is unlikely to lead to a broad perspective or understanding of the difficult issues. Doyle and Griffin (2012) argue that Gorard *et al.*'s (2006)

critique undermines potentially valid and useful research findings on the basis that the research design does not meet strict linear causal models and would not respond to medical style modes of evaluation.

It is, however, of value to note, Gorard *et al.'s* (2006) criticism of existing research into the effectiveness of widening participation activities for relying too heavily on soft data which, although able to provide some useful findings, tend to provide a snapshot of attitudes or behaviour rather than long term changes in the educational pathways of the participants who attended (see Pennell *et al.*, 2005; Morris and Golden, 2005). Hard outcomes, particularly tracking whether students actually enter HE are particularly relevant in evaluation studies for their ability to provide evidence on the long lasting impact of outreach. Chilosi *et al.* (2008) note that it was common for Aimhigher participants to declare an intention to apply for HE, but subsequently fail to do so. The HEAT data employed in this thesis provides a full raft of long term hard outcomes for all participants of outreach, participants who have been tracked longitudinally from the time at which they engaged in outreach to the time at which they enter HE. However, these data are not without their limitations when it comes to evaluating outreach; limitations that will be discussed fully in Chapter 5.

With the above challenges in mind, next only the most convincing evidence from the literature on effective approaches to widening participation is reviewed. First, I consider three discrete interventions that boast positive findings: summer schools, mentoring and campus visits (for a description of each please see Appendix 2.1), before moving on to discuss the evidence that suggests a sustained package of activities is most effective.

2.7.1 Discrete interventions

A number of separate pieces of research have independently suggested the effectiveness of summer schools. Usually involving at least one overnight stay at a university, summer schools have traditionally been targeted towards academically able students from families with little experience of HE, therefore lacking a network of family or friends who can advise them on their future (HEFCE, 2009). Hoare and Mann (2011) reported positive outcomes associated with participation in the Sutton Trust summer school programme. Comparing summer school participants with a comparison group of students who were eligible for the summer school, the research reported an increase in university applications and registrations from attendees. These conclusions were reiterated in a survey of HEIs who believe summer schools to be the most effective type of outreach activity (McCaig *et al.*, 2008). Elsewhere it has been reported that summer schools may be particularly effective as participants value support with the application process, academic preparation to ease transition and the chance to meet likeminded people (Jones, 2008).

Mentoring has also been reported as having substantial impact. Mentoring sessions allow for a more personalised service as guidance can be tailored to meet specific needs. Morris and Golden (2005, vi) suggest the benefits of mentoring for students who lack the confidence to participate in other activities such as summer schools or campus visits. Rogers (2009, p112) builds on this saying that mentors are able to provide 'psycho-social' support for students during a high pressure period in their lives. However, pieces of research such as these use soft outcomes that focus on evaluating the activities themselves rather than addressing whether the students who attended actually progressed to higher education, and this is Gorard *et al*.'s (2006) criticism.

Morris and Golden (2005) and Ireland *et al*. (2006) used interview and questionnaire data to show that delivering outreach at a university where participants experienced coming to a university campus, was more effective than delivery in school. However, Morris and Golden (2005) stressed the need for the activities delivered to be focused on the needs of the individual, believing that campus tours, where young people were simply given a tour of facilities, were less helpful. Like the evaluation of mentoring activities discussed in the previous paragraph, these studies also rely on survey data rather than accessing data on the actual attainment or progression outcomes of students who participated.

Passy and Morris (2010) and Ireland *et al.* (2006) found evidence showing the benefit of including undergraduate student ambassadors in outreach delivery, giving school students the opportunity to speak with young people close to their own age. Student ambassadors are now used universally in the delivery of outreach work in England (Gartland, 2015). Evidence suggests these university students act as 'role models' (Sanders and Higham, 2012) and provide trusted sources of information about university that is held in high regard by school students (Gartland, 2013; Slack *et al*., 2012) whilst also being able to share personal experiences about university life (Doyle and Griffin, 2012). Further benefits of employing student ambassadors to deliver outreach are that it can enhance the employability of the ambassadors themselves (Fleming and Grace, 2016). I will look more closely at the specific role of student ambassadors, particularly in relation to outreach activities that are designed to raise attainment, in Chapter 7.

In spite of the successes reported above, Moore *et al*. (2013, p21) argue that there is unlikely to be one discrete intervention that leads to that 'light bulb moment' for young people and instead, participation in a range of activities that are tailored to their needs and circumstances are key to progression (Kerrigan and Church, 2009), perhaps slowly changing their habitus over time. Evaluating packages of activities, which have been tailored to the needs of the individual, is far more complex than focusing on discrete interventions such as summer schools or campus visits. However, it is a

sensible approach as learners rarely participate in only one activity and so it is difficult to disaggregate whether their decision to progress to university was a result of the summer school or the campus visit they attended. I will come back to these ideas in my own analysis in the second research question presented in Chapter 5.

The above has summarised the limited available literature of the effectiveness of outreach activities, delivered by universities in England. However, research on the outreach activities that might work to raise attainment is far more limited than the spread of published educational intervention research, researching what schools can do to raise attainment. Although there is a clear overlap in terms of the aims – with both types of activity trying to raise attainment – the latter is arguably too voluminous and diverse to include in this literature review. To focus the parameters, this section concludes with a review of the literature on the effectiveness of academic tutoring. This is provided as it emerges following interviews with WP managers (chapter 7) as a key type of activity being delivered by universities to raise attainment and a discussion is needed to set the scene in relation to how it might be effective.

2.7.2 Academic tutoring

As discussed above, academic tutoring activities emerge as a dominant type of activity being delivered by universities under the new regulation to raise attainment in schools. This is not surprising as individualised tutoring is considered by some to be an effective way to augment educational attainment (Bloom, 1984; Elbaum, 2000). In the context of outreach activities, this tutoring is nearly always delivered by undergraduate student ambassadors, the majority of whom have no formal teacher training. This type of tutoring can therefore be aligned with cross-age non-professional peer tutoring, on which there is an expansive literature, although it should be noted that peer tutoring can also go by the names of 'peer teaching', 'peer education' and 'peer learning' (Britz *et al*., 1989, p17).

The scope of peer tutoring can be very wide; Damon and Phelps (1989, p11) define it as …"an approach in which one child instructs another child in material on which the first is an expert and the second is a novice". However, other definitions do not necessarily place the tutor as an expert (Greenwood *et al*., 1990; Pigott *et al*., 1986). Peer tutoring is characterised by having a focus on curriculum content, and in this respect it is different from 'mentoring', which tends to provide support that is more pastoral in focus. In cross-age tutoring, the tutor is …"usually two or more years older than the tutee" (Damon and Phelps, 1989, p137). This model of delivery is most similar to that described by WP managers in chapter 7, where undergraduate students act as tutors to students of secondary school age, and so I will next consider the conditions under which it can be effective. This is by no means an

exhaustive synthesis of the literature on cross-age peer tutoring. It draws primarily on research that establishes a link between cross-age non-professional tutoring and student outcomes for the tutee (with benefits to the tutor also widely reported) and focuses mainly on student tutees in secondary school.

There is an expansive body of studies pertaining to the effective outcomes of cross-age tutoring conducted in schools in America during the 1980s, the results of which are mainly positive. Sharpley and Sharpley's (1981) meta-analysis of 82 studies reported gains in reading and mathematics for tutees as did Cohen *et al*. (1982) in their review of 65 randomized and matched studies. More recently, Elbaum et al. (2000) conducted a meta-analysis of reading interventions for elementary school students with low reading ability and found college students to be highly effective tutors. Similarly, Leung *et al*. (2005) conducted a systematic review of 68 published studies and found significant improvements in overall academic achievement of school students when tutored by university students. This evidence has been generated by the movement in America to encourage college students to act as tutors, for example in the America Reads Challenge which, since the late 1990s, has mobilized tens of thousands of college students as volunteer reading tutors for children in Kindergarten through Third Grade (Fitzgerald, 2001).

There is no single dominant theory of change for cross-age peer tutoring (Shenderovich *et al*., 2016), perhaps a reflection of the multiple ways it can be designed and delivered. However, tutoring is theorized to lead not only to improvements in academic outcomes, but also socio-emotional outcomes (Robinson *et al*., 2005), such as confidence (Koh *et al*., 2012), self-efficacy (Elliott *et al*., 2000) and self-confidence (Margolis, 2005).

To explain these improved outcomes, a number of researchers have noted the benefits of the verbalisation and questioning that is inherent in peer tutoring (Webb, 1982; Foot *et al*., 1990; Forman, 1994). Peer tutoring facilitates a form of cooperative learning (Pesci, 2015) as students are able to elaborate on their thoughts at a timely pace, with someone in a non-professional or non-teacher role (Shanahan, 1998). Masten and Reed (2002) emphasise the importance of the meaningful relationships that develop between tutor and tutee and that this encourages academic resilience in students, especially low achievers. One reason meaningful relationships may develop is that tutors and tutees speak a more similar language than do teachers and students (McDaniel and Besnoy, 2019). Damon and Phepls (1989, p138) argue that in peer tutoring "the expert party is not very far removed from the novice party in authority or knowledge; nor has the expert party any special claims to instructional competence". The authors go on to claim that, for a tutee, being closer in knowledge and status to

their tutor allows them to "feel freer to express options, ask questions and risk untested solutions". These conditions are similar to those described by the studies reviewed above which emphasise the benefits of student ambassadors in delivering outreach activities (Gartland, 2013; Slack et al., 2012; Sanders and Higham, 2012; Doyle and Griffin, 2012). Developing a trusting relationship has been reported to improve socio-emotional outcomes such as self-efficacy (Elliott *et al.*, 2000), self-confidence (Margolis, 2005), and confidence in the academic subject tutored (Koh *et al.*, 2012).

In contrast, a more recent study in England failed to show the impact of peer tutoring. A paired reading tutoring scheme in which year 7 pupils were matched with year 9 pupils provided no evidence of impact on overall reading ability (Lloyd et al., 2015). Torgerson and King (2002) also found no impact when summarising four randomised trials where adult non-professionals acted as tutors. Thus results of meta-analyses range from null to positive significant effects, likely due to high levels of heterogeneity in styles and quality of academic tutoring and differences in research protocols.

One component of diversity in quality relates to the training the tutors receive before embarking on their role as a tutor. Indeed, evidence shows the importance of high quality tutor training which is needed to see large effect sizes (Cohen *et al.*, 1982; McDaniel and Besnoy, 2019; Karcher, 2005), something that is likely to vary across tutoring programmes. Building on this, the conduct of the tutor is key to success and Webb (1989) identifies several conditions for effectively transmitting knowledge through peer tutoring. Tutors must provide information that is relevant, appropriately elaborated, timely and understandable to the tutee. Following this, the tutor must provide an opportunity for the tutee to use the new information they have learnt and the tutee must take advantage of this opportunity. Tutoring with a pre-set structure in terms of content report greater success (Ritter, 2009; Ginsburg-Block, 2006) with non-trained tutors using 'knowledge-telling' rather than 'knowledge-building' explanations (Roscoe and Chi, 2007).

Relating the issue of tutee conduct to outreach activities delivered by university students, Gartland (2015) observed that successful relationships could develop when ambassadors worked collaboratively with school students, as equals. Here, school students valued the support provided from a trusted peer (the ambassador), support which helped develop their confidence towards learning and higher education. However, relationships tended to be less successful when ambassadors were placed in a superior role, such as the role of a teacher or tutor. Ambassadors were unable to replicate the professionalism of teachers and as a result the school students with whom they were working failed to respect them as useful sources of information and support. This suggests that the

ambassadors in Gartland's (2015) study were not successful in building the meaningful relationships on which peer tutoring appears to rely.

Thus the evidence in relation to academic tutoring appears to be mixed. Positive outcomes were reported for tutees receiving tutoring delivered in schools in the America, with this research conducted now over two decades ago. Evidence from the UK within a university outreach context is not always positive, but the amount of research that has been done is limited.

Having situated widening participation policy politically and theoretically, I now move on to present the research questions that will be explored in this thesis. A brief restatement of the key evidence presented in this literature review is given to provide the rationale for the three research questions. I also set out when the HEAT data will be used to answer these research questions and when additional data will be required.

2.8 Research Questions

Throughout this literature review I have examined a body of research that repeatedly traces the socio-economic inequalities in HE access back to disparities in prior attainment of the student whilst at school (Crawford, 2014; Chowdry *et al.,* 2009; 2013; Anders, 2012; Croll and Attwood, 2013; Anders and Micklewright, 2015). More specifically, performance at Key Stage 4 (GCSEs) has been shown to determine whether young people go on to university (Crawford, 2014). Those who fail to achieve five GCSEs at grade A* to C, including English and Maths, will find it difficult to continue along traditional academic educational pathways, such as studying for A-levels or equivalent Level 3 qualifications, which tend to be a precursor to entry for many universities.

Thus the qualifications young people have obtained by age 15 or 16 and the subsequent options these present, along with the decisions that individual students make, are critical to their future. Indeed, this stage of schooling presents young people with a fork in the road of their education, with one path leading towards, and the other away from university. In reality, for many the pathway is often set far earlier, with expectations for one's future shaped by a complex nexus of factors including school attainment, school environment and family background (Reay, 2012; Reay *et al.,* 2013; Stevenson and Clegg, 2011; Whitty *et al.*, 2015).

It makes sense, therefore, that outreach activities delivered by universities in schools designed to increase progression to HE amongst disadvantaged young people should be targeted towards disadvantaged pupils *before* the age they take their GCSEs (age 15 or 16) with the aim of raising their

attainment to achieve the five GCSEs they need in order to retain the full breath of options for their future. These ideas have been seized by government and the OfS now require universities to provide evidence in their Access and Participation Plans of how they are raising attainment in schools (OfS, 2018b).

In line with this new push by government, this study will focus on the potential for university outreach to raise the GCSE attainment of disadvantaged young people in school, and for this to then raise progression to university. There are, of course, several other target groups for universities' outreach: for example, working with FE Colleges and the wider community to help mature learners progress to HE; or focusing outreach on higher attaining disadvantaged young people who may need help with their choice of university, in line with the fair access agenda. These, and many other approaches are both valid and worthwhile, however, they are beyond the scope of this thesis and it could be argued that neither will contribute to reaching the government's latest target to double the proportion of people [young people] from disadvantaged backgrounds entering university [any HEI] in 2020 (DBIS, 2016, p14). The literature and the available HEAT data have led to the development of three research questions.

Research Question 1*: To what extent have HEAT member universities been targeting outreach towards students to raise their Key Stage 4 (GCSE) attainment as a precursor to widening access to higher education?*

Data source: HEAT data

Research Question 2*: Can a robust method that uses HEAT's longitudinal tracking data of outreach participants be formulated to show the impact of participating in outreach on school attainment at Key Stage 4 (GCSE)?*

Data source: HEAT data linked to Key Stage 4 attainment outcomes and HE progression

Research Question 3*: Which types of outreach activities are universities delivering to raise attainment in schools and how are they meant to work?*

Data sources: a) 2018/19 Access Agreements for 123 HEIs

b) Interviews with WP manager practitioners from 30 HEIs

Next I move on to the methodology chapter to explain the methods that have been employed to answer the above research questions. In this chapter I examine the theoretical assumptions behind different research designs, and justify the approach taken.

Chapter 3: Methodology

3.1 Research questions and analysis overview

This research incorporates a mixed-methods approach, employing three separate data sources to address the research questions (RQ) that have been constructed following the review of the literature (Chapter 2). Broadly aligned with a pragmatic methodological approach (Onwuegbuzie and Leech, 2005), the methods selected are driven by each of the three RQs set out in Table 3.1 below. RQs 1 and 2 draw on quantitative data in the form of a large scale secondary dataset of historical outreach delivery that was recorded through HEAT. RQ3 draws on two qualitative data sources to better understand the nature of attainment-raising outreach being delivered by HEIs: first, RQ3a examines narrative accounts provided by institutions in their Access Agreements (AA) and, second, RQ3b uses data from a series of interviews with managers of widening participation teams within universities.

Table 3.1: Summary of RQs and their data sources

Number	Research Question	Data Source
RQ1	To what extent have HEAT member universities been targeting outreach towards students to raise their Key Stage 4 (GCSE) attainment as a precursor to widening access to higher education?	HEAT data on historical outreach engagements (delivered 2004/05-2015/16)
RQ2	Can a robust method that uses HEAT's longitudinal tracking data of outreach participants be formulated to show the impact of participating in outreach on school attainment at Key Stage 4 (GCSE)?	HEAT data linked to Key Stage 4 attainment outcomes and HE progression
RQ3a	Which types of outreach activities are universities delivering to raise attainment in schools and how are they meant to work? Analysis of HEIs' 2018/19 Access Agreements.	2018/19 Access Agreements for 123 HEIs
RQ3b	Which types of outreach activities are universities delivering to raise attainment in schools and how are they meant to work? An in-depth analysis of data from interviews with widening participation managers.	Interviews with WP managers from 30 HEIs

Methods of analysis were applied as follows: RQs 1 and 2 both use HEAT data but ask quite different questions, requiring different analytical approaches. Descriptive statistics are used to examine proportions of historical outreach delivery that have met the criteria set out in RQ1. In RQ2 the

method is central to the question, and I choose to use a quasi-experimental matched cohort design to compare the outcomes of outreach participants with a carefully selected comparator group. Content analysis of HEIs' Access Agreements was employed in RQ3a to establish a typology of common attainment-raising outreach activities. In RQ3b a thematic analysis was undertaken on data from interviews to elaborate on how findings from the previous RQs apply in different cases.

Next I critically examine the methodological approaches taken in this research. I reflect on the reasons that led to these particular RQs and why the data sources were chosen. Inevitably my role as a researcher for HEAT heavily influenced the way the problem has been framed and this will be a central consideration throughout the following sections.

3.2 Discourse, context and mixed-methods research

According to Silverman (2000, p234), when writing a methodology chapter that involves qualitative research, it is good practice for the researcher to first make explicit their theoretical assumptions and explain why they choose to work with their particular data. After examining the literature on different research paradigms I decided the approach used here fits best under the pragmatic paradigm where "the research problem" is central (Creswell, 2003, p.11). Pragmatism is reported to provide the underlying philosophical framework for mixed-methods research, whereby the research questions themselves should drive the choice of method(s) used (Tashakkori and Teddlie, 2003; Somekh and Lewin, 2005).

In selecting this research paradigm, I am fully aware of the fervent debates that exist within the social sciences in relation to qualitative and quantitative research methods. With qualitative methods frequently aligned to interpretivist paradigms, and quantitative methods to positivist paradigms, the two are often seen as in competition (Smith, 1983; Sieber, 1973; Sechrest and Sidani, 1995; Howe, 1988; Johnson and Onwuegbuzie, 2004; Yin, 2006). Onwuegbuzie and Leech (2005) suggest that debates around the strengths and weaknesses of each method can be traced back 100 years, and often focus on the differences that exist with respect to ontology, epistemology and axiology. Such arguments have their roots in cultural assumptions about how the world is viewed and what constitutes knowledge. Sieber (1973, p. 1335) explains how the two dominant research paradigms have led to two camps of researchers, 'one professing the superiority of "deep, rich observational data" and the other the virtues of "hard, generalizable" survey data'. Others have pointed out that the neat separation of quantitative and qualitative data into these debates is in no way clear cut and I also note Symonds and Gorard's (2010, p126) argument that 'types of data are not necessarily paradigmatic'. Whilst aware of these purist debates, pragmatic researchers reject epistemological

purity and therefore the assumption that the two types of data are incompatible and propose they are combined in a single research study (Creswell, 2003). Thus this paradigm permits the mixed-methods approach adopted within this research study.

But in reality I did not enter into this pragmatic research design consciously. This brings me to respond to Silverman's (2000) second point on which a methodology chapter must be explicit: how I chose to work with the particular data. This research project was initially based around data collected through HEAT, the data used in RQs 1 and 2. As the Senior Data Analyst for HEAT I had privileged access to the large dataset of historical participants of outreach at my disposal. Notwithstanding that my PhD was being funded by my employer, it was somewhat inevitable that I would use the HEAT data. However, the way I would use the HEAT data and particularly the RQs set were considered and reflected upon at length. The RQs presented in Table 3.1 are quite different from those that were initially set when this research project was first conceived, each question having developed during the process of the research to reflect a deeper understanding of the problem and the data sources at my disposal.

Initial versions of RQs were designed exclusively around the HEAT dataset to ask much more directly 'what works' by exploring the HEAT dataset to determine the packages of outreach that have been most effective in encouraging progression to HE. However, for reasons set out in the introductory chapter, this approach was not fruitful. It was at this stage of data analysis that ontological, epistemological and theoretical issues came to the surface, including different kinds of 'truth' or 'validity' in research and the methods that generate them. Thus I was forced to reflect on the reasons why answers to my initial RQs might not have been possible.

These reasons are explored in the next section and also covered in relation to RQ2 (Chapter 5). But for now I simply point out that the RQs evolved along with my thinking about how the question of 'what works' in widening participation should be approached. RQs 1 and 2 were modified in order to ask questions that it was felt were useful to ask, but also that the HEAT dataset might reasonably be able to answer, thus allowing me to make the best use of this valuable dataset. It should be acknowledged that this perception of value is likely to be fuelled by my role within the HEAT team and the amount of time and energy my colleagues and I have invested in setting up the system to collect this dataset. In spite of this allegiance the limitations of the dataset were fully exposed. Furthermore, in acknowledgement of these limitations the study was extended in RQs 3a and 3b to draw on additional data sources and methods to elaborate on findings. Inferences from each method will then be drawn together at the end of the study in a concurrent mixed-method design (Creswell, 2003). I should add that my background and training prior to working at HEAT was as a social scientist and I have received

training in both quantitative and qualitative methods: this has made me particularly receptive to the recommendations that led to adopting this mixed-methods approach.

Next a brief history on the HEAT data is given, including why it was developed and how the data generated by HEAT fit within the dominant approaches to researching 'what works' in education. Within this context I also set out how my approach to 'what works' in widening participation has evolved into the final study design.

3.3 The HEAT dataset and the wider approaches to 'what works' in education

First, a reminder of how and why the HEAT dataset was developed. In 2006 Gorard and Smith famously criticised the higher education sector for failing to provide evidence of impact:

"In summary, there is limited evidence about the effectiveness of different pre-entry interventions with young people. Much of the research in this area has focused on students' perceptions of interventions, rather than tracking them into HE." (Gorard and Smith, 2006: 35).

At this time, following guidance from HEFCE (2007), many practitioners were only gathering short term monitoring data about their activities rather than evaluating their longer term impact.

This set the scene for the collection of data which *tracked* participants of outreach longitudinally to see whether, following taking part in their outreach interventions, they went to university. Meanwhile a wider consensus was developing in Government that policy should be evidence-based and informed by research (HM Government, 2013). This stemmed from the notion that more progress had been made in fields where this approach had already been adopted, such as medicine and agriculture (Hanley *et al.*, 2016). In 2013 Government set up the What Works Network to guide decision making in social policy in areas such as crime, health and social care and education. The 'what works' centre for education, known as the Education Endowment Foundation (EEF), received £125m from the Department for Education to fund educational research which they claim is of the highest standards. According to the foundation, 'wherever possible this will mean using a randomised control trial – the gold standard of educational research' (EEF, 2012, p27). At the same time the Cabinet Office's Behavioural Insights Team (BIT) published a report claiming that 'Randomised controlled trials (RCTs) are the best way of determining whether a policy is working' (Cabinet Office, 2012a, p4). Thus in the current research environment, research methods in education are dominated by scientific paradigms, particularly RCTs. By randomly assigning participants to two groups, one receiving the intervention

and the other not (a control group), RCTs are considered by many as capable of establishing causal relationships between an intervention and outcome (Cartwright, 2007; Coe, 2004; Goldacre, 2013).

This movement has heavily influenced the approaches to evaluation in widening participation and, congruent with the paradigm favoured by Government, recent reports from both HEFCE and OFFA advocate the use of RCTs as the 'gold standard' approach (OFFA, 2017a; HEFCE, 2015b). In partnership with the Behavioural Insights Team (BIT), King's College London has recently established their What Works Department to encourage the use of RCTs in widening participation research (KCL, 2018). RCTs have also been heralded as robust in the HEFCE commissioned evaluation of the National Collaborative Outreach Programme (NCOP), led by CFE Research in partnership with BIT (CFE, 2017). However, in recognition of the practical difficulties RCTs can involve, other, quasi-experimental designs such as Propensity Score Matching (PSM) and Regression Discontinuity Design (RDD), are also offered as alternatives that are still able to establish causal inferences (OFFA, 2017a). Tracking data obtained through HEAT fit easily into these proposed methods as providing the dependent variables, or student outcomes, on which the success of interventions can be judged. The student outcomes in which evaluators interested are either prior attainment whilst at school or eventual entry to higher education, depending on the aim of the intervention being tested. For this reason the OFFA (2017a) and HEFCE (2015b) reports referenced above have endorsed the use of HEAT and tracking methods across the sector.

The HEAT dataset now consists of a large sample of outreach participants, compiled by a growing number of English universities (the latest membership count being 85 HEIs), along with the types of outreach activities they have received. The outcomes for these students, their 'tracking' data, have been collated centrally by HEAT. This dataset is available for exploration now and forms the data on which RQ1 and RQ2 are based. However, the potential for this dataset to tell us which interventions have been most successful is arguably more limited than I first expected. To determine whether a causal relationship exists between intervention and outcome, the experimental methods such as RCTs discussed above, define a control or 'non-treatment' group during the initial research design stage and before the intervention is delivered. Although possible for prospective uses of HEAT's data, my dataset of retrospective outreach participants incorporates no such comparator group. Rather I must rely on quasi-experimental designs, such as the matched cohort design employed in RQ2, to construct a suitable comparator group retrospectively.

Whilst matched cohort methods have been recognised as robust by OFFA (OFFA, 2017a), any design that constructs a comparator group through processes other than randomisation is seen as inferior

within the context of policy evaluation (HM Treasury, 2011). Thus any retrospective design applied to HEAT's dataset will be open to criticism about its ability to address selection bias. However, this becomes a somewhat secondary concern when the persuasive views of those who argue against the use of scientific or experimental methods in educational research altogether are considered. Here most criticisms are directed at RCTs but many can be extended to quasi-experimental methods.

Some commentators contest the idea that scientific methods have any value in educational research. Hammersley (2005) and Biesta (2007) argue that positivist medical models are not relevant in the evaluation of education as they fail to acknowledge the complex human relations that exist in processes of pedagogy. Echoing Hammersley and Biesta, Furedi (2013a; 2013b) argues that unlike with medicine, teaching cannot be reduced to a technical process whereby the results will be predictable and can be generalised to other groups. These sceptics argue that the search for cause and effect is less straightforward in education than in medicine, and therefore reject RCTs as the dominant method on which policy decisions in education should be based. Harrison and Waller (2017a) develop these issues in relation to widening participation and warn against treating outreach activities as quasi-scientific interventions which can easily be shown to cause an intended change. The authors question whether the future behaviour of young people can ever be predicted:

"The lives of all young people are 'messy' as they are buffeted by myriad experiences and influences – some planned, but many accidental. The beliefs and expectations of their families, schools and communities will shape their own attitudes and ambitions. The intersection of their gender and ethnicity will also play a role, as will other social factors like disability or sexuality. All of these elements are then mediated through the prism of personality – itself mutable in the process of becoming an adult" (Harrison and Waller, 2017a, p83-84).

Instead, Harrison and Waller (2017a) call for more emphasis to be placed on first understanding the processes through which interventions are designed to work. Such processes should be clearly defined within the context of the individual participants, recognising their social and cultural starting points. The authors argue that processes should be refined over time through 'reflective practice and empirical research' (p85).

These arguments are reminiscent of the long running ideological quantitative/qualitative debates discussed in the opening pages of this chapter, and thus the 'methodological battleground' has resurfaced within the field of widening participation. On the one hand we have Government and the BIT who champion the use of scientific methods, particularly RCTs. On the other, those who convincingly call into question the relevance and suitability of scientific methods in the evaluation of

complex educational interventions, and moreover the unthinking application of design. These arguments have heavily influenced the evolution of my own thinking around the problem of identifying what works in widening participation, and particularly the formulation of my RQs. With this in mind, perhaps there are better questions that can be asked of the HEAT dataset that might tackle the 'what works' question indirectly. Although the HEAT data may not easily be able to tell us what works directly, as I had first hoped, there is, nevertheless, much it can tell us about the ways universities are delivering their outreach in practice.

3.4 The study design

As summarised above, the overall study design adopts a mixed-methods approach, drawing on both quantitative and qualitative data to explore 'what works' in widening participation. After reviewing the literature, I narrow my focus on the ability of universities' outreach to raise student attainment in schools, as this is the direction the policy has recently taken (OfS, 2018b).

I start by using HEAT's quantitative dataset of historic outreach delivery to examine the proportion of all outreach recorded through HEAT that can be considered as having the potential to widen participation in Higher Education (RQ1). Following on from arguments developed in the Literature Review, RQ1 examines whether outreach is being targeted effectively in order to tackle educational disadvantage. I then move on, in RQ2, to tackle the 'what works' question more directly and attempt to formulate a robust method that uses HEAT's longitudinal tracking data of outreach participants to show the impact of participating in outreach on school attainment. I use a quasi-experimental matched cohort design to examine impact. Having listened to those who caution against the use of experimental and quasi-experimental methods when evaluating educational interventions, I pay careful attention to the methodological limitations involved in my method and are cautious about the causal claims I am making. For my third RQ I draw on two qualitative data sources to explore the types of outreach activities universities are delivering to raise student attainment in schools, thus broadening my methodological approach. In RQ3a I conduct content analyses of universities' Access Agreements (AA). Finding these documents lacking in their ability to reveal detailed information on activities that are being delivered by universities, the study is extended in RQ3b in the form of semi-structured interviews with widening participation manager practitioners from a sample of 30 HEIs.

At times, in RQ3, I am reminded not to dismiss the value of the HEAT data which, although not perfect in its current form, does provide valuable information when used to monitor trends in delivery. It is, however, undeniable that as the Senior Data Analyst for HEAT I do have a personal interest in promoting the value of this dataset. In acknowledgement of this and as is good practice in social

science research, I reflect on my role as a researcher in determining the type of inquiry being conducted, particularly in relation to the formulation of each RQ within this study design (Agee, 2008). The RQs are discussed in detail next.

RQ1: To what extent have HEAT member universities been targeting outreach towards students to raise their Key Stage 4 (GCSE) attainment as a precursor to widening access to higher education?

In RQ1 the quantitative HEAT data will be used to explore trends in historic delivery of outreach. This is based on the students universities have recorded on HEAT as having participated in an outreach activity whilst at secondary school. The timeframe of this delivery spans eleven academic years, with data first collected in 2004/05 and the most recent full academic year of outreach delivery at time of writing being 2015/16. As a result I have a very large dataset, consisting of 223,725 students who participated in outreach whilst at secondary school during this time period. Drawing on this dataset I show the proportion of students who are most likely to be in need of support with their attainment in order to allow subsequent progression to HE. Within this definition of outreach, students must meet the following three criteria:

1. First received outreach before the age of 16 (before taking their GCSEs), a time that has been identified as critical for the future progression routes available to young people (Crawford, 2014; Chowdry *et al.*, 2013; Croll and Attwood, 2013). This is possible using students' date of birth and comparing this with the date on which they first participated in an outreach activity.

2. Were not expected to achieve 5 GCSEs at A*-C including English and Maths, the level of attainment that has been identified through national research as required in order to progress to HE (Crawford, 2014). This is possible as HEAT's dataset of participants have been linked with their Key Stage 2 attainment data available from the Department for Education's National Pupil Dataset (NPD).

3. Can be classified as disadvantaged, and thus are the target audience for widening participation outreach activities. Identifying students as disadvantaged is problematic because there is little agreement on how this type of disadvantage should be defined or measured (Savage *et al.*, 2015; Goldthorpe and McKnight, 2006). Nonetheless, we are reliant on data and markers at all stages of widening participation, as are many public sector policies relating to income distribution, health and education (Judge, 2001; Atkinson *et al.*, 2002). These are described in Appendix 3.1 and cover a basket of indicators, some being linked to the individual, some their school and some their home postcode.

In addition to these three criteria, as part of RQ1 I will examine the way outreach delivery has changed over time in the context of wider changes to widening participation policy. Data will be presented for the type of HEI delivering the activity to examine differences by institution type that have been well reported (McCaig and Adnett, 2009; McCaig, 2015; Rainford, 2017).

The formulation of this question has been heavily influenced by my own understanding of what a widening participation outreach activity should aim to do. It is argued in this chapter that if we are to achieve the government's intention of encouraging disadvantaged students into HE, which is, after all, the national aim of widening participation, then HEIs must work with this aim in mind, targeting the 'right' students with consistency in the ways in which these students are identified and encouraged into HE. As my job at HEAT gives me access to a large number of HEIs' data, I see the variation in outreach delivery across the sector and so am fully aware that this consistency might not exist.

It should be acknowledged that in RQ1 I choose to focus only on the part of widening participation policy that aims to *increase* participation of disadvantaged young people, rather than the part that aims to address whether that participation is fairly distributed across HEIs (fair access concerns). Whilst this has been justified through the Literature Review (Chapter 2) it is certainly influenced by my background within a medium tariff university, and particularly the colleagues I have worked with whilst at this institution. My introduction to, and education in, widening participation has been heavily shaped by this one institution's understandings of what widening participation means to them, which in turn is shaped by their institutional priorities. It is possible that if I had worked within a high tariff institution my understanding of widening participation might be different.

RQ2: Can a robust method be formulated that uses HEAT's longitudinal tracking data of outreach participants to show the impact of participating in outreach on school attainment at Key Stage 4 (GCSE)?

In RQ2, the HEAT dataset of historical outreach participants is again explored, but this time in terms of its ability to show the impact of outreach. The method chosen to show impact is central to the RQ itself and here I am searching for a robust method that uses HEAT's longitudinal tracking data of outreach participants to show the impact of participating in outreach on school attainment at Key Stage 4. Therefore, in this RQ I come closest to asking 'what works', although rather than asking which parts of outreach might work better than others (which I explain in Chapter 5 may be beyond the ability of the HEAT dataset in its current form) I ask whether participation in any type of outreach might have had an impact on attainment.

In RQ2 analysis is based on those students identified under RQ1 as in need of support with their attainment at Key Stage 4 in order to allow subsequent progression to HE. I use a quasi-experimental matched cohort design to compare attainment of a group of outreach participants (the treatment group) with that of a non-treatment or comparator group. The process of defining the latter group was problematic; HEAT is currently used to record information on students with whom universities *have* engaged in outreach, and so I do not have easy access to data on students who *have not* participated in outreach. To overcome this issue I use a group of students who have been recorded on HEAT as having participated in very low levels of outreach, specifically only one activity classified under the HE Information Talk activity type, and treat this as the non-treatment comparator group. I feel this is justified as participation in this one type of activity which typically has high student to staff ratios and usually lasts little longer than an hour, is arguably the least likely of any form of outreach to have a transformational effect on the student. Having made this assumption, I am aware that speakers at such events can be inspirational, and can change lives. There is no perfect solution in the creation of the comparator group. Outcomes for these students will be compared with those for a similar group of students who have participated in at least three outreach activities, comprising the treatment group.

The confounding variables on which students from the treatment group are matched with students from the comparator group are crucial to the quality of this analysis. These are summarised in Table 3.2 below, a full justification of why these variables were chosen is provided along with the analysis in Chapter 5.

Table 3.2: Six observed confounding variables on which matching will be based

Match variable	Reason included as a matching variable
Gender	To control for differentials in the Key Stage 4 achievement of boys when compared with girls.
Ethnicity	To control for differentials in Key Stage 4 achievement across ethnic groups.
Income Deprivation Affecting Children Index (IDACI) Quintile	To control for differentials in Key Stage 4 achievement by socio-economic background.
Key Stage 2 Attainment Level	To control for differences in students' prior attainment, with Key Stage 2 exams taken in Year 6 being the last prior attainment available.
School performance at Key Stage 4	To control for the influence of the school, this may include the school environment and teaching quality.
Key Stage 4 exam year	To control for changes in national achievement measures year on year.

The formulation of RQ2 has been heavily influenced by my role at HEAT. Within this role I am tasked with using HEAT's longitudinal tracking data to show the impact of outreach and therefore, it is my responsibility to find how the HEAT data might be used effectively. It could be argued that my role at HEAT has influenced my perception of the value of HEAT's tracking data in its ability to show this impact. Although my background at HEAT is driving my agenda to some extent, I feel this is a valid and ethical aim; HEAT and the tracking of participants is an area in which the sector has already invested heavily and this RQ aims to develop that work. Furthermore, I am familiar with, and sympathetic to, the criticisms of tracking, such as those reported by Harrison and Waller (2017a) and in this RQ I attempt to devise a method that makes best use of tracking data within its constraints. I therefore consider my closeness to the data a strength here; I am aware of common mistakes, for example, choosing unsuitable comparator groups and claiming too much from statistical analyses, and so am cautious when choosing how to use the HEAT data.

RQ3: Which types of outreach activities are universities delivering to raise attainment in schools and how are they meant to work?

This question developed following processes of ongoing questioning whilst analyses for RQ1 and RQ2 were being conducted. It aims to investigate areas the secondary HEAT dataset cannot disclose. Following the analyses conducted in RQ1 it is clear that there is wide variation in the nature of outreach delivery across the sector, particularly in terms of who is being selected to participate. However, it is only possible to make assumptions as to why HEIs are delivering these different forms of outreach. When this variation is removed in RQ2 there does appear to be some evidence of impact on attainment, but it is not known which specific elements of outreach might have been effective and why.

In RQ3 I draw on two different qualitative research methods to take a closer look at the nature of outreach that is being delivered with the aim of raising attainment in schools. First content analysis of all 123 HEIs' 2018/19 Access Agreements (AA) was conducted and second, data were collected from semi-structured interviews with widening participation managers from a sample of 30 HEIs. Here I move away from confronting the 'what works' question directly and try to make sense of what is being done and why. This will inform a theoretical discussion about the practical approaches universities are taking in order to fulfil their new brief to raise attainment in schools through their outreach activities.

In RQ3a I employ content analysis techniques to analyse AA submitted by HEIs for the academic year 2018/19 in order to better understand the types of activities universities are delivering to raise attainment in schools. Content analysis is a widely used qualitative research method whereby

materials, in this case AA, are systematically reviewed and analysed based on identified categories (Weber, 1990; Rosengren, 1981). AA are strategic documents in which institutions will set out *some* of the activities they are delivering. According to OFFA's guidance on writing an AA, universities should include:

"Examples of the sorts of access agreement activities you will be funding and why, including the evidence base for doing so (this does not need to be a detailed list of all activities)" (OFFA, 2018a).

From the above guidance it might be expected that AA will not include sufficient detail on the comprehensive range of activities being delivered. However, the 2018/19 AA appear more promising in their ability to deliver the information I need. These AA are the first in which universities have been asked by OFFA to set out the measures they are taking to raise attainment in schools. To do this OFFA requested the following information was included:

"We want you to review and develop your access agreement so that it sets out clearly what you are doing and/or plan to do, to:

- increase your work to raise attainment in schools and colleges for those from disadvantaged and under-represented groups, including through outreach and/or strategic relationships" (OFFA, 2017b)

Thus the 2018/19 AA *should* contain the information on the approaches universities are taking to raise attainment in schools that is pertinent to my third RQ. However, reports have commented on the highly 'controlled' nature of these documents (Bowl and Hughes, 2016) and so I plan to follow my analysis of AA with a series of interviews, to explore in more depth the approaches universities are taking to raise attainment in schools.

Interviews were semi-structured so as to allow the interviewees' thoughts and feelings drive the interview. Interview questions were primarily designed to address the specific aims and targeting of attainment-raising outreach, so as to elaborate on findings from RQ3a. The open-ended questions addressed the high level findings from RQ1 and RQ2 in order to understand, from the universities' perspectives, the trends observed in the HEAT data. As it was my intention to elicit a deep and rich level of data, interviews were used rather than questionnaires; according to Patton (2002, p341), interviews provide one of the best ways to "enter into the other person's perspective". Such interviews are an accepted part of educational research, and have been used previously in widening participation research (Harrison and Waller, 2017b).

Next processes of data collection and analysis are discussed, alongside the limitations involved in each data source. These three components of the methodology are dealt with in turn for each type of data - HEAT data used in RQ1 and RQ2, the data from AA used to inform RQ3a and interview data used in RQ3b.

3.5 The data collection process

This section provides a detailed account of how the three sources of data were collected. I cover how the data were accessed and describe collation processes for the secondary sources: HEAT data and AAs. For the primary source, the interview data, I describe in detail my sampling strategy and the use of pilot interviews to test the suitability of the interview questions.

3.5.1 Access to and collection of HEAT Data

HEAT data was accessed through the HEAT Service, to which I have privileged access through my job. External researchers wishing to access the HEAT dataset would have to apply to the Service and have their project proposal approved by the HEAT Research Group, something which, to date, no external researchers have opted to do. Here my 'insider status' acts as a strength as it has provided access to the dataset as well as experience and knowledge regarding its collation and analysis. The benefit of insider status has been recognised by others (Merriam *et al*. 2001; Stevenson *et al.*, 2010). However I have been careful to reflect on my influence as a researcher and how this may be a threat to validity.

As described previously, the HEAT dataset is a secondary dataset of outreach participation and so the data, having been collected by universities, is already available for analysis. Universities add information about the outreach activities they are delivering and the students who participated to a central repository (known as the HEAT database). Where sufficient personal information for students have been recorded by universities, these students can be 'tracked'. As part of my role for HEAT I am responsible for managing this tracking process for all HEAT members. Here the outcomes for students are obtained by tracking them through the datasets of national education administrative agencies. These outcomes become the measures of success on which impact can be based. The datasets into which HEAT is able to track participants were provided in Chapter 1 (Figure 1.4).

In RQ1 students' date of birth and the date of activity participation, all recorded through HEAT, was used to determine whether students first received outreach before the age of 16. Next students' prior attainment at Key Stage 2 was used, available following tracking into the Department for Education's (DfE) National Pupil Dataset (NPD), to identify students who were not expected to achieve five GCSEs

at A*-C including English and Maths. I opt for a straightforward approach to this complex issue of predicting likely future achievement and include Medium and Low Key Stage 2 attainment bands. A justification for this is provided in Chapter 4 but for now I note that these data were available from the NPD.

Finally, I drew on a range of proxies for disadvantage in order to identify students within my cohort of participants who are considered to be 'disadvantaged'. Each of these proxies has its limitations in identifying social class, not least because of the intangible nature of what they are trying to measure. In spite of these limitations, these markers are central to widening participation, being used in performance monitoring, setting targets and targeting students for inclusion in outreach. Certain indicators are so embedded they have come to define widening participation and are often taken for granted and insufficiently questioned by practitioners (Harrison and McCaig, 2014). For this reason I will consider the limitations of each of these markers and provide a justification for those I have selected to use in my analysis. This justification is provided in Appendix 3.1. In terms of their availability, all proxies were accessible through HEAT, either linked to the student's postcode (for example IDACI or POLAR), collected during surveys (parental experience of HE) or available through linking with the NPD (Free School Meal eligibility). However, there are issues with missing data for some variables (particularly parental experience of HE) which are discussed in Chapter 4. For this reason, a simplified definition of disadvantage which is available for all participants (IDACI) is incorporated into the matching process in RQ2.

In RQ2 I examine the impact of outreach on attainment at Key Stage 4, this outcome being available from the NPD. Here I use a simple marker – attainment of at least five GCSEs at A*-C including English and Maths - which is provided as a binary variable in the NPD. Following the retrospective matched cohort design already described, students from the treatment group were matched with students from the comparator group based on six observed confounding variables. Table 3.3 summarises the sources of the six observed confounding variables on which matching will be based.

Table 3.3: Sources of the six observed confounding variables on which matching will be based

Match variable	Source
Gender	NPD
Ethnicity	NPD
IDACI Quintile	Open dataset linked to student postcode from HEAT
Key Stage 2 Attainment Level	NPD
School performance at Key Stage 4	School performance tables (open dataset)
Key Stage 4 exam year	NPD

3.5.2 Access to and collection of data from Access Agreements (AA)

Access Agreements (AA) are publically available documents that can be accessed via OFFA's website. A total of 123 HEIs submitted an AA to OFFA for the academic year of entry 2018/19, all of which were available online. The AA for Further Education Colleges (FEC) that also provide higher education provision were not included in the analysis as my study focuses on the approaches adopted by universities. The AA for 123 HEIs were downloaded from OFFA's website and saved locally for analysis.

3.5.3 Access to and collection of data from interviews

The interviews conducted as part of RQ3b comprise the source of primary data collection. This meant a number of additional considerations needed to be made when approaching the data collection phase when compared with the two secondary data sources. These are discussed next.

3.5.3.1 Sampling

When recruiting participants for interviews, for the first time it was necessary to employ a sampling method. Where HEAT data and AA data used *all* data at my disposal, for the first time I had some control over selecting which individuals and HEIs were included in the sample that would make up the dataset of interview responses. Following advice from Robinson (2014) and Patton (2002) on sampling in qualitative-based interview research, the following four areas were considered.

First, the target population eligible for sampling was decided, including the inclusion and exclusion criteria. This was based on the type of HEI at which widening participation managers worked and their job title. Following the analysis conducted in RQ3a, drawing on HEIs' AA, specialist institutions were excluded from the interview phase as they tended to deliver very different types of outreach activities that were specific to their institutional context.

When identifying the correct staff within non-specialist HEIs, I aimed to interview the Head of Widening Participation. This member of staff was likely to be responsible for managing the implementation of their institution's widening participation strategy and thus have the strategic oversight required to answer my questions. However, job titles and office structures differed across universities and it could be difficult to identify the correct member of staff to make up a homogenous sample. This required some background research into staff profiles, investigated on the universities' websites, before contact was made. Following contact with the Head of Widening Participation (actual

job titles varied), it sometimes transpired that there was a more suitable member of staff who would be able to provide more informed answers to the questions and so this person was nominated to participate instead. What resulted was a mix of job titles, but all either the Head of Widening Participation (or equivalent), or a nominee who the Head of Widening Participation felt was qualified to answer the questions on their behalf.

Second, a target sample size of 30 HEIs was chosen. It was felt this sample was sufficient to ensure the validity or transferability of the findings (Silverman, 2010) whilst at the same time being manageable within the resource constraints of the study. Patton (2002, p246) recommends:

 'Sampling to the point of redundancy is an ideal, one that works best for basic research, unlimited timelines, and unconstrained resources. The solution is judgment and negotiation. I recommend that qualitative sampling designs specify minimum samples based on expected coverage of the phenomenon given the purpose of the study and stakeholder interests.'

Thus the sample has been set at 30: large enough to provide validity within my context whilst being manageable within my timeline. However, I set out to be flexible with this number as the interviews progressed and reviewed regularly whether it was suitable in theoretical terms (Silverman, 2010). To aid this flexible approach, analysis of the interview data was conducted at the same time as new interviews were being held, rather than the analysis stage being left to the end. This allowed us to decide in real-time whether the sample had provided a 'saturation' point, or if new ideas were being introduced that might warrant further data collection (Strauss and Corbin, 1998).

Third, a stratified sampling strategy was employed to ensure all types of HEI were represented in the sample (Mason, 2002). As I wish to compare the responses of staff from different types of non-specialist institutions and search for similarities and differences, this was built in to the sampling strategy. An equal number of participants were selected from high, medium and low tariff HEIs, as differences in terms of approaches to outreach have been shown here (McCaig and Addnett, 2009; McCaig, 2015). Furthermore, a sufficient proportion of high tariff HEIs aligned themselves with the Russell Group, allowing analysis by this group of selective institutions. Although not one of my sample inclusion criteria, only HEIs that were also members of HEAT participated in an interview. This is likely to have been because my name was familiar to them. This followed a convenience sampling method, where a convenient group of potential participants are approached for interviewing and then potential participants are selected, based on who responded (Robinson, 2014). The sample was therefore not randomly selected and voluntary participation would inevitably have led to some extent of self-selection bias.

Fourth, participants were approached with an interview request. Contact was made via an email, with email addresses available on university websites. Using email helped meet ethical requirements as I was able to include information that informed participants of the study's aims, of what participation entailed, that participation was voluntary and of how anonymity would be protected so that they could reach an informed decision to whether or not to participate. The process of recruiting participants consisted of three stages. First, convenience sampling was used to select participants for five pilot interviews. This involved approaching five individuals who met inclusion criteria directly and asking them to participate in a pilot phase of the interviews. These were five individuals I knew through HEAT and with whom a professional relationship already existed. I asked whether they would take part in the pilot phase of the interviews, which involved answering the questions I had prepared and then reflecting on these questions and the interview in general to see if any improvements could be made. As these interviews required a deeper level of reflection, on both the interview questions and my interviewing style, they were all conducted face-to-face.

Following this stage, and some modifications to the questions which will be discussed in the next section, I started phase two of recruitment, recruitment *en masse*. A non-personalised email was sent to all Heads of Widening Participation for whom an email address could be found either on the university website or through HEAT's database of contacts. This accounted for 88% (n=80) non-specialist HEIs. Where an email address for the Head of Widening Participation could not be found, an email was sent to the team's generic email address. During this phase, emails were sent from my personal Gmail account. However, responses were very low and so next a different method was employed. Personalised emails were sent to all HEAT contacts within the relevant job title, a method which proved far more successful. This time, emails were sent from my HEAT email account with the Director of HEAT's permission and I introduced myself as HEAT's Senior Analyst, rather than an independent researcher.

Fifteen individuals with whom I already had a professional relationship agreed to take part immediately. A purposive sampling strategy was then employed to ensure inclusion of individuals working in different types of HEIs from different locations. Follow up emails were sent to selected individuals and this nearly always resulted in a successful interview. Only four individuals refused to participate in the research. Inevitably this recruitment strategy resulted in degrees of bias. Voluntary participation is likely to have resulted in including those who were engaged in the research topic and I may have included a larger proportion of managers with strong views in relation to raising attainment through outreach than is found in the entire population of outreach managers. However, it would have proved extremely difficult to avoid this type of bias in interview based research for which

voluntary participation is essential for ethical compliance. I can only ensure I am aware of the consequences of this bias and consider the possible impact on my findings and the generalisability of the conclusions I draw.

3.5.3.2 Methodological modifications following pilot interviews

Five pilot interviews were conducted in order to test the interview questions. Following this two changes were made to the interviews: the questions themselves which were made more specific and reduced in number and the medium through which the interviews would be conducted.

It soon became clear that the interviews were taking far too long for the participants, who tended to have busy and demanding jobs, to complete. Even though participants had been told that the interview would take around an hour and a half, two of the five pilot participants had to leave before I had finished asking all of my questions. Interviews lasted from 55 minutes to an hour and 20 minutes depending on the respondent's willingness to talk around the topic and elaborate on their answers. Although this yielded a rich source of narrative data with many interesting ideas and diversions, when analysing the data and attempting to extract common themes it soon became clear that the questions were not sufficiently focused. In particular, the information relating to the attainment-raising outreach activities being delivered was inconsistent and not sufficient to allow comparison across HEIs. This led to a more structured set of initial questions and then two open ended questions (see Appendix 3.3 for final set of interview questions). Three of the five pilot participants were very willing to give their opinions on whether attainment-raising should be the responsibility of universities, often presenting political arguments. As a result this was included as an open ended question giving all participants the opportunity to present their views on this topical issue. Three of the five pilot interviews were included in the final sample as their interviews covered all questions that were included in the final version, thus 32 widening participation managers from different HEIs were interviewed overall.

Following the pilot interviews, which were conducted face-to-face, it was decided that the interviews in the following stage would be held over the telephone. This decision was made largely for practical reasons with budget constraints limiting ability to travel. Telephone interviews would allow HEIs from across the country to participate, and thus not limit the sample by geography. It was felt that telephone interviews would not be detrimental to the research as the topic being discussed was not sufficiently delicate or sensitive to warrant face-to-face interviews (Oltmann, 2016). Furthermore, the benefits telephone interviews would bring in terms of reach would outweigh any reduction in the quality of discussion that it was possible to elicit over the telephone. This decision is supported by

studies that have found interviewing over the telephone to produce similar results to those conducted face-to-face (Holt, 2010; Irvine, 2011; Miller, 1995; Sturges and Hanrahan, 2004).

Next a discussion of the processes of data analysis for each type of data is provided.

3.6 Approaches to data analysis

3.6.1 Approaches to analysing HEAT data

In RQ1 descriptive statistics were produced to show the proportion of students within the HEAT dataset who meet the criteria set out in RQ1. After calculating the overall proportion of students who meet the three criteria at the same time (detailed in Chapter 4, RQ1 analysis), the analysis moves on to examine each of the three criteria separately. The way this has changed over time and variations by the type of HEI delivering the outreach are also considered.

In RQ2 I follow a matched cohort design to retrospectively create treatment and non-treatment groups from my dataset of historical outreach engagement. This is based on those students who met the eligibility criteria set out in RQ1 and for whom all tracking data were also available. Here I also made use of the number and types of outreach activities in which each student had participated and divide the sample into two groups: those who have participated in three or more activities (the treatment group) and those who have participated in only one activity that has been recorded as a one hour HE Information Talk (the non-treatment group). Many students in the sample were not eligible for either the treatment or non-treatment groups as their outreach participation consisted of either fewer than three activities (treatment group), or where this was one activity, it was recorded as a type other than an HE Information Talk (non-treatment group).

The Case Control function in SPSS was used to perform the matching and thus create the two groups to be compared. Data were then manipulated in Excel to calculate differences in the proportion of students from the treatment and non-treatment groups who achieved five GCSEs at grades A*-C, including English and Maths. Following advice from White and Gorard (2017) inferential statistics were not performed as the design is not random.

3.6.2 Approaches to analysing AA data

In RQ3a, AA were imported into the qualitative analysis software NviVo, where they were read and analysed using content analysis techniques. The basic coding process in content analysis is to arrange large volumes of text data into fewer categories based on the text's content (Weber, 1990). The

identified content categories in my analysis of AA consisted of the activities being delivered to raise attainment. These categories of activities emerged directly from the text, with similar outreach activities coded to the same category, clearly a subjective decision by the author. Content analysis where the categories and labels for the categories are drawn from the data itself is known as conventional content analysis (Kondracki and Wellman, 2002) or inductive category development (Mayring, 2000). In theory, a comparison of the outreach activities reported by different HEIs in their AA would enable us to obtain a comprehensive understanding of the range of approaches universities are taking to raise attainment in schools, allowing the mapping and visualisation of these activities in an activity typology. Following the development of this typology, the number of HEIs delivering each of the activities within the typology were quantified, thereby deriving quantitative data from the qualitative data (Berg, 2001).

3.6.3 Approaches to analysing interview data

All interviews were recorded on an audio-device so as to enable conversations to be transcribed. This was done verbatim within one week of the interview taking place. This was a time consuming and laborious process but one that helped me become familiar with the data and identify broader themes and patterns as part of a thematic analysis approach (Guest *et al.*, 2012; Braun and Clarke, 2006). Transcripts were read and re-read to search for further themes and patterns that might form conceptual categories. Transcripts were then imported into NviVo where they were coded into these categories. The categories were constantly reviewed to make sure they fitted the themes that emerged from data.

Pilot interviews were analysed within one week of the interview and always before the next pilot interview was conducted. Analysis of pilot interviews allowed me to identify relevant and non-relevant constructs and thus develop and refine the questions for future interviews. Pilot interview participants were asked to advise on the questions being asked and so this information was used to modify the questions themselves. Post-pilot telephone interviews were also analysed concurrently with data collection, but unlike the pilot interviews, the findings were not used to change the nature of the questions being asked as I was mindful that at this stage questions should be consistent.

Next a discussion of the limitations of the research design and data sources is provided.

3.7 Limitations

In the final section of this chapter I address the limitations of all three types of data and their ability to address the RQs. These limitations cover only the technical issues with the data. Wider paradigmatic issues surrounding the suitability of the method used to examine the efficacy of outreach interventions will be debated in the discussion accompanying the analysis of RQ2 (Chapter 5). Many of the limitations discussed next will be developed in the four analysis chapters, alongside appropriate examples, but for now a summary of the main challenges encountered is provided.

3.7.1 Limitations of using HEAT data to address RQ1

Although HEAT's data has significant potential to be used to monitor trends in national outreach delivery, as required for RQ1, there are currently issues in relation to incomplete coverage and missing cases within the data that have been recorded, that reduce validity.

The HEAT Service has recently undergone a rapid expansion thanks to funding from HEFCE and currently 85 English HEIs subscribe to HEAT from a range of mission groups and tariff bands (HEAT, 2018). From the analysis of AA I found that 91 non-specialist HEIs submitted AA in 2017/18; the HEAT membership includes 80% of these institutions. Thus HEAT's coverage is extensive and enables reporting on the outreach that these HEIs have recorded on HEAT's database. But coverage is not complete and there remain a minority of 20% of non-specialist HEIs who do not record their data with HEAT. In addition, many of HEAT's newer members have only started recording data on outreach delivery fairly recently, and so these HEIs will contribute a smaller proportion of students to the collective pot.

Furthermore, even within HEAT's sample of member HEIs, it is likely that data will be missing. Currently, each HEAT HEI member decides which students they record for tracking, this is likely to be determined by whether data for these students were available. Thus my dataset will only include those students who were asked for, and agreed to provide, their personal data. From my own conversations with HEIs at HEAT, this may sometimes disproportionately affect younger students as some practitioners report concerns over the ethics of collecting personal data for students younger than 16 years old. This poses validity issues in relation to RQ1 which aims to identify the proportion of all outreach participants added to HEAT who first received outreach before the age of 16. In the analysis of RQ1 (Chapter 4) I attempt to support findings by using alternative data recorded on HEAT, these being estimated student totals which do not rely on individual student details having been collected.

A further issue that contributes to the number of missing cases is one of data quality. RQ1 relies on identifying the age at which a student first participated in outreach, and so a valid date of birth and year of activity must have been recorded. RQ1 then requires sufficient personal information to link students' records with those found in the NPD in order to learn their prior attainment at Key Stage 2. This requires accurately recording a student's first and last name and their postcode. Where these key fields have not been recorded I was forced to remove the students from my dataset. As data are added by a number of different HEIs and therefore individuals, data quality and therefore the number of missing cases will vary across the membership and over time (owing to whoever is put in charge of entering data). HEAT undertake an annual data clean during which members are asked to check the quality of their data, but they are ultimately responsible for their own portion of the collective dataset. Of all student participants who were added to HEAT during the period in question, 14% were considered of insufficient quality to include in the final dataset.

3.7.2 Limitations of using HEAT data to address RQ2

As already discussed, the primary technical issue with using HEAT's tracking dataset to examine the impact of outreach, is the ability to identify a suitable comparator group. Theoretically, this should consist of a group of students who had not participated in outreach, with this being the counterfactual scenario in which I am interested. It is possible to obtain, from the Department for Education's NPD, data on students who do not appear in my dataset of outreach participants, who could then *de facto* be considered non-participants. However, given that HEAT do not capture all outreach that is delivered nationally, I could not be confident that these students had not received any form of outreach. It is more likely that it had simply not been delivered by one of HEAT's university members. Thus finding a suitable comparator group was problematic. Nevertheless, I believe using the data for students who have taken part in what might be considered a relatively low impact activity provides a practical solution.

Although practical, and easily available, the decision to consider this scenario as the counterfactual could be criticised. What is now actually being assessed is whether a substantial amount of outreach (at least three activities) has more of an impact than a little bit of outreach (one HE Talk). As a result I might expect any difference in outcomes between the two groups to be smaller than if I was to compare the same treatment group with a group of similar students who had received no outreach at all. However, availability of data renders this the best solution.

A further limitation of RQ2 is one that is commonly reported in matched cohort designs: the method can only moderate selection bias attributed to detected characteristics that have been accurately

measured, known as the observed variables (Stuart, 2010). The suitability of the comparison is heavily dependent on the *accurate* assessment of all variables which might influence the outcome being compared, in my case Key Stage 4 attainment. As set out in Table 3.2, I do match on a number of key variables identified in the literature as likely to influence attainment at Key Stage 4. However, this method is open to criticism based on what is not being measured, the unobserved variables. The unobserved variables most likely to be in operation within my dataset include students' psychological characteristics influencing their motivation to engage in their education, the effects of the students' schools, such as individual relationships with teachers and additional attainment raising interventions available within the school, elements of home learning not captured by crude proxies for disadvantage (such as IMD and FSM) and the targeting effects of who is chosen for, or applies to participate in, outreach. These factors have not been ignored in my analysis, and my discussion in Chapter 5 shows that they are strongly associated with one or more of my observed variables, but it is not possible to account for them entirely. For this reason the results of this analysis are presented as associations between variables and I am careful with the language I use in order to avoid 'overclaiming' (Gorard, 2002b, p147).

Finally, I acknowledge and discuss in the context of the results presented for RQ2 (Chapter 5) that rather than helping to answer 'what works' in outreach, my analysis only makes the case that 'outreach works'. Although this may be useful evidence for showing the value of the overall policy, we are no better informed as to why outreach might work, or which parts are effective. This has been noted as a common issue of using experimental or quasi-experimental methods to test the effectiveness of outreach interventions (Younger *et al.*, 2018). Such attempts at evaluation can lead to reducing outreach to a so called 'black box' whereby nothing is understood about why or how or under what conditions it works (Peterson, 2016; Scriven, 1994). I attempt to address this issue in RQ3 by drawing on qualitative methods to examine the specific elements of what HEIs are delivering to raise attainment, and why these might lead to success.

3.7.3 Limitations of using AA data to address RQ3a

The limitations involved in using AA to examine the approaches universities are taking to raising attainment in schools are many. Following my analysis it became apparent that AA provide a flawed basis for the assessment I am trying to make. These limitations can be more easily described alongside the analysis of RQ3a (Chapter 6), where relevant examples are available, and so here I provide only a summary. AA appear, on reflection, to take the form of political-response documents rather than documents containing the strategic aims relating to activities. As a result these documents are highly

controlled (Bowl and Hughes, 2016) and much of the information presented is not sufficiently detailed to reveal the specific practices of universities in terms of attainment-raising outreach. It is worth noting that OFFA has been challenged repeatedly for being light-touch and ineffectual (Attwood, 2011; MacLeod, 2004; Baty, 2004; Gill, 2009) and the lack of clarity in AA, OFFA's main reporting mechanism, may be a further reflection of this. It is difficult to see how OFFA can know in any detail what universities are actually delivering from their AA. Bowl and Hughes (2013; 2016) argue that universities tend to take such a measured approach to writing AA that their commitments to widening participation are often ambivalent and sometimes contradictory to messages appearing in promotional material, for example material from their websites.

However, when writing these documents universities are required to make targets in terms of widening access to their own institutions. Indeed, an article published in The Sunday Times, cited internal documents to report that Cambridge University's plans to reduce one of their targets for admitting disadvantaged students, set out in their AA, were rejected by OFFA (Henry, 2016). Thus it appears that universities are not totally free to do as they wish, although how OFFA monitored the work that was actually being delivered to achieve these targets is not well known.

AA also vary considerably in format and content. They are text documents, narrative or conversational in style, with HEIs choosing the level of detail they provide on the measures they are taking. McCaig (2015, p7) suggests that AA can be thought of as 'discursive events'. However, owing to their qualitative nature, there is wide variation in content; furthermore, a lack of consistency made it difficult to compare activities delivered by different HEIs and judge whether they were similar.

Thus in spite of what guidance from OFFA claims AA will provide, they are a problematic basis for the enquiry I am trying to make. In order to mitigate the impact of these limitations, every attempt was made to ensure the analysis conducted on AA is consistent in approach and I feel the final the typology of activities remains of value.

It must also be acknowledged that the process of coding AA in order to create the typology of activities was heavily subjective. Another researcher would almost undoubtedly have interpreted the information presented in AA differently, and produced a different typology. Every effort was made to ensure the process was as logical and rational as possible. I read and considered all 123 AA myself – no other researchers were involved - a time consuming process but one that ensured consistency and provided me with an overarching perspective of activities being delivered nationality. Whilst coding AA, each type that emerged within the typology was regularly reviewed to ensure accuracy and consistency of content. My ability to produce a useful and accurate typology was heavily dependent

on my own knowledge, skills and abilities – and my in-depth awareness of my RQs. My experience of working with a large number of HEIs through HEAT proved a considerable strength here. I was able to draw on my knowledge and involvement in processes of collating the diverse range activities delivered by different HEIs within the HEAT membership into common types. This has afforded me some experience of the complexity of such as task which in turn is likely to have helped to avoid a naïve interpretation of the data.

3.7.4 Limitations of using interview data to address RQ3b

A commonly reported limitation of interviewing as a method of data collection relates to the difference between what people say in interviews and what they do (Taylor *et al*., 2015; Fielding and Thomas, 2015; Deutscher *et al*., 1993). In the context of RQ3b this may happen for three reasons. First, the topic being discussed is highly political and interviewees may, therefore, be presenting a politically acceptable version of their institution's approach to attainment-raising in schools. To mitigate against this the confidentiality of information discussed was emphasised before all interviews and I felt I was successful in creating an atmosphere where people could talk freely. It did appear that many interviewees were prepared to talk honestly on the topic and were pleased to have a 'voice'; views that were in opposition to the new policy direction were often expressed. My background at HEAT may also have been a strength here. I had already developed a rapport with many of the participants, and of those I had not met many had a similar rapport with one or more of my colleagues at HEAT.

Second, I cannot be certain that the views of the individual being interviewed matched the views, and subsequent actions, of their institution. The interviewees themselves tended to have different levels of knowledge and experience about widening participation and outreach in general. I was careful always to ensure interviewees had some strategic responsibility for their institution's widening participation delivery, thus ensuring a certain level of responsibility. However, team structures within universities differ and so it was often difficult to assess exactly how much responsibility each person had until after the interview had started.

Third, even when interviewees were willing to present an honest account of their institution's approach, it often appeared that this approach was constantly being negotiated. The topic in question is a relatively new one for universities to grapple with, and as such, ideas are regularly being developed. Therefore, some interviewees were still uncertain about how they would be reacting to this new requirement. In spite of this I was still able to learn about how people viewed the subject at that moment in time, but acknowledge that these ideas may develop and evolve relatively soon after

the research was undertaken. An interview held some 12 weeks later could, therefore, yield slightly different results.

Each of the limitations discussed above can be mitigated, or exacerbated, by the researcher. The role of the researcher is of paramount importance in being able to elicit and then interpret responses from interviews. Becker and Geer (1957) and Merton *et al*. (1990) argue that in interviews, the researcher must make a number of assumptions when listening to and interpreting the answers provided. Having worked in the sector for four years I feel my background and experience helped maintain quality in this regard and ensure that the assumptions being made were accurate of these interview subjects. However I acknowledge that a different researcher may have interpreted the same data differently.

The final limitation, which is directed towards many forms of research (qualitative and quantitative) although perhaps more often to qualitative methods (Ritchie and Lewis, 2003), is whether the findings are generalizable across the wider population. In the case of my interviews, whether the collective views of the 30 HEIs reflect those of the rest of the sector. The non-random sampling is likely to have led to a degree of selection bias. However, the sample size (30% of the total number of non-specialist HEIs that submitted AA for 2018/19), which ensured that interviews were conducted until saturation point had been reached in terms of the information being uncovered, provides an argument that findings can be generalised across all non-specialist HEI in England. Furthermore, I have been careful to recognise differences between different types of HEI, incorporating in the sample high, medium and low tariff HEIs so as to ensure their approaches and positions are represented.

This section has provided a critical account of the limitations involved in each data source and method when considered independently. Many of these are mitigated within the overall research design which aims to synthesise the results from each method in parallel. Thus the mixed-methods approach will ensure findings are triangulated and the final discussion chapter (Chapter 8) will be informed by the combination of methods.

3.8 Ethical considerations

This section provides a discussion of the ethical considerations that were made in relation to this research. First, the ethics of using data of children (the HEAT data) are discussed. This is followed by a discussion of ensuring ethical good practice during the interview stage of the research.

3.8.1 Ethics associated with using data of children

The analyses presented in Chapters 4 and 5 are based on personal data collected on children who have participated in outreach activities. The specific cohort of outreach participants included in this research were in secondary school, between the age of 11 and 18, at time of participating in outreach and so are legally considered children by the Information Commissioner's Office (ICO, 2019). Concerns about the use of secondary data broadly include the potential harm to the individual participant and issues of participant consent (Tripathy, 2013). These concerns will be addressed in this section when considering the ways in which data were collected, stored and analysed.

First, in relation to the collection of this secondary dataset, the university members of HEAT ask the students who participate in their outreach activities to provide a selection of personal details (including their full name, date of birth and postcode). These personal details will be used by HEAT to track students into the NPD and HESA's HE entry databases. Students are also asked to provide some personal characteristics including their gender and ethnicity and whether they are the first in their family to attend university, to assist with the monitoring of activities. Students are asked to provide their personal details before the start of an outreach activity. At this point they are provided with a printed information sheet (also known as a privacy notice) setting out how their data will be used (see Appendix 3.4). If students are not willing to provide their personal details they are not excluded from the outreach activity, and so there is no penalty attached to opting out of providing personal information.

The information sheet provided in Appendix 3.4 is designed to inform participants of how their personal data will be used.

Here the concept of *informed* consent must briefly be considered, and whether this has been achieved in relation to the student data used in this research. Faden and Beauchamp (1986) describe how the process of gaining informed consent from participants is virtually seen as an unconditional requirement in research. However, Hammersley (2004) writes about the difficulties associated with ensuring 'informed' consent in relation to research participants and, as a result, the requirements are highly varied in the way they are interpreted (Thorne, 1980). Informed consent is based on the rights of individuals to self-determination, protecting research participants from exploitation and harm (Wiles *et al.*, 2005). Informed consent therefore relates to the provision of information about the research being conducted to enable potential participants to make an informed decision about whether they choose to participate. However, Homan (1991; 1992) notes the challenges in ensuring participants fully understand the consequences of participating before a study has commenced. In the

case of data collected on outreach participants, ensuring children are fully apprised of their participation is even more challenging. Thus although on the surface informed consent appears straightforward, it is often difficult to guarantee in practice. Homan also argues that because researchers are often aiming to encourage, rather than dissuade, participation in their research, they may use strategies such as giving minimum information on the study or incentivising participation. There is certainly a risk of this in data collected on outreach participants as universities are under increasing pressure from the regulator (OfS) to collect these personal data for evaluation.

Thus on closer examination, the concept of gaining informed consent, particularly from children, is far from straightforward. Miller and Boulton (2007) argue that the notion of informed consent is socially constructed, dependent on society and what is considered acceptable in terms of social relationships at that time. In the case of the data on outreach participants used in this research, the ethical procedures that are seen as acceptable are set by Government who regulate ethical practice in relation to the collection and processing of personal data in their legal framework, the Data Protection Act (1998). It is worth noting that the General Data Protection Regulation (GDPR) introduced in Spring 2018, was not yet in force at the time in which the student data underlying the analysis presented in this thesis was collected. Thus it was the regulatory framework of the 1998 DPA to which universities adhered when collecting personal data on outreach participants.

Unlike the GDPR, the DPA does not specifically mention children, however, its provisions apply to them as individuals in their own right. Unlike the GDPR, the DPA does not state that privacy notices (such as the information sheet set out in Appendix 3.4) must be clear and accessible to a child or tailored specifically for them. However, the information sheet provided used to collect data underpinning this research has been designed for young people to understand and thus maximise the chances that their consent, when given, can be considered to be informed. Following on from this, under the DPA children can provide their own consent if they are seen to be 'competent', a notion that is clearly complex (Allmark, 2002; Masson, 2004; Alderson and Morrow, 2004). If it is believed a child can 'understand' the implications of participating in research (known as 'Gillick competence') then parental consent is not necessary. Determining a child's competence level is not straightforward, approaches to assessing competence vary among researchers and will depend on the risks involved in the research being conducted (Ensign, 2003; McCarthy, 1999). The collection of personal data for the students participating in outreach activities can be judged as low-risk; the research is not controversial in nature – involving only quantitative analysis where findings do not identify individuals and are not used to discriminate against individuals. Participants are never re-contacted after their outreach intervention and their data will only be used for the purposes for which is was collected (Appendix

3.4). For these reasons it is appropriate that parental consent was not sought, however this judgement was taken by the universities collecting the data rather than by this researcher.

It is worth noting that although not a legal requirement of the DPA, the Economic and Social Research Council (ESRC) website states that 'where consent is sought from children it is good practice to secure permission from a responsible adult in addition to child consent (ESRC, 2019)'. This consent was not sought but, as the collection and processing of the data is legal, and the processing under this research is low-risk, it was thought that this should not prevent the research being conducted.

Further data protection considerations were made when applying for the attainment data used in Chapters 4 and 5 obtained from the National Pupil Database (NPD). To be granted access to extracts of the NPD I had to demonstrate that I would comply with strict terms and conditions covering the confidentiality and handling of data, security arrangements, and retention and use of the data. This included having appropriate security arrangements in place to store and process the data and ensuring that the data would only be used only for the specified purpose in my request. I was also required to secure Disclosure and Barring Service (DBS) clearance. My application for data was approved by the Department for Education's NPD application panel.

In spite of the legality of the student level data used in this thesis, scholars have noted a number of potential concerns around using data from the NPD which may apply to this research. Dowty (2008) explains that the NPD is compiled directly from school management systems and because schools have a statutory duty to provide this information, consent is not sought from children or parents. Thus it is likely that many students, regardless of whether they have participated in an outreach activity, are unaware that information on their attainment at school can be accessed by any researcher. This raises issues of privacy, concerned with our own autonomy and control over our personal information. In spite of this, since its creation the NPD has been linked to a number of other datasets and used extensively as a research resource for longitudinal analyses (Lynn, 2009). In support of the ethically robust use of children's data, Flewitt (2006) argues that if data on children were made inaccessible to researchers, we risk excluding children from important research. This is certainly pertinent for this research whereby without the data on outreach participants I would not have been able to present time series analyses showing the nature of outreach being delivered and how this is changing over time (analysis presented in Chapter 4).

In relation to the storing and analysis of the children's data underpinning this research, my job afforded me some expertise in, and experience of, the ethical and proper use of data. In relation to storage, HEAT's data protection protocols ensure that I comply with stringent data security

requirements when conducting analysis as a matter of course. All data were stored and processed on a secure system and never copied onto a mobile device, for example a laptop or portable hard drive or memory stick. These arrangements are based on the requirements set out when using data from the NPD, and has been applied to all data on outreach participants, whether this has been linked with the NPD or not. When analysing data, all personal data were removed from the dataset on which analysis was based, in order to minimise the risk of identifying individuals. Although not a requirement for this research, I have also completed Office for National Statistics' Safe Researcher training and so am fully aware of statistical disclosure from outputs after analysis. Drawing on this training I was able to ensure data in my final output (the analysis chapters) were suppressed where necessary.

Next an account of the ethical considerations involved in the interview stage of the analysis is given.

3.8.2 Ethics of conducting interviews with WP managers

First, ethical approval to conduct research with human participants was applied for and granted by the University of Kent's Ethics Committee. It was a requirement of the University's ethical procedures that informed consent is sought from all interview participants. As already discussed, the concept of informed consent is not straightforward; however, unlike the HEAT data, I had full control over how data were collected in this stage of the research and, therefore, how participants were informed. This was done on more than one occasion.

First, I aimed to inform WP managers of the research when making contact for the first time to request an interview. This was done via an email outlining the broad topics that would be discussed (see Appendix 3.x). In this email I balanced the need to inform the potential participant about the research with the need to keep the email brief so as not to risk losing interest from these busy managers at this early stage. Presenting research in general terms is common in interviewing (Thorne, 1980) so as not to overwhelm to interviewee. It was made clear that the interviews were confidential and that no personal or University names would be used in the final output. When a manager responded to the email, I was always careful to answer any of their questions about the research and any confidentiality issues they had. Second, a consent form was sent to all managers who agreed to be interviewed before the interview had started (see form in Appendix 3.2) which set out the confidential nature of the research and the rights to withdraw. The consent form explained that the interview would be recorded and transcribed by the researcher. This was to be signed and returned before the interview. Third, I reiterated the aims of the research, that all discussions were in confidence, the interviewees' rights to withdraw and that the interview was being recorded orally, over the telephone, before the interview started. A further measure was put in place to inform participants during the interview. I sought to

indicate the purpose of asking specific questions, justifying what the answers would contribute to. This is seen as good ethical practice by Shils (1980) but is not a necessity of informed consent. However, it was felt that this was necessary as other research has highlighted the possibility that interviewees may be unaware that their views will be represented in a bad light by the researcher, and knowing this may change whether they consent to being interviewed (Hammersley, 2014). This was identified as a risk in my research, one of the aims of which was to critically analyse universities' attainment raising outreach activities.

It is worth noting that although I answered all questions raised by potential interviewees before, during and after interviews, there was one request raised by two potential interviews which I chose to decline. This was the request to send the specific questions, by email, before the interview. This decision was taken as I wanted all interview responses to be spontaneous and felt that if participants were given time to prepare answers, they may provide a political response rather than an honest account. Rather, the overarching topics to which questions related was sent. It was also made clear to all interviewees that they could withdraw from the interview at any point, during or after the interview. Thus if, after the interview, participants reflected on what they had discussed, and felt they had revealed too much, they were aware that they could withdraw their contribution. In spite of this being made clear, no interview participants chose to withdraw.

Following interviews, transcripts were not sent to interviewees for checking. Member checking of interview analyses has been reported as way to increase validation of results (Creswell and Miller, 2000; Merriam, 1998; Birt *et al*., 2016), described as a "way of finding out whether the data analysis is congruent with the participants' experiences" (Curtin and Fossey, 2007, p.92). In spite of the potential benefits, after consulting with the focus group it was decided that WP managers were busy people who did not have to time to read through the transcript.

To ensure data security post interviews, transcripts were saved in a pseudonymised format (removing names and replacing with IDs) on a password protected and encrypted laptop to which only I had access. Audio recordings were destroyed as soon as the interview had been transcribed and before this were stored in a locked draw in my house to which only I had the key. Whilst transcribing interviews, all reference to university or outreach activity names which may have identified interviewees were removed. Thus transcripts were de-identified with the exception of an ID which linked to the name of the interviewee and their university. A file linking IDs to names was saved in a separate folder on the encrypted laptop and also password protected with a different password. Transcripts will be destroyed upon the successful completion of this PhD.

Beyond the standard consent and privacy considerations discussed above, a specific ethical challenge that required some additional reflection arose when contacting participants for interviews. This involved my job at HEAT and the relationships I already had with many of the prospective interview participants. In order to recruit participants for interview I relied heavily on networks and contacts that were available through my job. I was conscious that some participants might feel obliged to take part in the interview as they did not want to risk harming the professional relationship they had with HEAT. To alleviate this I was careful to explain to prospective participants that although they knew me through HEAT, this research was being done in my spare time and was not tied to my job. I always explained that participation was voluntary and that choosing not to participate would not impact on any work we did through HEAT. I tried to keep the tone of the email or conversation light and said I knew they must be very busy and so I understood that they might not be able to participate. I felt this offered them the opportunity to opt-out easily.

Nevertheless, keeping the research separate from HEAT work was a constant challenge. I also had to be mindful of my professional reputation at work and asked the Director of HEAT, my manager, to confirm whether she was happy with the way I contacted participants. Even after the interviews had been conducted I had to take care during all interactions, both whilst at work for HEAT and doing research for this thesis, that I followed all ethical procedures set out in my original Ethics application, particularly those around confidentiality. However, keeping work and research separate sometimes became a secondary concern to more pushing priorities. For example, prior to the interviews my primary concern was to recruit a large sample of participants and in order to do this I eventually contacted people personally via email, using my HEAT email address. Undoubtedly this familiar email address would have elicited more attention in crowded inboxes, however it was necessary to recruit the target sample of 30 HEIs.

Chapter 4: Research Question 1 Analysis

Research Question 1: To what extent have HEAT member universities been targeting outreach towards students to raise their Key Stage 4 (GCSE) attainment as a precursor to widening access to higher education?

4.1 Introduction

To identify the extent to which HEAT member universities have been targeting outreach towards students to raise their Key Stage 4 (GCSE) attainment, as set out in Research Question 1 (RQ1), the following analysis examines the proportion of students recorded on the HEAT database who meet the following three criteria:

1. Students must have been aged 16 or younger when they first participated in an outreach activity. These students received outreach before taking their GCSEs, a time that was identified in the Literature Review (Chapter 2) as critical for the future progression routes available to young people (Crawford, 2014; Chowdry *et al.*, 2013; Croll and Attwood, 2013).

2. Students were not expected to achieve 5 GCSEs at A*-C including English and Maths. This level of attainment that has been idenitified through national research as required in order to progress to HE (Crawford, 2014) and thus those who are already 'on track' to achieve this benchmark may not need intervention in order to raise their attainment to this level.

3. Students are classified as disadvantaged according to a number of proxy measures, and thus are the target audience for widening participation outreach activies. These measures, although imperfect, are relied on in the field of widening participation to target resource. The particular set of proxies used here have been set out in Appendix 3.1.

The population on which this analysis is based comprises all secondary school aged students added to the HEAT database who are known to have participated in at least one outreach activity. The sample size is large, consisting of 223,725 students who participated in outreach between 2004/05 and 2015/16. Thus the data reflect a long time period – 11 years - during which there has been a great deal of political change and will allow us to examine changes in the targeting and delivery of outreach over this time. The first research questions thus uses HEAT data to monitor trends in the historic delivery of outreach activities. In doing this I examine the feasibility of these activities to raise the attainment of those engaged, the results of which aim to ensure Higher Education (HE) remains a viable option for their futures.

Students in my population have been added by 42 universities. Although HEAT's membership is now much larger, this smaller number of institutions recorded data over the time period being monitored. Some universities have contributed a larger proportion to the sample than others, this will depend on the volume of outreach being delivered by each university and the length of time they have been recording their data with HEAT. Appendix 4.1 shows the proportion each of the 42 universities contributes to the total sample. For clarity it is important to note that two of the 42 organisations that have contributed data to the sample are not universities, but collaborations between universities that were retained following the partnership era of AimHigher. For ease of communication all will be referred to as universities in this chapter. Students may appear in the sample population more than once, where a student has received outreach from more than one university these are treated as separate outreach participants. This level of duplication is needed in order to examine differences between types of university delivering outreach. Student data collected during AimHigher are attributed to the partnership of universities that worked together to collect that data.

4.2 Analysis

The structure of this analysis is as follows. First, the proportion of all secondary school aged outreach participants recorded through HEAT who meet each of the three criteria for RQ1 posed above is calculated. I then move on to consider each criterion separately, examining the way proportions have changed over time and by institutional tariff band, offering explanations for the trends observed.

Figure 4.1 shows that 17% of secondary school aged pupils recorded on the HEAT database meet the three criteria set out in RQ1

Figure 4.1: Proportion of all secondary school aged pupils recorded on the HEAT database who meet the criteria set out in RQ1

> Proportion of secondary school aged pupils recorded on HEAT who meet **all three** of the following criteria:
>
> 1. First received outreach before the age of 16 and,
> 2. were not expected to achieve 5 GCSEs at A*-C and,
> 3. can be classified as disadvantaged
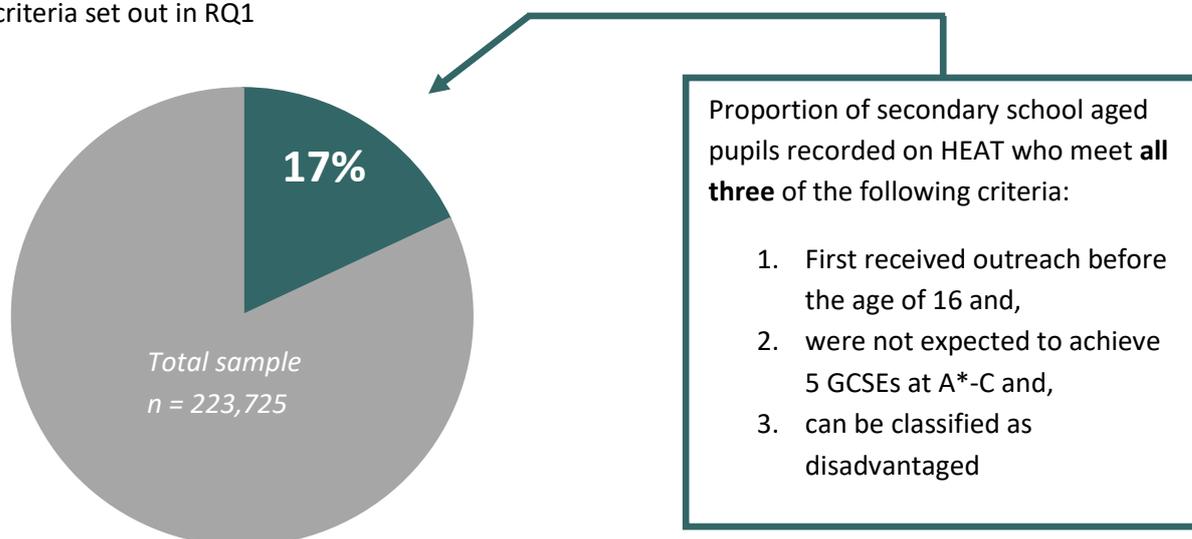
a. What proportion of secondary school students in the sample population meet each criterion separately? (criteria 1-3 in Figure 4.1)

b. Has this has changed over time?

c. Does this vary depending on the entry tariff of the university delivering outreach?

4.3 An in-depth examination of the three criteria set out in RQ1

Outreach delivered to students before the age of 16

a.   What proportion of secondary school students first received outreach before age of 16?

Many students in the dataset have participated in more than one outreach activity, and in some cases this has been both before and after the age of 16. For this part of the analysis the age of the student when they *first* received outreach is used to calculate the proportion of students receiving outreach before the critical Key Stage 4 exams (GCSEs). Although all students have received at least one outreach activity, the type of activities will be varied (please see the activity typology in Appendix 2.1). I do not know whether the activities that were delivered had the aim of raising attainment at GCSE; at this stage I am simply examining the extent to which universities are delivering 'something' to students before the age of 16. However, it is important to remember that there is currently no conclusive evidence that aspiration raising outreach will have an impact on attainment (Gorard and See, 2013).

Figure 4.2 shows the year groups to which all students in the sample population belonged when they first took part in a university outreach activity. GCSEs are taken at the end of year 11 and so the green bars account for students in secondary school year groups in pre-16 education and the blue bars show those above the age of 16. The majority of those in post-16 education were in school sixth form or FE College when they received outreach. The brown bars show the proportion of outreach that has been delivered to the very young (whilst still at primary school), or mature learners who are beyond school age. This is presented for interest and the rest of this analysis will focus only on the population who were of secondary school age when they received outreach.

Figure 4.2: Year groups of outreach participants when first engaged in outreach by universities
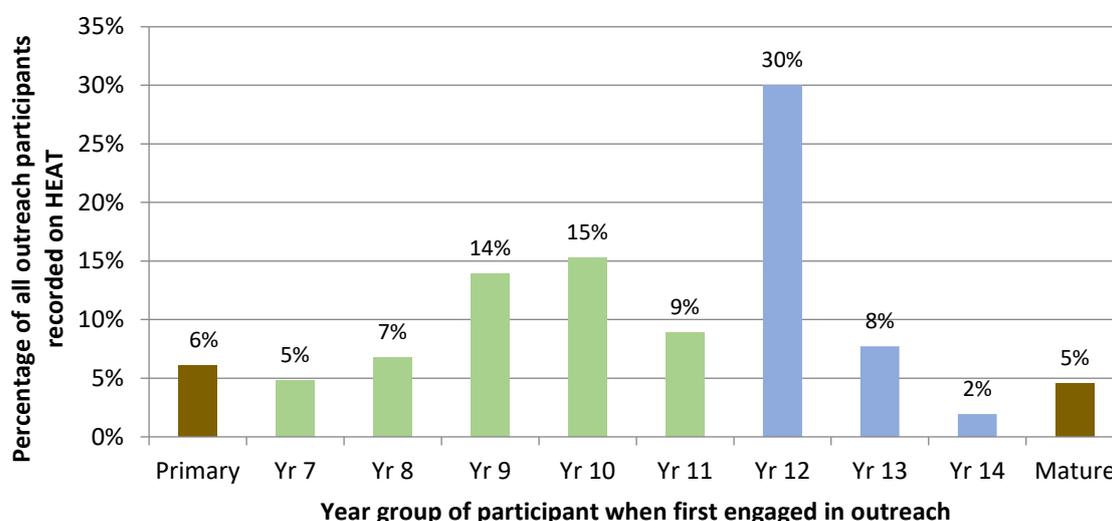
The proportion of all secondary school aged students who first received outreach before the age of 16 is shown in Figure 4.3 as 56%. This leaves 44% of students who do not meet my first criterion for targeting as they first received outreach once already in post-16 education, the majority of whom were in year 12. In light of findings from Crawford (2014) showing the pivotal role of Key Stage 4 (GCSE) attainment in determining HE progression, it could be argued that outreach delivered to students who had already successfully navigated their way through their GCSEs and attained sufficiently to progress to post-16 education is failing to address issues of educational disadvantage that act as the barriers to HE entry. Recent guidance from government supports this idea, appealing that outreach delivered to post 16s is more likely to engage students already entering the existing applicant pool, whereas working with younger students is more likely to grow or widen the applicant pool (OFFA, 2018b).

Figure 4.3: Percentage of secondary school aged outreach participants who first received outreach before or after the age of 16 (2004/05 – 2015/16)
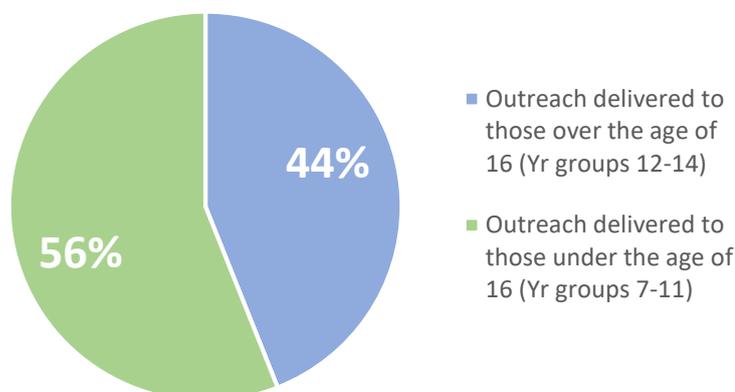
Next I examine whether the proportion of outreach delivered to students before the age of 16 (56% of the overall population) has changed over the period during which the data have been collected. Data are available for outreach that was delivered from 2004/05 to 2015/16.

b.   *Has the proportion of secondary school students who first received outreach before the age of 16 changed over time?*

Figure 4.4 shows the yearly change in the proportion of the secondary school aged students in the sample population who were in pre-16 education when they participated in their first outreach activity. The trend over the 12 year period is one of decline, with an overall -17 percentage point reduction in the proportion of students who first received outreach before they took their GCSE exams.

Figure 4.4: The proportion of secondary school aged students who first received outreach before the age of 16, yearly change
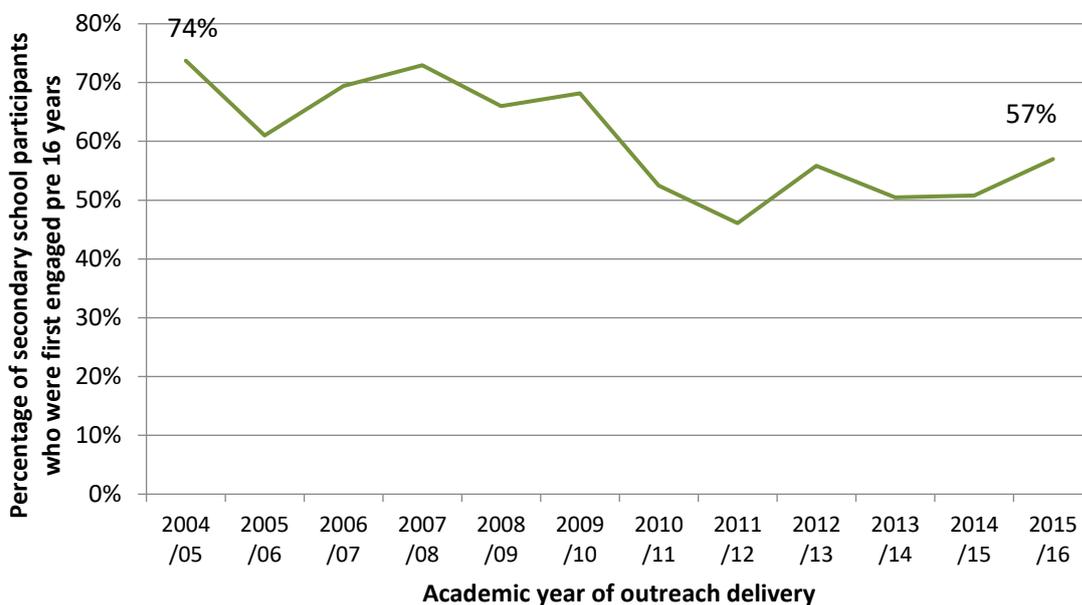
With the exception of 2005/06, the early period (2004/05 to 2009/10) saw an era of relatively stable and high engagement of pre-16s. This is in spite of a lack of specific guidance from HEFCE or OFFA to target students before the age of 16, rather AimHigher partnerships were advised to work with 'young people' between the ages of 13 and 19 (HEFCE, 2007, p6), claiming that 'regardless of the age group, our priority is [to target] learners from lower socio-economic groups' (p8).

The decline in engagement of pre-16s occurred most notably between 2009/10 and 2011/12, the last two years of AimHigher funding. I can only surmise at this point as to the underlying reasons for this but the period brought with it a raft of uncertainties for the sector. First, in the wake of a global economic recession, 2008 saw a reduction in funding for AimHigher partnerships, and finally in 2010 it was announced the programme would be closed, news which would have undoubtedly destabilized the targeting practices built up since 2004. Second, in 2010 following the election of the Conservative-Liberal Coalition government talk of the imminent tuition fee rises caused a great deal of apprehension in the sector over the extent to which this would damage applicant numbers. By 2011 it was announced these were to be set at £9,000 (DBIS, 2011). Third, 2010 also saw the introduction of student number controls, meaning that there were fewer places for students than applications being made. This may have changed the way universities targeted their outreach, focusing on work with students entering the existing applicant pool, rather than working with younger stundents with the aim of growing the applicant pool (OFFA, 2014a).

This period of uncertainty and change, particularly in relation to student fees and the implications this would have for individual universities' application numbers, is likely to have accalerated the level of competition between universities. Indeed a number of commentators remark on the increasingly competitive marketplace of HE (McCaig, 2015; McCaig and Taylor 2017; Tomlinson, 2017; Perry and Francis, 2010; Marginson, 2006). Under pressure to align widening participation outreach with institutional recruitment processes, universities may have encouraged the targeting of disadvantaged students for whom university was already a more realistic, and imminent, option. Harrison and Waller (2017b) interviewed WP practitioner managers and concluded that outreach activities were often popular particularly if they were compatible with universities' recruitment activity. Thus, students in sixth-form who are already in a position to consider applying to university within the next year or two may have appeared a more appealing group of students to work with than those in younger year groups for whom progression to HE was still a number of years off. Here I begin to see overlap between outreach and recruitment with the boundary between the two becoming less well defined. This is a theme that will be developed throughout this chapter.

In 2012/13, the proportion of participants who first received outreach before the age of 16 increased following two years of decline, although this has not returned to the peak seen in 2007/08. This trend is surprising considering the reasons given above and research suggesting the force of marktetisation within the sector has not slowed to the present day (McCaig, 2015). To explain the recovery observed in Figure 4.4 I turn to OFFA guidance to see if improvements in the engagement of pre-16 age groups can be traced to recommendations from the regulatory body at that time.

Although universities had been required to submit Access Agreements (AA) setting out the nature of their outreach activities (amongst other strategies to widen access) since 2006/07, 2012/13 saw the powers of OFFA increase to ensure commitment from universities to widening participation following changes to the fee regime (DBIS, 2011; McCaig, 2015). From this point universities were asked to show through their AA that they were spending around 25% of the income generated from their higher rate fees on strategies to widen access (OFFA, 2011). This time marked a step change in the way universities reported to OFFA, with AA requiring numerical targets and milestones rather than less tangible strategic prose that had previously sufficed (OFFA, 2011). This provides some evidence that the way universities report their outreach work to regulators can have a real impact on what is being delivered on the ground. Regarding pre-16 work specifically, OFFA's annual guidance for universities when writing their AA, talks about the need for 'long-term outreach' when advising on 2012/13 access (OFFA, 2011, p1); guidance which may explain the sharp improvement in the engagement of younger students observed in Figure 4.4. However, it was not until two years later, in guidance for 2014/15,

that this was clearly articulated in terms of the requirement for universities to work with younger age groups.

'Your access agreement must include information on your long-term outreach work, including how you are working with younger age groups such as Key Stages 2, 3 and 4 as appropriate' (OFFA, 2013, p21).

This advice is reiterated in the 2015/16 guidance (OFFA, 2014a) and the impact of this can be seen in the trend data above.

A further significant event in the HE landscape that is worthy of note when interpreting the data in Figure 4.4 is the removal of student number controls in 2015/16. This change would undoubtedly have increased the feeling for many universities that they must compete to retain their market share of students. It was hypothesised by OFFA at the time that this would provide less incentive for universities to carry out long term outreach with young students as their focus would be on recruitment (OFFA, 2014a). However, this is not apparent in the data presented in Figure 4.4, and the proportion of students receiving outreach before the age of 16 increased marginally in these two years.

A possible limitation of the data presented in Figure 4.4 relates to the way the data have been compiled by a number of different universities over time. Not all of the 42 universities who have contributed data to the population have been members of HEAT since the beginning of the reporting period and thus any changes in the composition of the population observed may be due to new universities adding their outreach participant data into the sample, rather than any changes in targeting practices. Figure 4.5 recalculates the above analysis but draws on a participant sample provided by 22 HEAT university members who have consistently supplied HEAT with data over eight years. This eight year period spans from 2008/09 to 2015/16 so I am only able to examine this shorter period of time, however, the trend is similar to that seen in Figure 4.4. The chart shows a decline in the proportion of students first engaged before the age of 16 between 2008/09 and 2011/12, followed by an unsteady recovery from 2011/12 onwards. Thus, this comparison shows that whether data are used for 42 or 22 universities, trends over time appear to be consistent.

Figure 4.5: The proportion of outreach delivered to secondary school aged students before the age of 16, yearly change (22 member universities with continuous data over eight years)
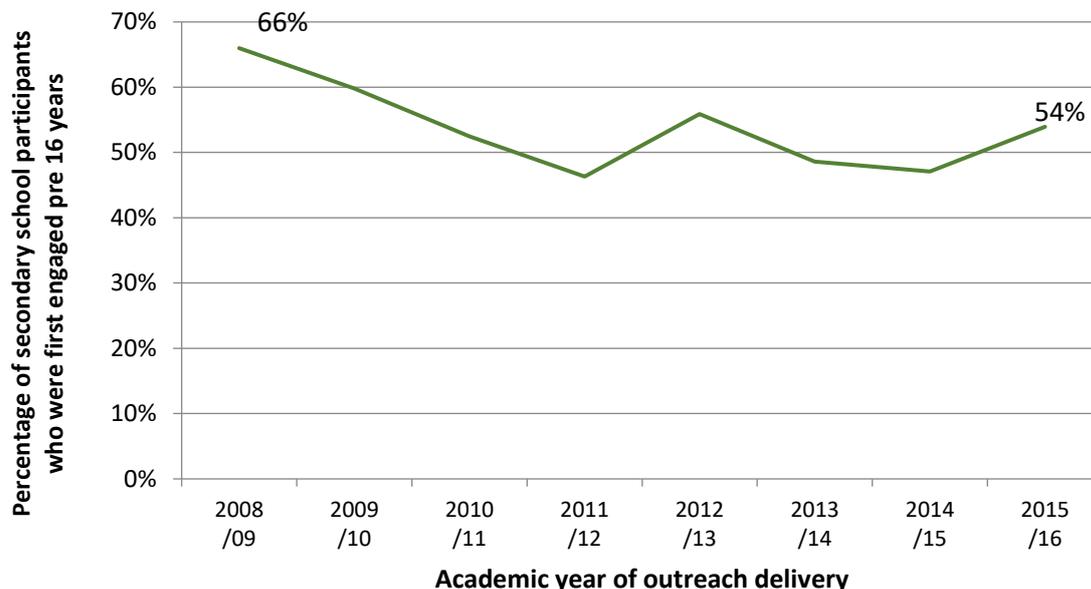
Figure 4.6 compares the average proportion of students who first received outreach before the age of 16 during two key time periods in widening participation history: the era of AimHigher funding (2004/05 to 2010/11) with the years following AimHigher funding (2011/12 to 2015/16). On average, outreach was directed to a larger proportion of students before they reached the age of 16 during AimHigher, with a -13 percentage point difference between the two periods. However, Figure 4.4 and 4.5 show that the decline in targeting of pre-16s started far earlier than 2011, and changes in the targeting of young students do not align with the end of AimHigher funding. Thus a reduction in the collaborative ethos fostered under AimHigher cannot be blamed entirely for the reduction in targeting of pre 16 students.

Figure 4.6: The proportion of outreach delivered to secondary school aged students before the age of 16, during and post AimHigher funding
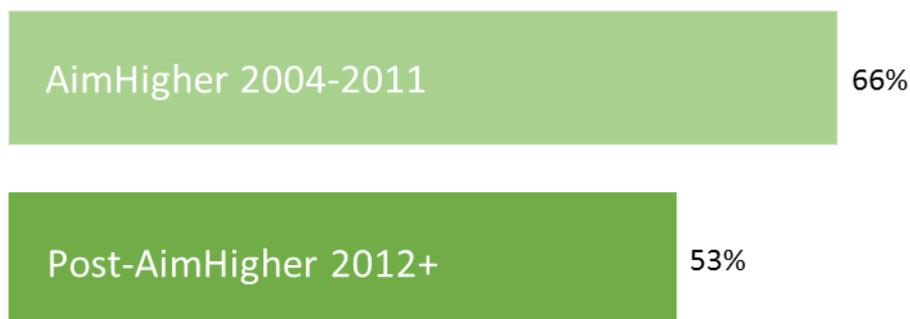
Next I examine whether there is a difference in the proportion of outreach being delivered to students before the age of 16 between universities with different entry tariff requirements.

c.   *Does the proportion of outreach that is directed towards students before the age of 16 vary depending on the tariff of the delivering university?*

In the Literature Review (Chapter 2) I discussed how HE has undergone a process of marketization, consolidated and intensified following a number of government drivers put in place since 2010, most notably the increase in student tuition fees and the deregulation of student places (DBIS, 2011). One predictable outcome of this marketization of the HE sector has been the way institutions have positioned themselves in relation to each other (Graham, 2013; McCaig, 2011), with clear 'types' of institution emerging. McCaig (2015) comments on the way some institutions have positioned themselves as prestigious universities, highly selective in their intake, whereas others have projected an institution habitus formed around inclusivity, catering for the needs of a diverse set of students. Immediately, it is clear the latter has fewer tensions with the aims of widening participation than the former. Thus the following analysis will examine the way different 'types' of universities, classified by their entry tariff, have directed their outreach work to see if these differences emerge in the data.

The 42 universities delivering outreach have been classified as either High, Medium or Low tariff, depending on where they fall in terms of their entry requirements in the Complete University Guide league table results (CUG, 2016). Universities are ranked based on their average UCAS tariff score for new students entering the University. High tariff universities fall within the top third of UK universities included in the league table, Medium tariff universities the middle third and Low tariff universities the bottom third. Five outreach providers could not be classified as their data were missing from the league table and so data for 37 universities are compared in this analysis.

Table 4.1 summarises the number of universities falling within each category and the percentage of students each group of universities has contributed to the HEAT sample of outreach participants. For this section of the analysis, any students who participated in outreach during AimHigher, when outreach was delivered by a partnership of universities, are recorded under each of the universities within each AimHigher partnership separately.

Table 4.1: Summary of HEI breakdown by tariff

Tariff band of HEI	Number of HEIs	Proportion of students recorded on HEAT
High Tariff	17	28%
Medium Tariff	8	32%
Low Tariff	12	40%
Total	**37**	**100%**

Figure 4.7 shows the average proportion of secondary school aged students who received outreach before they reached the age of 16, broken down by the tariff of the university delivering the outreach. The data reflect an average for the reporting period of 2004/05 to 2015/16. The chart shows that High tariff universities were less likely to target students before the age of 16 when compared with Medium and Low tariff universities.

Figure 4.7: Percentage of outreach delivered to students before or after the age of 16 by tariff of HEI delivering outreach (2004/05 – 2015/16)
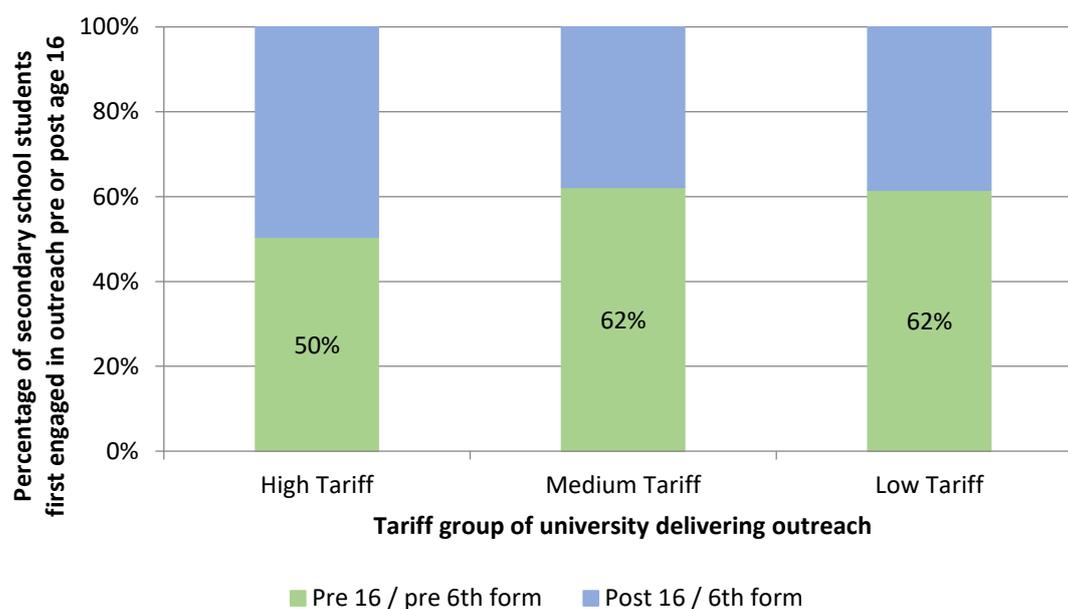
The analysis presented here begins to show the diversity in outreach delivery across the sector, particularly when comparing highly selective universities with all other types of institution. This differentiation will be further demonstrated when criteria two and three are discussed over the following pages. To explain this, here the notion of 'fair access' must be reintroduced; this being a branch of widening participation that relates to the ability of individual universities to recruit disadvantaged students to their own institutions (Bekhradnia, 2003). Fair access has risen to take

central stage in government rhetoric on widening participation and selective universities have come under significant pressure to recruit disadvantaged students in line with targets set by government (DBIS, 2011). Concerns over fair access were emphasised in the 2011 white paper, presented in light of data from OFFA showing that the proportion of disadvantaged students entering the most selective institutions is low, and declining (DBIS, 2011). Thus since 2011 more highly selective universities appear to have been less concerned with the overarching objective of widening participation which is to increase the participation of disadvantaged students in HE across the sector as a whole. Instead, they have been forced to focus on increasing the participation of these students to their own institutions. Figure 4.8 examines variation in delivery over time. By separating trends for the three university tariff groups it can be examined whether differentiation in outreach delivery can be traced to a particular time.

Figure 4.8: The proportion of outreach delivered to students before the age of 16 by tariff group of delivering HEI, yearly change
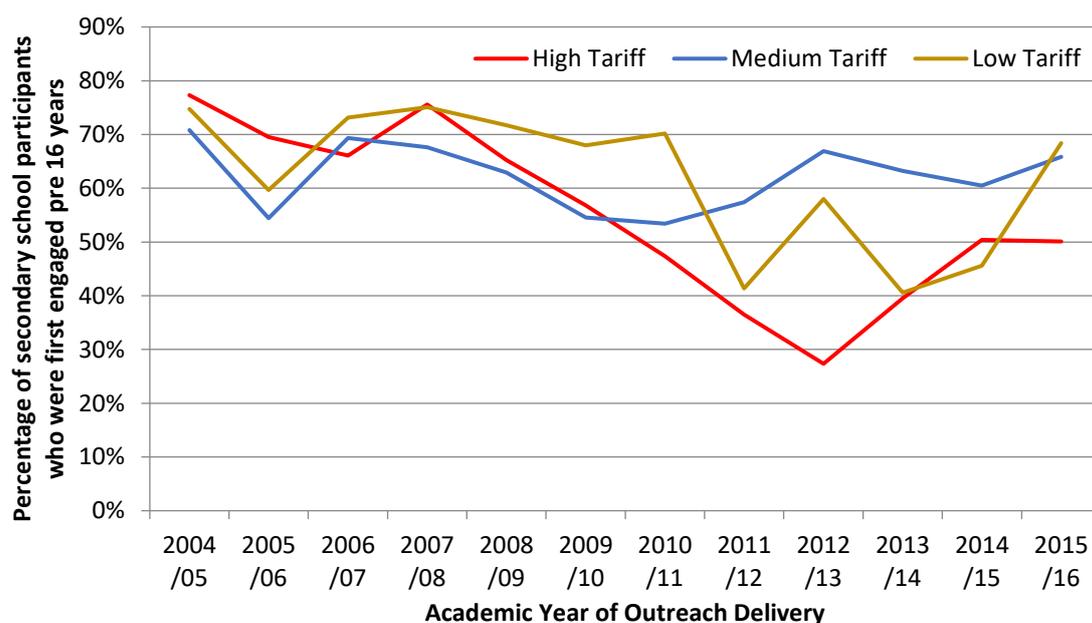
Until 2008/09 patterns in targeting of pre-16 students appears relatively similar across the three tariff groups; this is likely to be a reflection of the partnership working during AimHigher. From 2009/10 trends diverge, with High tariff universities recording a continued decline in the proportion of secondary school students first receiving outreach before the age of 16. These fell to a low of 27% in 2012/13 before rising to the 50% recorded in 2015/16. In contrast to High tariff universities, Medium and Low tariff universities recorded sharp increases in the proportion of pre-16 year old participants who received outreach in 2012/13. Low and Medium tariff universities engaged larger proportions of participants who were pre-16 years old than High tariff universities in the most recent reporting year

of 2015/16. It could be argued that the closure of Aimhigher and associated removal of the requirement for universities to work in partnership resulted in less consistency in the ways universities targeted their outreach work. High tariff universities, struggling to meet their targets for the disadvantaged students entering their own institutions, appear to have adopted a more recruitment oriented approach to outreach that saw them engaging larger proportions of 'HE-ready' sixth formers.

This seemingly contradicts research by McCaig (2015) who compared AA for high and low tariff universities and found that high tariff institutions were more likely to emphasise that they were targeting younger age groups. Furthermore, he showed that the emphasis on young students increased between AA published in 2006/07 and 2012/13. However, as discussed, AA are strategic documents that universities write setting out their approaches to widening participation and fair access. They do not contain any hard data on delivery such as those to which I have access through HEAT. Here, the HEAT data are showing a different picture from the messages conveyed by high tariff universities in their AA (McCaig, 2015).

In 2012/13 an increase in the proportion of pre-16 students high tariff universities have engaged in outreach is observed, an upward trend that is maintained for the remaining three years of the reporting period. This broadly aligns with guidance at the time from OFFA who, from 2011, published advice dedicated to high tariff universities proposing that they work with younger age groups, specifically before their GCSEs, guiding students towards subject choices that are favoured by selective universities (OFFA, 2011; 2012). This provides more evidence for the influence of regulatory advice, without the need for stringent auditing.

As with the time series analysis shown in Figure 4.4, a limitation of this analysis is the change, and growth, in universities contributing student data to the HEAT population throughout the reporting period. Figure 4.9 recalculates the data for 21 universities who have contributed data to HEAT for eight consecutive years between 2008/09 and 2015/16. The breakdown of these universities across the tariff bands is shown in Table 4.2. The table includes one fewer university than Figure 4.5 as not all outreach delivering HEAT members could be assigned a tariff band.

Chapter 4: Research Question 1 Analysis

Table 4.2: Summary of HEI breakdown by tariff, 21 HEIs with eight years of continuous data

Tariff band of HEI	Number of HEIs	Proportion of students recorded on HEAT
High Tariff	8	25%
Medium Tariff	4	30%
Low Tariff	9	44%
Total	**21**	**100%**

Figure 4.9 shows a similar trend to that presented in Figure 4.8, and thus I can conclude that changes in delivery by different universities are more likely to be due to changes in targeting practices than any changes in HEAT members.

Figure 4.9: The proportion of outreach delivered to students before the age of 16 by tariff group of delivering HEI, yearly change for 21 delivering HEIs with eight years of continuous data
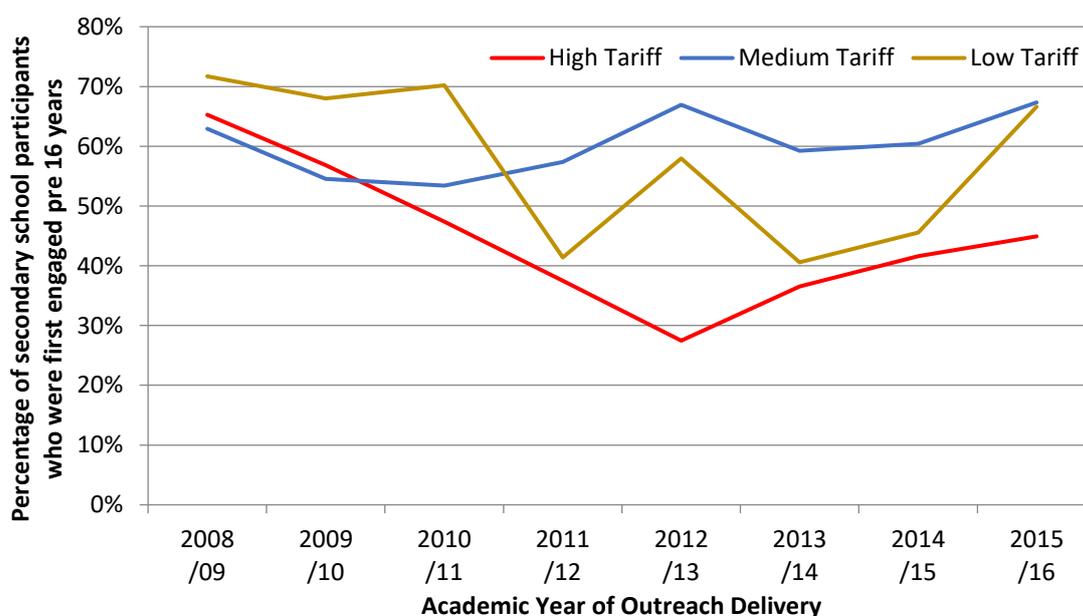
Next criterion two is examined, specifically the extent to which HEAT member universities have engaged students in outreach over the reporting period who were not expected to achieve five GCSEs at A*-C including English and Maths.

Engagement of students who were not expected to achieve five GCSEs at A-C including English and Maths*

a.   *What proportion of secondary school students in the sample of outreach participants were not expected to achieve five GCSEs at A*-C including English and Maths?*

Here I consider the extent to which universities have been working with students who were not expected to achieve five GCSEs at A*-C including English and Maths, hereafter known as five good GCSEs. Identifying these students from the data was not without its problems: although I have access to rich information on actual attainment at GCSE from the Department for Education's (DfE) National Pupil Dataset (NPD), I do not have access to predicted grades. Following the scrapping of Key Stage 3 tests, the last set of commonly available results on which I can now base a judgement of whether a student was on track to achieve five good GCSEs are those collected at Key Stage 2, taken at age 11.

When targeting students for inclusion in outreach activities, practitioners may have access to a school's internal assessment data and teachers' assessments which may help identify students who have ability but lack attainment. However, such a nuanced judgement is not possible using the data that is available to us from the NPD.

As a result I will keep the classification of students' prior attainment straightforward and draw on their attainment band at Key Stage 2. This attainment band categorises students into High, Average and Low attainment. Those classified as High attaining students achieved above Level 4 at Key Stage 2 in both English and Maths; Average attaining students achieved at Level 4, and Low attaining students achieved below Level 4. National data tell us that attainment at Key Stage 2 is the best predictor of attainment at Key Stage 4 (Eason, 2010; Benton and Such, 2014). Although studies have questioned the strength of Key Stage 2 in predicting GCSE performance in some subjects including Modern Languages, stronger relationships were reported in the core subjects of English and Maths on which I base my analysis (Smith, 2013 cited in Benton and Such, 2014).

Table 4.3 presents national data on the proportion of students who achieve five good GCSEs by their Key Stage 2 prior attainment band. Nationally, of those who were High attainers in Key Stage 2, 93% went on to achieve the benchmark of five good GCSEs, with percentages far lower for the Medium and Low attainment bands (54% and 7% respectively). The GCSE performance is then provided for the HEAT outreach participants to show that a similar relationship exists between Key Stage 2 and Key Stage 4 attainment. Within each Key Stage 2 attainment band the proportion achieving five good GCSEs is higher for the HEAT outreach participants than for all pupils in England, however, at this point I am not commenting on the possible impact of having participated in outreach, but rather showing that those who achieve the High Key Stage 2 attainment band are highly likely to achieve five good GCSEs, both nationally and for my population of outreach participants.

Table 4.3: Percentage of students achieving 5+ A*-C GCSEs or equivalent including English & Maths by Key Stage 2 prior attainment band

Key Stage 2 Prior Attainment Band	Percentage of students achieving 5+ A*-C GCSEs or equivalent including English & mathematics	
	All pupils in England (2010/11-2014/15)	**HEAT Outreach Participants**
Low Key Stage 2 attainment - Below Level 4	7%	17%
Average Key Stage 2 attainment - At Level 4	54%	69%
High Key Stage 2 attainment - Above Level 4	93%	96%

Source: DfE Performance Tables 2010/11 – 2014/15

With this in mind, it is reasonable to assume that students with High Key Stage 2 attainment can be 'expected' to achieve five good GCSEs. Conversely, a larger proportion of students with Medium and Low Key Stage 2 attainment are 'not expected' to perform at this level. Although just over half within the Average and Low bands will go on to achieve five good GCSEs, this is far less likely than in the High band.

Thus the rest of this section will consider the outreach that has been delivered to students with Average and Low Key Stage 2 attainment – as this is the best indicator I have to identify students who were not expected to achieve five good GCSEs. Although this measure is far from perfect, it is reasonable to assume that engaging students with High Key Stage 2 attainment in outreach will not help improve attainment at Key Stage 4 above the standard we are working towards because these students are most likely already 'on track' to achieve this benchmark.

Figure 4.10 shows the proportion of outreach participants in my population by their Key Stage 2 prior attainment band. Of all secondary school aged students who received outreach, 58% were Medium or Low attaining students at Key Stage 2; students for whom, according to national relationships between Key Stage 2 and Key Stage 4, the achievement of five good GCSEs was not secured. The corollary of this is that 42% of resource appears to have been spent on individuals who were very likely to achieve five good GCSEs and then follow the subsequent path into university in due time. Harrison and Waller (2017b) describe this as 'deadweight', where outreach is mis-targeted towards those students already on the conveyor belt into HE. This represents a waste of resource in view of the overarching policy aim to increase participation across the sector. However, as discussed over the following paragraphs, high tariff universities may choose to work with high-attaining young people in

order to encourage that they choose selective universities, and thus satisfy their fair access requirements.

Please note: I have only been able to obtain the Key Stage 2 data for 87.7% of the participant cohort. The population used in the following section therefore consists of a population of 196,237 outreach participants. The remaining students for whom Key Stage 2 results were not available could not be found in the Department for Education's databases. They may not have sat these exams or the personal details recorded by the university delivering outreach may have been incorrect and so made linking their record more difficult or they may have moved into the country or between countries. These 'missing' students were evenly distributed across the time series and HEI tariff groups considered in this analysis.

Figure 4.10: Percentage of secondary school outreach participants by Key Stage 2 attainment band (2004/05 – 2015/16)
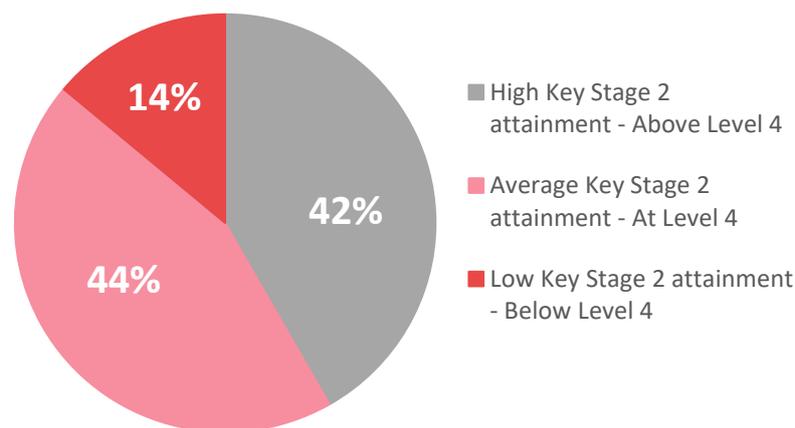
Next I consider whether the proportion of outreach that has been delivered to Average and Low achieving students at Key Stage 2 has changed over time. Here I will examine whether the abolition of AimHigher and increasing pressures on universities to compete for students has changed the types of students, in terms of their prior attainment, they choose to engage in outreach.

b.   *Has the proportion of outreach that is directed towards Average and Low achieving students at Key Stage 2 changed over time?*

Figure 4.11 provides time series data from 2007/08 to 2015/16 showing the proportion of outreach participants who were classified within either the Average or Low attainment bands at Key Stage 2. The chart shows that the proportion of Average or Low attaining outreach participants was fairly stable in the first five years reported (between 80% and 86%). Following 2008/09 a steady decline in

the proportion of students from these lower attainment bands engaged in outreach is observed. The most recent year (2015/16) records the lowest proportion, of just under 48%. A similar downward trend from 2008/09 to 2015/16 is presented when data for the 22 universities with continuous data over eight years are considered, as shown in Figure 4.12. It is worth noting that the proportion of pupils in England who achieved Level 4 or above (High attainment) in mathematics increased over the same time period (77% in exam year 2006/07 to 85% in exam year 2012/13[2]) (DfE, 2013b). Whilst this will have meant there were fewer Average or Low attaining students available for inclusion in outreach nationally, it cannot explain the full extent of the steep decline observed in Figure 4.11.

Raising the attainment of disadvantaged students in schools has long been part of the stated aims of outreach that universities were expected to deliver, with AimHigher supposedly aiming to 'improve attainment, raise aspirations and otherwise facilitate progression to HE' (HEFCE, 2004, p6). However, Harrison (2012) notes the increasing emphasis on attainment raising throughout the life of AimHigher, with the guidance from HEFCE stressing this as a key goal towards the end of the funding period between 2008 and 2011. OFFA continued this message, stressing the important role of university outreach in "raising aspirations and attainment among potential applicants from under-represented groups" from 2012/13 onwards in their strategic guidance for AA (OFFA, 2011, p15). However, it was not until 2017, after the reporting period for which I have data, that OFFA asked universities to focus specifically on outreach work aimed at raising attainment (OFFA, 2017b).

Any changes in the working practices of universities that may have resulted from the government's shift in emphasis towards working with potential applicants to raise their attainment is not visible in the HEAT data presented in Figures 4.11 and 4.12. Furthermore, the proportion of students who needed the most help in order to raise their attainment, those with Average or Low Key Stage 2 attainment, with whom universities engaged actually decreased following this advice. However, neither HEFCE nor OFFA have provided a clear definition of where attainment needed to be raised from and to, and no clear guidance about how to identify 'potential applicants' using Key Stage levels (OFFA, 2011; 2012; 2013; 2015a; 2016) and so it cannot be assumed that universities have been intentionally ignoring the requirement to raise students' attainment. It is more likely that any efforts that have been made to raise attainment have not been directed towards the students on whom I am focusing – those with Average or Low Key Stage 2 attainment. This perhaps suggests how important it

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[2] Outreach participants in Figure 4.11 will have taken their Key Stage 2 exams over a number of different years. Exam years correspond as follows: those in year 10 when participating in outreach in 2015/16 will have taken Key Stage 2 exams in 2012/13.

is that guidance produced by government is specific in terms of the requirements being made on universities.

It was not until guidance published in 2017 that OFFA boosted their emphasis on raising attainment, placing it as the first bullet point in their list of strategic priorities for 2018/19 access agreements (OFFA, 2017b). For the first time this guidance does not mention the word 'aspiration', but attainment raising is referred to 25 times. Thus, the real emphasis on outreach to tackle attainment is a recent message in policy documents and it is yet to be seen how this will affect the students appearing in the HEAT population.

The decline in the proportion of Average and Low attaining participants seen from 2008/09 may partly be explained by the increasing pressure, felt by all universities, to maintain their student numbers in an increasingly competitive marketplace without reducing their entry tariff. I have discussed the need for high tariff universities to recruit the most able students in line with their fair access targets, but the pressures of marketization within the sector are felt by all, particularly from 2012/13 when the core and margin student number controls increased the demand for high grade students (DBIS, 2011; McCaig and Taylor, 2017). In his analysis of AA narrative McCaig (2015) comments on how low tariff universities had shifted their policy statements from welcoming and inclusive discourses published in 2006/07 to other markers of success by 2012/13. These markers relate to impressive student retention rates and graduate outcomes, all key elements of league tables which research shows are easier to achieve with traditional (non-WP) students (HEFCE, 2013b) who tend to enter with a higher tariff. Here we see the continued overlap of outreach and recruitment, a situation which threatens widening participation objectives.

Figure 4.11: Percentage of secondary school aged outreach participants with Average or Low attainment at Key Stage 2
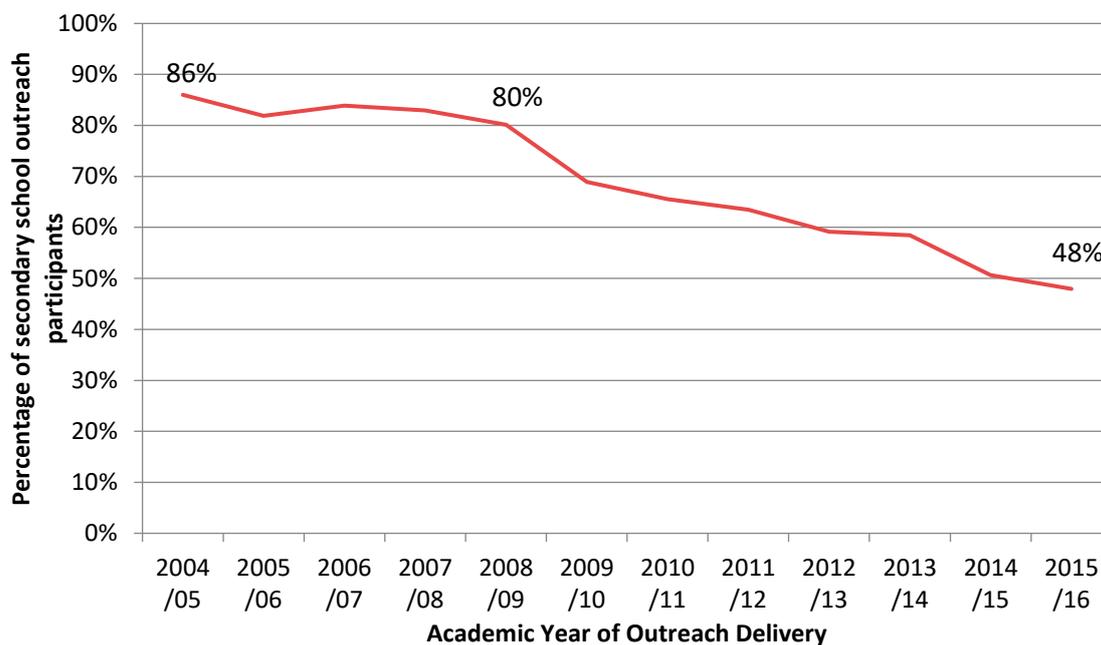
Figure 4.12: Percentage of secondary school outreach participants with Average or Low attainment at Key Stage 2 – 22 members with eight years of continuous data
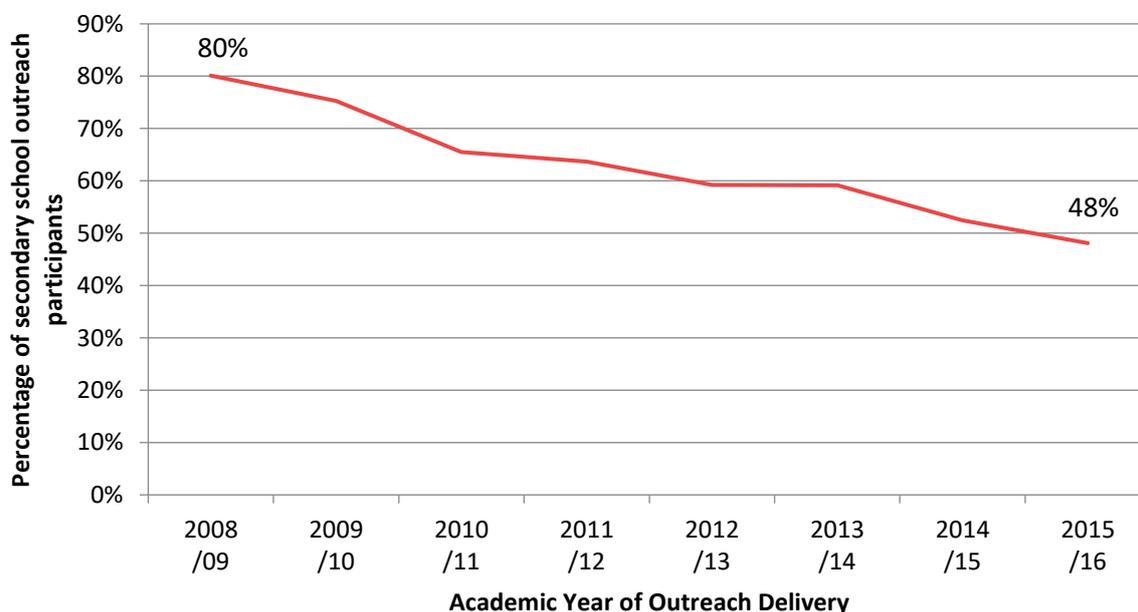
Figure 4.13 aggregates the data into two time periods: during and post AimHigher to show a -21 percentage point reduction in the proportion of outreach that was directed towards Average and Low attaining Key Stage 2 students in the post-AimHigher funding period. However, the decline in the

targeting of these students started well before the end of AimHigher funding and so changes in targeting based on prior attainment cannot be traced to changes in collaborative working.

Figure 4.13: Percentage of outreach delivered to Average and Low Key Stage 2 attaining students during and after AimHigher

Next I consider whether the proportion of outreach that has been delivered to Average and Low achievers at Key Stage 2 varies depending on the tariff band of the university delivering outreach.

c.   *Does the proportion of outreach that is directed towards students with Average and Low attainment at Key Stage 2 vary depending on the tariff of the delivering university?*

Figure 4.14 shows that High tariff universities work with smaller proportions of students with Average or Low Key Stage 2 attainment, with 56% achieving High levels of attainment. In contrast, Medium and Low tariff universities were more likely to work with students with Average and Low Key Stage 2 attainment, with only 25% and 21% of students respectively having previously achieved High attainment. These differences in the attainment levels of the students who different types of universities are engaging in outreach have been observed elsewhere through analysis of individual institutions' AA (McCaig, 2006; 2015; Rainford, 2017), but here HEAT data provide hard evidence of this variation in delivery.

Figure 4.14: Percentage of outreach delivered to High, Average or Low attaining students at Key Stage 2 by tariff of delivering HEI (2004/05 – 2015/16)
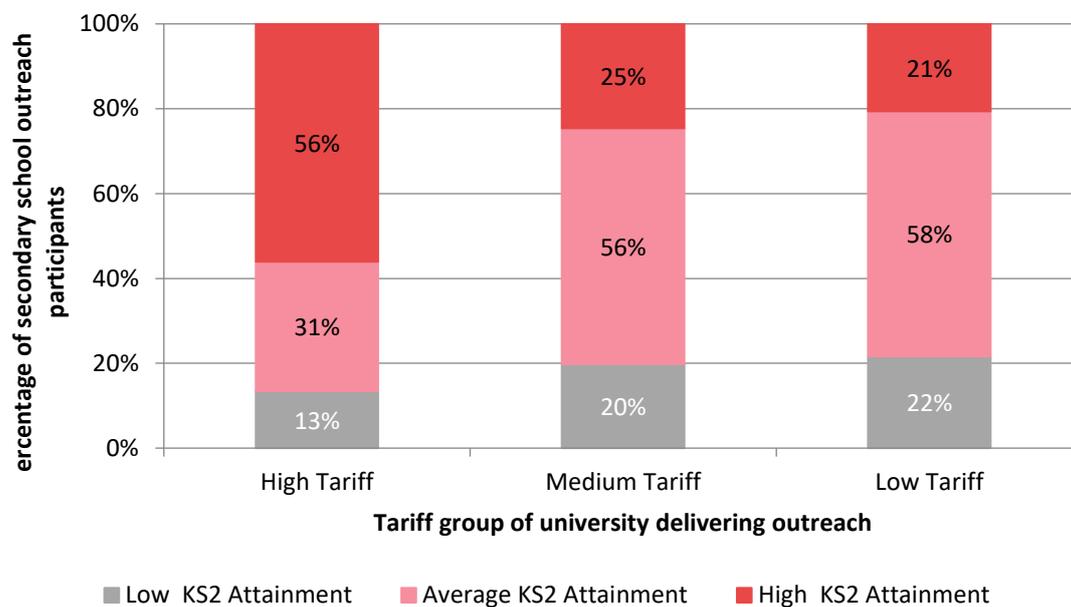
We may be seeing the manifestation of 'fair access' policies through which high tariff universities are under pressure to recruit widening participation students to their own universities (DBIS, 2011, McCaig, 2011; 2015, McCaig and Adnett, 2009). To achieve this without sacrificing entry standards, High tariff universities appear to be directing their outreach towards students who show academic potential early in their school career. With less need to worry about their widening participation recruitment targets, Medium and Low tariff universities appear more likely to deliver outreach to young people who were less likely to enter HE, and therefore focus their attention on widening participation to the HE sector as a whole. These data may thus reflect the different 'versions' of widening participation that institutions conduct through their outreach work, with more and less prestigious universities delivering quite different forms of outreach.

The tensions between fair access and widening participation, and the ways in which the two articulate with each other, are notable. Because fair access is concerned with the equitable distribution of disadvantaged students across universities, high tariff universities are conducting a very different form of outreach. This targets different students with different objectives; very different from the type of outreach that is designed to overcome the educational disadvantage needed to widen the applicant pool. It could be argued that fair access type of outreach does nothing to overcome the educational disadvantage that has been shown is the main impediment to HE progression for certain social groups (Crawford, 2014). Indeed, Harrison and Waller (2017b) suggest that outreach delivered to high-attaining young people acts to 'reallocate participation rather than widen it' (p144) as these high-

attaining young people receiving the fair access type of outreach may otherwise have chosen lower tariff institutions or a different high tariff institution.

This may provide more evidence of the blurring of lines between outreach and recruitment, legitimised in government policy by their concern with 'fair access'. This has led to a more fragmented approach to national outreach delivery than was adopted during the partnership working era of AimHigher, with universities conducting outreach that aligns more closely with their recruitment agendas (McCaig, 2010). Next I consider the extent to which this variation in delivery has changed over time.

Figure 4.15 shows how this pattern has changed over time. High tariff universities worked with a far smaller proportion of Average or Low attaining students from 2011/12 onwards, a time period that aligns with the closure of AimHigher and the increased emphasis on fair access and individual institutions' AA, The overall reduction in the proportion of Average and Low attaining students receiving outreach that were observed in Figures 4.11 and 4.12 is thus being driven by High tariff universities. While we have known this to be the case (Harrison and Waller, 2017b; Rainford, 2017), these data provide confirmation.

Figure 4.15: Percentage of outreach delivered to Average or Low attaining students at Key Stage 2 by tariff of delivering HEI
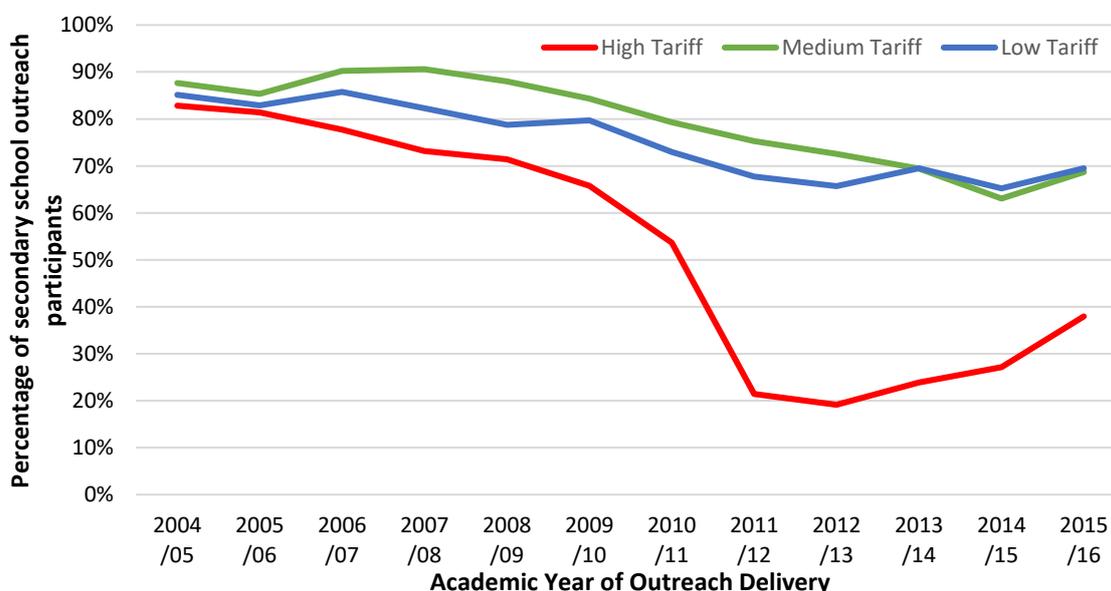
Next I take the third and final criterion identified in RQ1 and consider the proportion of outreach that has been delivered to students who are disadvantaged.

Chapter 4: Research Question 1 Analysis

Engagement of disadvantaged students

a.   What proportion of outreach has been delivered to students who are disadvantaged?

As discussed in Chapter 2, the accurate delivery of outreach activities towards the disadvantaged young people for whom they are intended has long been problematic for practitioners for two reasons. First, there is no commonly agreed definition of what constitutes a 'disadvantaged' student and so practitioners must rely on a number of proxy measures, all of which have limitations. Second, isolating young people in schools as deemed to be in need of outreach might stigmatise them, a practice which may risk negative social consequences for that young person amongst their peer group. As a result, activities are often delivered to entire year groups within schools that are known to include over represented proportions of disadvantaged learners. This targeting at school, rather than individual level, results in what Harrison and Waller (2017b) call 'leakage' of activities to non-disadvantaged students. This can be seen clearly in the HEAT data and Figure 4.16 shows the proportion of participants meeting various proxies for disadvantage that are commonly used in the targeting of outreach activities. The chart also shows the extent to which certain proxies for disadvantage are 'unknown' for the participants in the sample, either because they were not collected by practitioners or are unavailable from administrative datasets.

Figure 4.16: Percentage of outreach participants meeting various indicators for disadvantage (2004/05 – 2015/16)
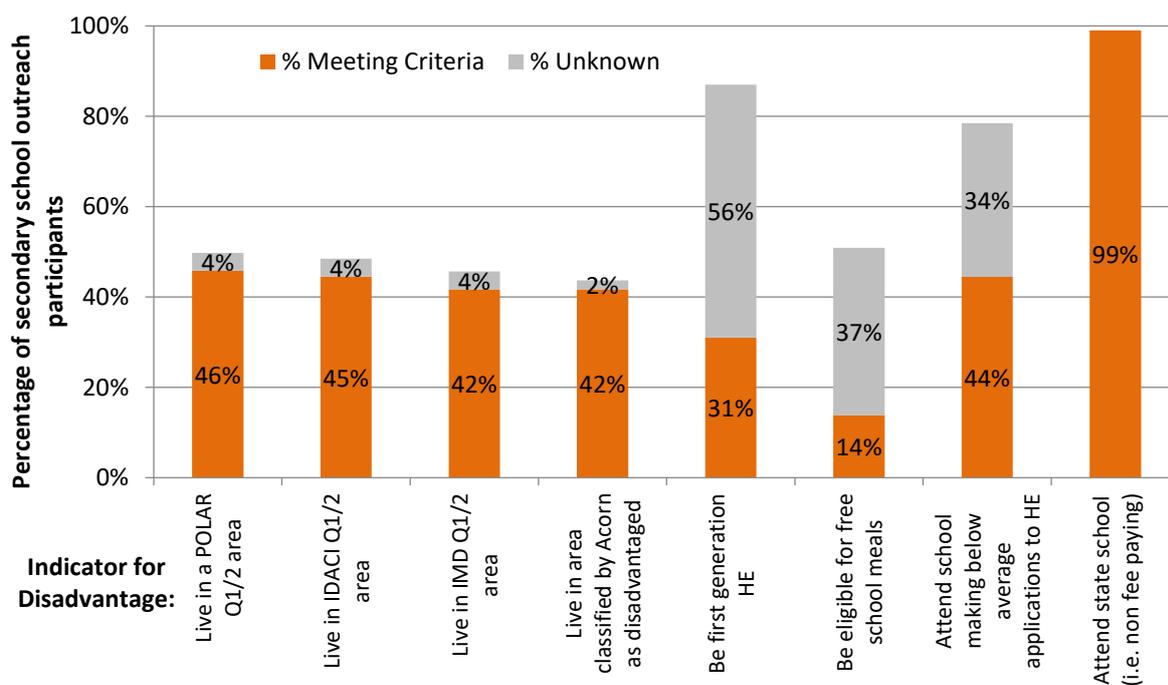
In Appendix 3.1 I discussed the limitations of each of these indicators and then decided to draw on a number of proxies for disadvantage that align with Bourdieu's capitals. The proportion of participants who meet my definition of disadvantage is shown in Figure 4.17 to be 41%. This is lower than HEFCE's recommendation, which is now over a decade old, that two thirds of all activity participants should meet criteria for disadvantage (HEFCE, 2007).

Figure 4.17: Proportion of outreach participants who have been classified as disadvantaged (2004/05 – 2015/16)
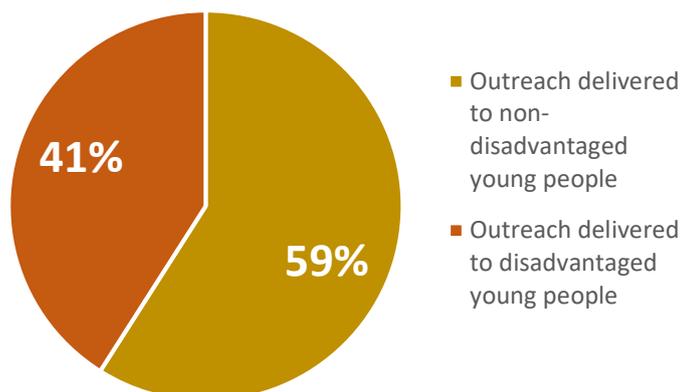
Such leakage of outreach activities raises obvious concerns in terms of efficiency and waste of resources with Figure 4.17 showing that nearly three-fifths of outreach has been directed towards people for whom the policy was not intended. Establishing a 'definition' for disadvantage through data is useful for the purpose of analysing the HEAT data. However, it should be pointed out that practitioners have never previously been asked to target using the particular combination of proxies I have chosen. HEFCE (2007) have offered general statements regarding target groups including "lower socio-economic groups who live in areas of relative deprivation where participation in higher education is low" (HEFCE, 2007; OFFA, 2014a), so it would seem that no clear definition as to whom universities should target has ever been established. Thus, it could be seen as unfair to criticise too harshly these universities for poor targeting. I acknowledge that were a different set of proxies used in my analysis, results may have been slightly different; although different combinations of proxies were tested by the author and revealed similar conclusions.

In light of these results it could be argued that delivering outreach to non-disadvantaged students has the potential to worsen the social gap in HE participation, and thus could theoretically do more harm than if no outreach were delivered at all. Thus, the consequences of mis-targeting are serious. The extent to which outreach has been mis-targeted in the sample of HEAT data is supported in Figure 4.16 where the data are presented for proxies separately. The only indicator capturing the majority of the population (99%) is when attendance at a state school (i.e. not fee paying private schools) is used

as a proxy for disadvantage, this being one of the three widening participation targets institutions are required to meet for their own student intake. However, as discussed in Appendix 3.1, pupils from state schools do not necessarily come from low socio-economic backgrounds, and this has been criticised for being a blunt measure for disadvantage (Riddell *et al.*, 2013; IES, 2013).

b.   Has the proportion of outreach that is directed towards disadvantaged and non-disadvantaged students changed over time?

Figure 4.18 provides time series data showing the proportion of secondary school aged outreach participants who are classified as disadvantaged, by year of outreach delivery. From the first year of data collection in 2004/05 the chart shows six years of continuous increase in the proportion of outreach participants who meet my definition of disadvantage. This peaked in 2009/10 at 54%, followed by a steady decline to the most recent reporting year of 2015/16. The time period during which the targeting of disadvantaged students appears to improve aligns with an era of continued AimHigher funding. These improvements in targeting practices may have been fuelled by the refinement of relationships between universities and schools and a better understanding of metrics for disadvantage, leading to the more accurate identification of those in need of outreach activities. This provides evidence that good working practices require time to become established, something that Hagerval (2016) argues the short term policy making and constant setting up of new projects does not allow.

Since this period of apparent improvement in the targeting of disadvantaged students, the data show a continuous decline in the proportion of outreach that is delivered to disadvantaged students, from 2010/11 to the most recent year, 2015/16. This may reflect the loss of expertise, as a result of staff job losses, that may have followed the abolition of AimHigher. It is interesting to note that the sharpest decline when compared with the previous year can be seen in 2010/11, seemingly one year before the closure of AimHigher. However, it was announced that AimHigher was to close in November 2010, the beginning of this academic year and so a loss of morale and confidence in the project may have weakened resolve to target the most hard to reach.

Following the closure of AimHigher in 2011, universities had more control and responsibility for the students they could choose to engage in their outreach activities. This period also brought with it plans to increase tuition fees to £9,000 (DBIS, 2011), inevitably causing universities to be anxious that they retain their market share of the applicant pool. It could be argued that, following this, universities were more likely to design widening participation strategies that acted as a mechanism to maintain their own student numbers, focussing their efforts on recruitment and as a result weakening the

quality of the targeting of their outreach activities. This provides yet another example of the manifestation of marketization, with the HEAT data supporting the idea that outreach is being threatened by the pressure on universities to compete over potential applicants (McCaig, 2015).

Figure 4.18: Percentage of outreach delivered to disadvantaged students, yearly change
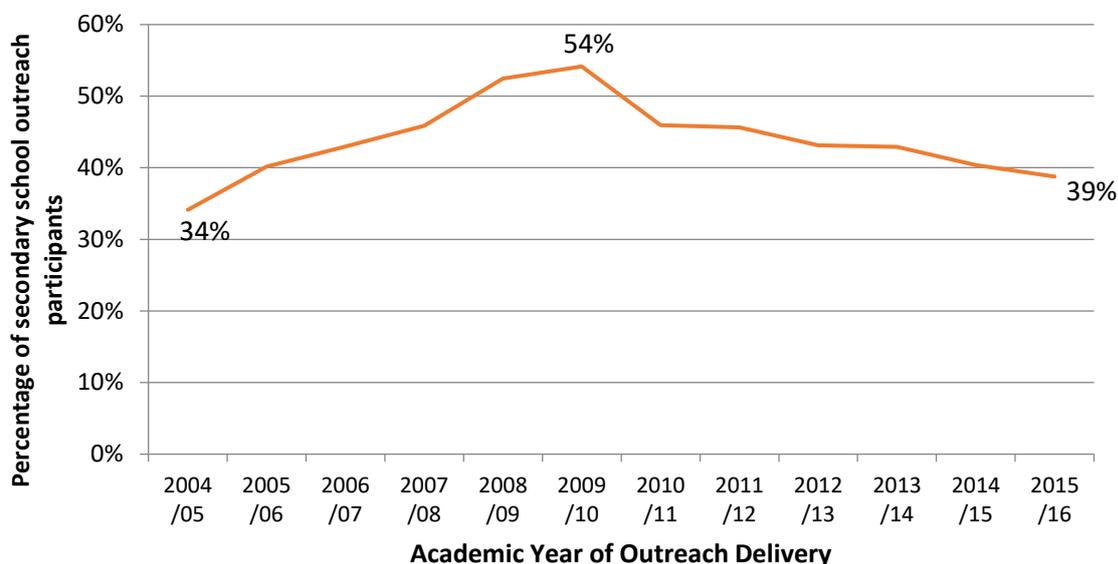
As discussed in the previous section, the membership of universities contributing data to the HEAT sample population has increased over the reporting period. As a result any changes observed in targeting practices may be caused by the addition of new data from new member universities, rather than changes in the targeting practices of existing universities. To account for this, Figure 4.19 shows time series data from 2008/09 to 2015/16 for 22 universities who have added eight years of continuous data to HEAT. The trend within this time period remains one of a decline in the proportion of outreach that is delivered to disadvantaged students, and thus the picture presented above remains a fair reflection of patterns of outreach delivery.

Figure 4.19: Percentage of outreach delivered to disadvantaged students, yearly change for 22 universities with eight years of continuous data
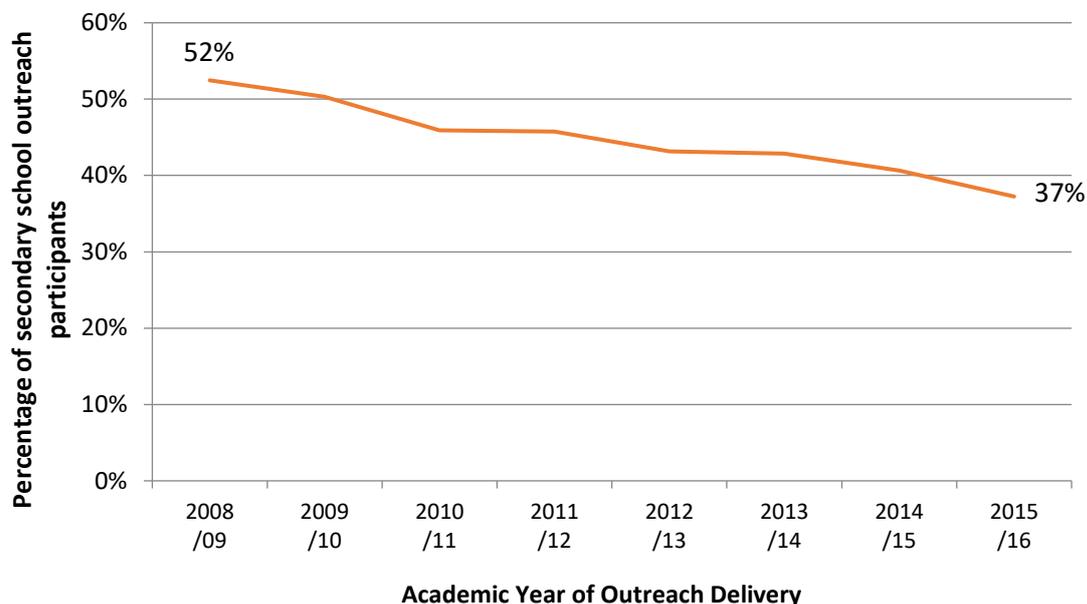
Figure 4.20 aggregates the data into two time periods: during and post AimHigher, to show a -6 percentage point reduction in the proportion of outreach that was directed towards disadvantaged students in the post-AimHigher funding period.

Figure 4.20: Percentage of outreach delivered to disadvantaged students, during and after AimHigher
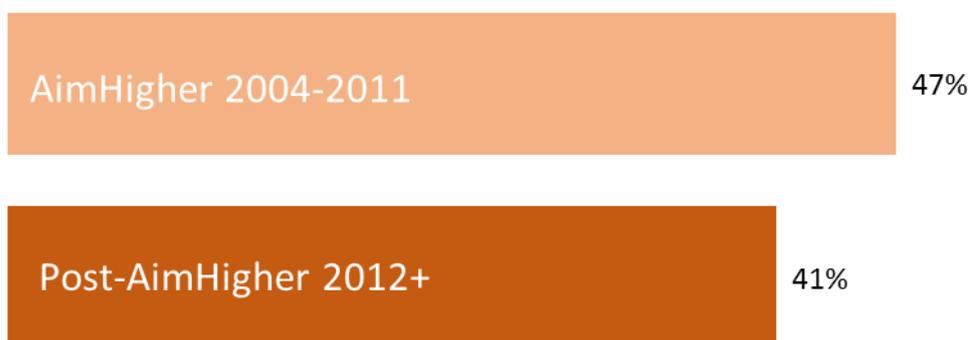
Next I examine whether there is a difference in the proportion of outreach being delivered to disadvantaged students when High, Medium and Low tariff universities are compared. Theoretically, there should be no reason why different types of universities are more or less effective in their targeting of disadvantaged learners. However, given that high tariff universities tend to be working

with larger proportions of high-attaining students, and that high-attaining students are less likely to come from disadvantaged families, I would expect to see greater leakage of activities to non-disadvantaged students.

c.   *Does the proportion of outreach that is directed towards disadvantaged and non-disadvantaged students vary depending on the tariff of the delivering university?*

Figure 4.21 shows that Medium and Low tariff universities have delivered similar proportions of their outreach to disadvantaged young people (45% and 44% respectively).

High tariff universities have recorded a lower proportion of disadvantaged students (35%). As suggested above, this is perhaps unsurprising in light of the prior attainment of the students to whom High tariff universities appear to be delivering their outreach. In the previous section it was shown that High tariff universities are more likely to work with high-attaining students. As socio-economic background and low attainment go hand in hand (Gorard, 2012), schools with large proportions of high-attaining students are less likely to include students who are socio-economically disadvantaged (Gorard, 2010a; Gorard *et al*., 2013; Harris and Williams, 2012; Boliver and Swift, 2011). Where outreach is delivered to whole year groups, working in high performing schools is likely to yield a higher rate of 'leakage' (Harrison and Waller, 2017b) (where outreach is delivered to non-disadvantaged students) than if a university were to work with schools with large proportions of low-attaining students.

Figure 4.21: Percentage of outreach delivered to disadvantaged students by tariff of HEI delivering outreach (2004/05 – 2015/16)
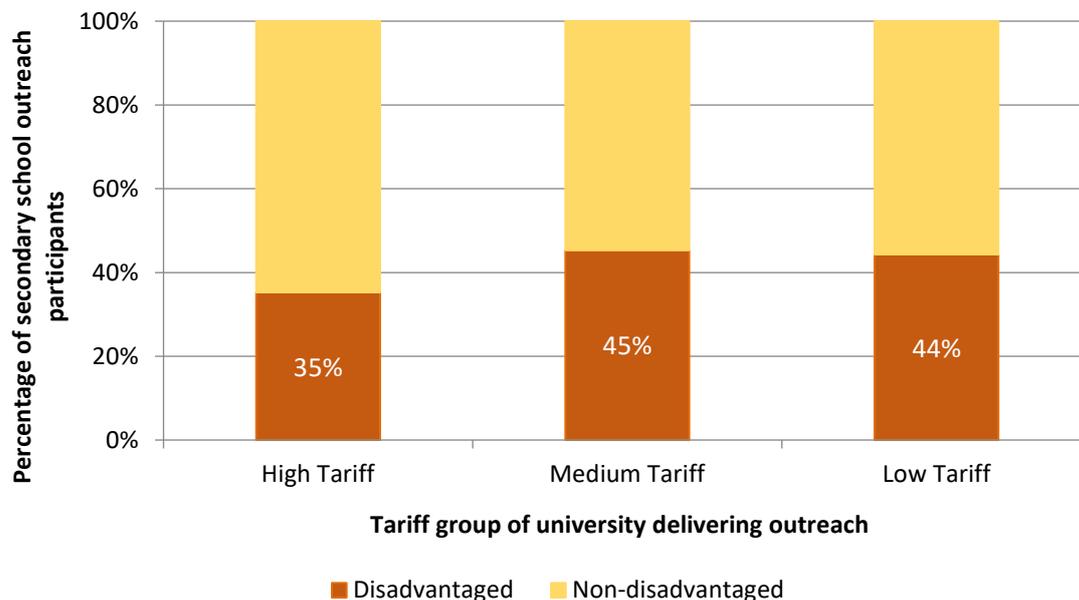
Time series data presented in Figure 4.22 shows that, with the exception of the two earliest delivery years, High tariff universities have consistently delivered outreach to a smaller proportion of disadvantaged students when compared with Medium and Low tariff universities. However, this gap widened considerably between 2010/11 and 2012/13 before returning to a similar rate to that for Medium and Low tariff universities over the final three reporting years. This short period of decline in the proportion of outreach delivered by High tariff universities that was directed to disadvantaged students (between 2010/11 and 2012/13) may reflect a period when High tariff universities were reacting to changes in the HE landscape following the abolition of AimHigher, the increase in student fees and the increased emphasis placed on institutions' own AA.

Figure 4.22: Percentage of outreach delivered to disadvantaged students by tariff of HEI delivering outreach, yearly change
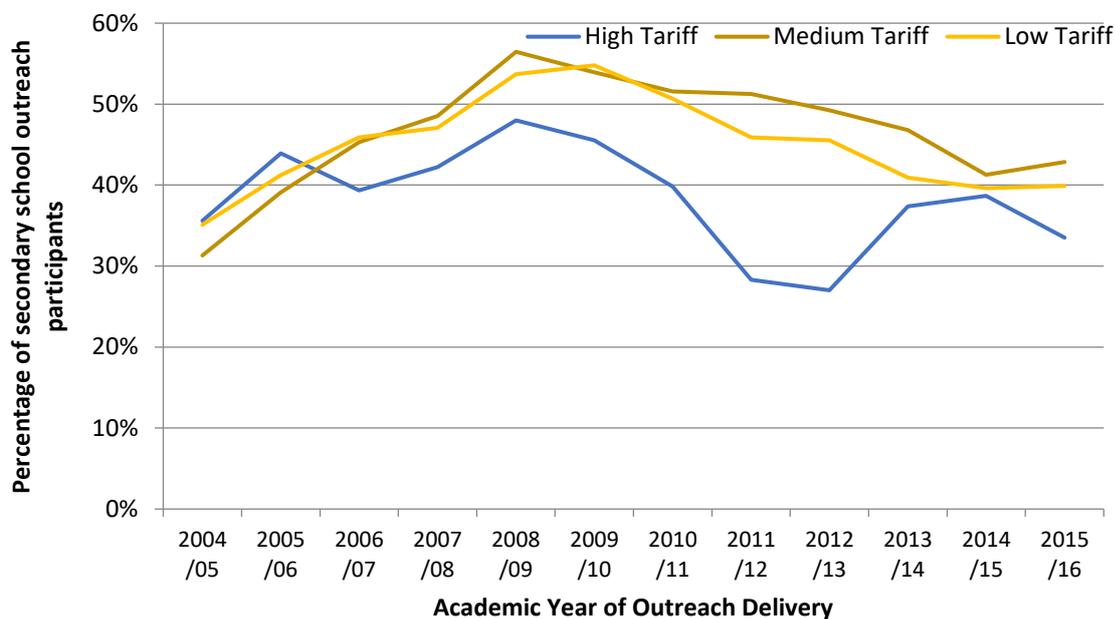
Again, the picture is similar for the 21 members with eight years of continuous data that can be classified into a tariff band, as shown in Figure 4.23.

Figure 4.23: Percentage of outreach delivered to disadvantaged students by tariff of HEI delivering outreach, yearly change for 21 members with eight years of continuous data
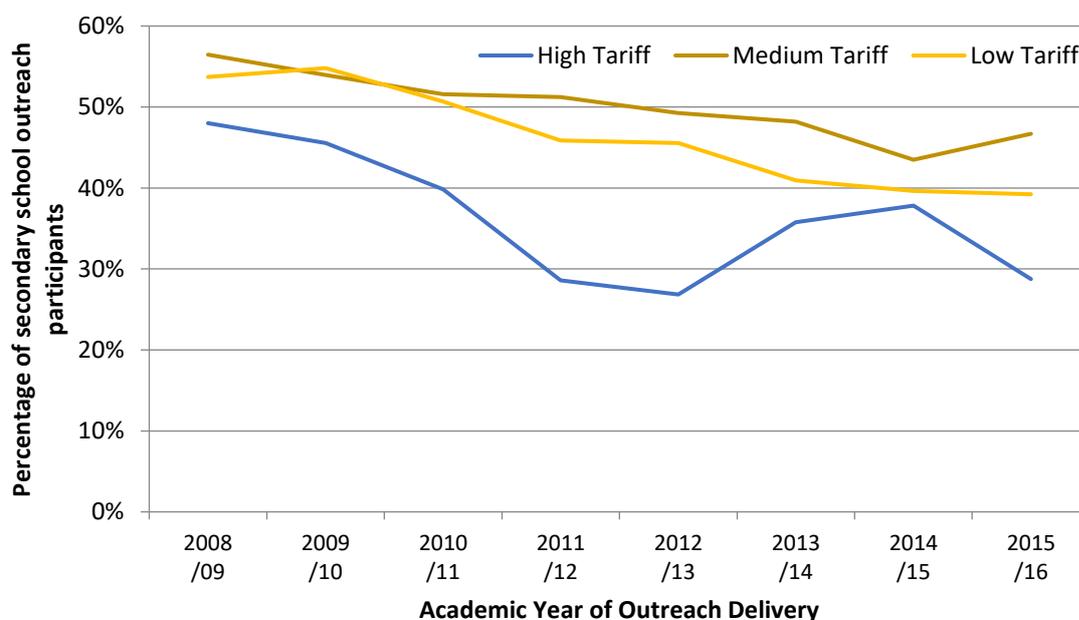
4.4 Intersections between the three criteria

Returning to my original research question (RQ1) I next examine the way the three criteria, examined separately above, intersect to calculate the proportion of the total HEAT cohort that satisfies all three criteria *together* - the 17% figure given at the beginning of this chapter. Table 4.4 provides the percentages showing how this figure has been derived. The figures in the table in bold italics show the cumulative proportion of students in the sample population who meet all three criteria.

Table 4.4: Intersections between the three criteria making up RQ1

Total number of secondary school outreach participants	Criterion 1		Criterion 2		Criterion 3	
	First engaged in outreach		Key Stage 2 Attainment Band		Classified as Disadvantaged	
	Category	% of total	Category	% of total	Category	% of total
223725	***Pre 16 / pre 6th form***	***56%***	***Low/Average***	***34%***	***Disadvantaged***	***17%***
					Non-disadvantaged	16%
			High	24%	Disadvantaged	9%
					Non-disadvantaged	14%
	Post 16 / during 6th form	44%	Low/Average	24%	Disadvantaged	11%
					Non-disadvantaged	14%
			High	18%	Disadvantaged	5%
					Non-disadvantaged	13%
Total		100%		100%		100%

4.5 Conclusion

This chapter has used data from HEAT to identify the extent to which member universities are delivering outreach to disadvantaged secondary school pupils under the age of 16, who are not expected to achieve their five GCSEs at grades A*-C, including English and Maths. This type of outreach was identified in the Literature Review (Chapter 2) as having the greatest potential to narrow the social gap in HE participation, being aimed at the young people who are least likely to be destined for university given their circumstances. HEAT data show that, until now, the type of outreach I have identified has been delivered to less than one-fifth (17%) of the total outreach participant population. I have not considered the nature of the activities delivered, their aims or whether they were effective, but rather simply examined who has participated. However, my analysis confirms that a significant

amount of deadweight and leakage currently exists amongst the population to whom outreach is being delivered (Harrison and Waller, 2017b).

There is further concern that the proportion of outreach that is being delivered to the 'right' students is declining. Commentators have linked this with a reduction in collaborative working and the increased pressure on universities to compete within an HE market (McCaig and Taylor, 2017; McCaig, 2015; Archer, 2007). Steps to marketise HE include the development of sector wide performance indicators, the increase in student tuition fees to £9,000 and the removal of student number controls (Brown, 2015). Universities who withdraw from the competitive HE marketplace risk a loss of consumer confidence and the associated failure to recruit income generating students, the consequence of this being disastrous for the sustainability of the institution (McCaig, 2015).

In the face of these forces of marketization, from 2012/13 universities were asked by OFFA to spend around 25% of their higher fee income on widening participation related work, depending on their record of access performance. Research by Harrison and Waller (2017b) found that the outreach activities favoured by universities tended to be closely aligned with institutions' recruitment objectives. It is unsurprising therefore that under these pressures the boundary between outreach and recruitment loses its clarity. It is argued that the marketization of HE appears to be compromising the type of genuine outreach identified here that has the potential to reduce the social class gap in HE participation. The data do, however, show periods of improvement and these can often be linked to recommendations found in governmental guidance. This shows the important role of guidance in reducing the effects of market forces on the way outreach activities are targeted.

Furthermore, universities with High entry tariffs are less likely to target the 'right' students I have identified than are Medium or Low tariff universities; and this variation has increased since the closure of Aimhigher and its ethos of partnership working. High tariff universities appear to be conducting outreach that, the data suggest, may be more closely aligned with recruitment activities, with many participants already in sixth-form at first point of contact, typically already high-attainers at school and fewer meeting proxies for disadvantage.

It is likely that the privileged position held by High tariff universities within the HE marketplace affords them less concern than Medium or Low tariff universities over failure to recruit students from the current applicant pool. Indeed, Taylor and McCaig (2014) comment that Low tariff post-1992 universities have been put under more stress from the effects of marketization. Rather, the concern for High tariff universities relates to the proportion of disadvantaged students entering their own institutions, with many criticised for failing to meet their targets under the 'fair access' agenda. High

tariff HEIs appear to be operating what could be described as a predatory style of outreach, whereby they work largely with the most able and likely to progress to HE, with the aim of encouraging that they progress to their own institutions. Thus using outreach as a form of recruitment, albeit towards disadvantaged students, is legitimised by government through the 'fair access' agenda in order to ensure that the distribution of disadvantaged students across universities is equitable. This type of outreach which acts to reallocate participation rather than widen it (Harrison and Waller, 2017b) has limited potential to close the social class gap that is the central tenet of widening participation policy. Furthermore, where students are simply reallocated amongst Russell Group universities, this does not even meet the objectives of the Fair Access agenda. Thus the government's ambition to achieve an equitable distribution of students from all social backgrounds across universities creates tensions with the overarching aims of widening participation policy, and this can clearly be seen in the HEAT data.

Chapter 5: Research Question 2 Analysis

Research Question 2: Can a robust method that uses HEAT's longitudinal tracking data of outreach participants be formulated to show the impact of participating in outreach on school attainment at Key Stage 4 (GCSE)?

5.1 Introduction

In the previous chapter (RQ1) a subset of the HEAT student population (17%) were identified as having received outreach that had the potential to raise Key Stage 4 attainment. I have argued that this type of outreach has the greatest potential to widen participation in Higher Education (HE) amongst young people, with other types of outreach more likely to include students who were already on track to enter HE, whether they participated in outreach or not. The students isolated in Chapter 4 will be the focus of this chapter.

This chapter addresses the second research question of this thesis (RQ2) which aims to investigate whether participating in outreach may have had a positive impact on school attainment at Key Stage 4. HEAT's longitudinal tracking data are used as the only data source underpinning my analysis, and through this I aim to formulate a robust method based on this dataset. In asking this question I am hinting at a causal relationship; it is, after all, plausible that interventions such as universities' outreach activities could raise attainment at Key Stage 4, and this is certainly something that the Office for Students (OfS) are asking universities to demonstrate (OfS, 2018a). However, I am cautious of claiming causality. The link between participation in outreach activities and raised attainment is not sufficiently coherent to assert causality (Gorard, 2012). For students who participate in outreach, this is just one of many possible mechanisms that may explain why their attainment might be higher; other variables include their inherent motivation and the influence of their schools, families and peer groups. For this reason the results of this analysis are presented as associations between variables and I am careful with the language I use in order to avoid 'overclaiming' (Gorard, 2002b, p147).

In spite of this cautious approach, I do acknowledge that practitioners and universities are under increasing pressure to show the value of their interventions (OfS, 2018a; DBIS, 2016; OFFA, 2015a; HEFCE, 2015). In Chapter 2 I discussed the demand within the sector for robust studies showing the impact of outreach activities in terms of widening access to higher education. There are also significant expectations that the kind of tracking data used in this analysis will provide this evidence of impact, particularly following HEFCE's investment in HEAT (HEFCE, 2015a). Here I examine the ability of HEAT's

tracking data to deliver this evidence. However, I take note of Gorard (2012) who advises that no one data source should be expected to satisfy all requirements needed to establish a causal relationship between an intervention and the desired effect.

5.2 Analysis

Although the sample size on which this chapter's analysis is based is far smaller than the original HEAT dataset interrogated under RQ1 (n=17,305), focusing only on these students in the impact analysis does have benefits when assessing the possible effectiveness of outreach. Filtering out participants who do not meet the three criteria for outreach identified in RQ1, ensures that the analysis is based on a subgroup of HEAT's large and varied population whom were 'in need' of the support that widening participation outreach is designed to offer. This ensures some degree of consistency amongst the sample population, as all met certain proxies for disadvantage and all had medium to low levels of prior attainment at Key Stage 2; characteristics discussed in the literature review and which were shown to be inversely related with high Key Stage 4 attainment and subsequent HE progression. This is important as it removes some of the variation in the background of the sample of outreach participants observed in the previous chapter. Including advantaged students or students with high prior attainment in the impact analysis is likely to inflate any estimated impact of outreach activities as these students were more likely to have performed well at Key Stage 4 and then progress to HE regardless of their participation in outreach. These students are likely to appear in the population as a result of mis-targeting or 'leakage' of activities to those who do not need them (Harrison and Waller, 2017b). These concepts were discussed in the previous chapter but they are re-introduced here as they can impede the ability of tracking data, like that collected by HEAT, to produce robust impact analyses (Harrison and Waller, 2017a). This is carefully considered in the methodology, with approaches to mitigate the effects proposed in the analysis and discussed in the final paragraphs.

Before turning to the impact analysis of RQ2, it is necessary to describe the sample of outreach participants in order to gain a clearer understanding of their personal characteristics. Next I examine their personal characteristics along with the types of outreach activities they received. Student characteristics are compared with the national average the see whether the sample are representative of all pupils in England.

5.3 Describing the HEAT population of outreach participants

Tables 5.1 to 5.3 show the gender, ethnicity, home region and disadvantage quintile for the population of outreach participants. For comparison, the same data are provided for all state-funded secondary

school pupils in England. It is important that the representation of gender and ethnic groups is similar within the population of outreach participants to that of the wider population, as each has their own relationship with educational attainment (Gillborn and Mirza, 2000). For example, if one particular group was over-represented in this population, the findings would not be applicable to the wider population. If populations are similar to the national pattern, the possible 'effects' of outreach observed are more likely to be replicated if implemented across the wider population. Tables 5.4 and 5.5 present data for two further characteristics associated with educational inequality: prior attainment at Key Stage 2 and level of disadvantage. These characteristics were incorporated in RQ1 to define this population of outreach participants and so I would not expect results to match that of the wider population, rather the data are presented for information. Although all students included in this stage of analysis are 'disadvantaged', according to my set of proxies, Table 5.5 defines disadvantage slightly differently. Disadvantage is presented according to only one proxy, the Income Deprivation Affecting Children Index (IDACI) in order to show the background of students based on this widely recognised and utilised area based indicator for disadvantage (Crawford and Greaves, 2013; DCLG, 2015).

As the cohort of participants spans a number of academic years, 2007/08 to 2015/16, the national school comparator data are provided to cover the range for this period where necessary. Changes over time have been minimal in the particular characteristics presented, with the exception of increases in the proportion of pupils from ethnic minority groups, which are shown in Table 5.2. Gender and ethnicity data for the outreach participants in the sample were obtained through linking with the National Pupil Dataset (NPD), however the information is unknown for a small proportion of the population, the extent to which data are missing is indicated in each of the tables. Percentages are calculated based on those for whom the data have been collected and it is this cohort, for whom the full range of data are available, on which this impact analysis is based.

Females are more likely to appear in the HEAT cohort than males (58% and 42% respectively). This aligns with anecdotal evidence; it is commonly discussed at practitioner forums that it is more difficult to encourage boys to take part in outreach events. Furthermore, national research shows consistently lower levels of educational achievement amongst boys when compared with girls (Sullivan *et al.*, 2014; Strand, 2014), which may help explain why it is more difficult to engage with boys. The ethnicity profile of outreach participants (shown in Table 5.2) is similar to that of the student population as a whole. This is important given variation in attainment across ethnic groups. Recent DfE data show that Asian pupils perform above the national average at Key Stage 4 whereas White and Black pupils perform below that seen nationally (DfE, 2017a). Fortunately, the sample of students mirrors the ethnic profile

of all pupils in England. The final table, showing the home region of the sample population is highly skewed, with the majority (57%) living in the South East of England. This compares with 15% of all school pupils nationally and is a reflection of the HEAT membership which, although growing, is still dominated by universities in the South East. A large proportion (89%) of the sample live in areas classified as within the top two quintiles for disadvantaged. This is not surprising as the sample has already been filtered to include only those meeting other proxies for disadvantage that would correlate with the one used here (IDACI).

Table 5.1: Gender breakdown of HEAT participants

Gender	HEAT Participants	All secondary pupils in England (2007 - 2015)*
Female	58%	50%
Male	42%	50%
Total	**100%**	**100%**
Unknown	*0.01%*	-

*Source: DCSF, 2007; DfE, 2015a

Table 5.2: Ethnic breakdown of HEAT participants

Ethnicity	HEAT Participants	All secondary pupils in England (2007 - 2015)*
White	79%	83% - 76%
Asian / Asian British	10%	7% - 11%
Black / African / Caribbean / Black British	6%	4% - 6%
Mixed / Multiple ethnic groups	3%	3% - 5%
Other ethnic group	1%	1% - 2%
Total	**100%**	**100%**
Unknown	*8%*	-

*Source: DCSF, 2007; DfE, 2015a

Chapter 5: Research Question 2 Analysis

Table 5.3: Home region of HEAT participants

Home Region	HEAT Participants	All secondary pupils in England (2007 - 2015)*
South East	57%	16%
North East	9%	5%
East of England	7%	12%
Yorkshire and The Humber	7%	10%
London	7%	15%
North West	6%	13%
West Midlands	1%	11%
South West	6%	10%
East Midlands	0%	9%
Total	**100%**	**100%**
Unknown	*0%*	-

*Source: DCSF, 2007; DfE, 2015a

Table 5.4: Prior attainment of HEAT participants

Prior attainment at Key Stage 2	HEAT Participants	All pupils in England (2008 - 2011)*
High (> Level 4)	0%**	31% - 34%
Medium (Level 4)	74%	46% - 50%
Low (<Level 4)	26%	31% - 34%
Total	**100%**	**100%**
Unknown	*0%*	-

*Source: DfE, 2011

NB: Comparator data for all pupils in England are shown for the academic years in which the cohort of HEAT participants took their Key Stage 2 exams

**High attaining students were removed from the population following RQ1

Table 5.5: Level of disadvantage of HEAT participants using IDACI quintiles

IDACI Quintile	HEAT Participants	All secondary pupils in England*
Quintile 1 (Most deprived)	41%	20%
Quintile 2	48%	20%
Quintile 3	7%	20%
Quintile 4	3%	20%
Quintile 5 (Least deprived)	1%	20%
Total	**100%**	**100%**
Unknown	*1%*	-

*Source: DCLG, 2015

Next I consider the nature of the outreach activities the population of participants received from universities. I examine the average number of activities each student received and the types of activities on offer.

5.4 The number and types of outreach activities in which the sample population have participated

The mean number of activities in which students in the sample participated was seven, data are presented in Table 5.6. However, there is significant variation around the mean, with a standard deviation of 18 activities, and 45% of students received only one activity. Figure 5.1 shows the proportion of students who received one to six activities, with data aggregated for those who received seven or more activities. On further investigation many of the 20% of students who participated in seven or more activities were registered to mentoring programmes, and individual mentoring sessions have been recorded as multiple activities. For example, a mentoring programme that is delivered weekly for one academic year had, in some cases, been recorded as 39 separate activities. If mentoring sessions that were delivered within the same academic year are aggregate, the average number of activities per student falls to just over three, with a standard deviation of five activities. It is likely this is a more realistic picture of what students received and so I continue with this format in the analysis presented later.

Table 5.6: Mean number of outreach activities in which participants have participated

	N	Mean	Std.Dev.
All outreach events / activities	17305	7.0	17.8
All outreach events / activities (with mentoring sessions aggregated)	17305	3.1	4.8

Figure 5.1: Number of outreach activities in which students have participated
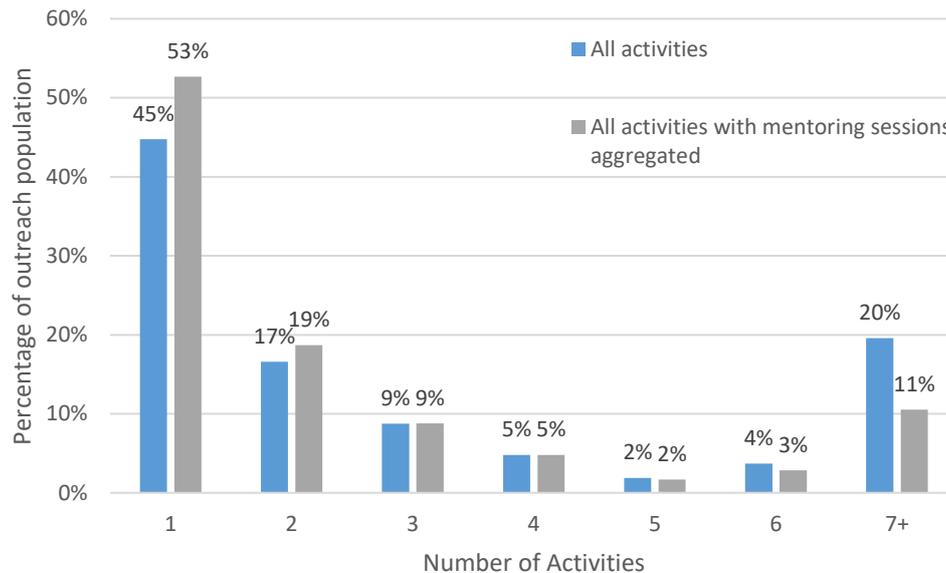
Although these data provide a good indication of the extent of outreach that students in the sample population have received, it is worth noting that a simple count of activities may not be the most accurate way of assessing volume of outreach. There is likely to be variation in the number of contact hours a student will receive from one activity to the next. For example, suppose Student A participated in only one activity, such as a residential summer school which consisted of five days and four nights on campus, totalling over 100 hours. Student B, on the other hand, participated in three activities, which were three campus tours lasting only three hours each and added up to nine hours, a fraction of the time experienced by Student A. Clearly, summing the contact hours a student has experienced is a better indicator of their volume of outreach rather than counting activities. However, contact hours were not routinely collected in the early stages of HEAT's development and so this variable is not available for a large proportion of the sample. Although this is unfortunate it will not detract from the analysis as I am examining the overall impact of having participated in *any* outreach, rather than assessing whether outcomes improve along a scale of the volume of outreach received.

Figure 5.2 shows the types of activities that students received, classified according to HEAT's activity typology. Subject Tasters and general HE Information Talks are the most common type of outreach events delivered by universities, with 32% and 30% of students respectively having experienced one of these types of activity (for a definition of these types of activities please see Appendix 2.1). It is very tempting to draw on the type of activity, listed in Figure 5.2, when attempting to show the impact of outreach. For example, an obvious question would be to ask whether Summer Schools are a more effective form of intervention than Subject Tasters or Mentoring. This would certainly help answer the 'what works' question, but it is far too simplistic for the following reasons: first, as many of the students in the sample have taken part in more than one activity, it is impossible to say whether any improvements in the academic performance that might be observed are due to one activity or another. Second, there is likely to be significant variation in what is being delivered and recorded under each activity label across HEAT's membership of universities, with each university developing their own distinctive style of events. For example, a Summer School at University X is likely to take on a totally different character from a Summer School at University Y, with each being marketed for their individuality. These variations, combined with the likely variations in the competence, charisma and appeal of the individuals delivering the outreach across the sector means that little meaning can be given to these activity categories in my pursuit of 'what works'. For now, I simply note that many students have participated in more than one type of activity and it is for this reason that the percentages shown in Figure 5.2 do not add up to 100.

Figure 5.2: Types of activities in which students have participated
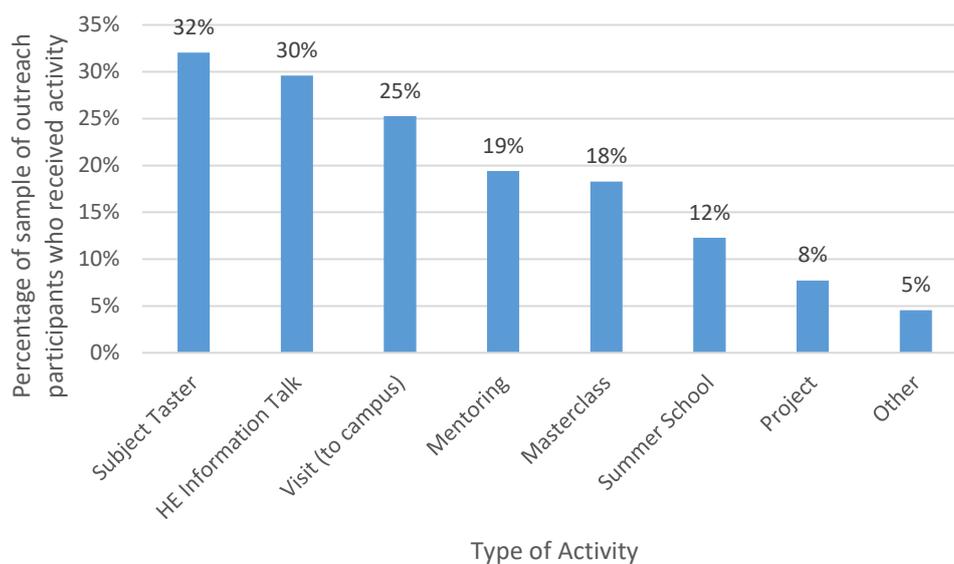
It is clear from Figures 5.1 and 5.2 that there is wide variation in terms of the number and types of outreach activities that individual students in the sample have received. Many students have received only one activity, this could be as light as a one hour talk about the benefits of HE. Others have received multiple activities, comprising a number of the different types of events shown in Figure 5.2. If I were to consider the two variables presented in Figure 5.1 and Figure 5.2 together, there are hundreds of different combinations of 'packages' of outreach in which students have participated. Very few of these packages of outreach are the same; even when the total number and types of activities match, students will often have received activities in a different sequence or whilst in different year groups. There are so many combinations that looking for patterns becomes highly complex and, moreover, is an approach that does not necessarily reveal patterns of value to my analysis.

For the following impact evaluation I will keep things straightforward and consider the relationship between participating in outreach of *any* type and Key Stage 4 attainment. Next I discuss the approach I will take to evaluate the impact of outreach using the HEAT data and then present the results of my analysis. I conclude the chapter by debating the challenges and limitations of working with the HEAT dataset.

5.5 Using HEAT data to conduct an impact evaluation

When conducting an impact evaluation in an educational setting there are a number of approaches one could follow. As discussed in Chapter 3 experimental research methods, and specifically Randomised Controlled Trials (RCTs) are commonly seen by government as the 'gold standard' approach to evaluation (OFFA, 2017a; HEFCE, 2015b). HEAT's system of tracking outreach participants through school and into HE can indeed play a role in RCT research, providing the infrastructure to collate the educational outcomes for students assigned to the treatment (outreach participants) and control (non-participants) groups. However, the data on which I am basing my analysis here is historical. Students have already participated in outreach and the random assignment of students to treatment and control groups did not take place.

The HEAT data are able to meet research design criteria for quasi-experimental methods which, according to OFFA (2017a), can be considered the 'second best' (p15) approach and qualify for the highest level (Level 3) in OFFA's Standards of Evaluation Practice (p5). This guidance has since been superseded by guidance published after this thesis was submitted (OfS, 2019) which does remove the ranking of methods in this way.

It should also be noted that this approach remains open to some of the criticisms raised in Chapter 3, and these will be explored fully in the limitations section of this chapter. For now I focus on describing the method. Quasi-experimental methods refer to research designs that compare outcomes for a treatment group with those for a suitable comparator group by methods other than randomisation. The method selected here is to match students from a treatment group with their pair in the comparisons group based on variables known to influence attainment at Key Stage 4. For this analysis a suitable comparator group would consist of students who did not participate in outreach; it might then be inferred that any difference in outcomes upon comparison with the group of outreach participants could have been influenced by participation. It has been suggested that this method has value locally as it offers a more pragmatic solution for universities who do not have the resource or expertise to set up expensive trials that interfere with the way interventions are run (Younger *et al*., 2018). However, it is important to be cautious with causality and remember that there can be other possible explanations for any differences in outcomes that are observed.

5.5.1 Finding a suitable comparator group

As explained in Chapter 3, one significant problem with this analysis is that I do not have easy access to data on students who *have not* participated in outreach. Universities use HEAT to record information on students with whom they have engaged in outreach, collecting the required consent from the student needed to record and store their personal details. No such data are routinely collected for students who met the criteria for inclusion in an outreach activity, but did not participate, either of their own volition or that of the university. This issue is wider than simple availability of data: students who chose to 'opt-out' of outreach opportunities are likely to possess quite different attitudes and behaviour towards their education from students who accepted the opportunity of working with a university. Thus even if their details were available, they may not be a useful comparator group. Collecting a dataset of students who 'opted-in' but did not receive outreach is problematic for ethical reasons. Many universities refuse to deny disadvantaged students access to outreach opportunities purely to allow the construction of a comparator group. It is possible to obtain from the Department for Education (DfE) data on students who *do not* appear in the dataset of outreach participants, who could then *de facto* be considered non-participants. However, given that HEAT do not capture all outreach that is delivered nationally, I could not be confident that these students had not received any form of outreach. It is more likely that it had simply not been delivered by one of HEAT's university members. Thus finding a suitable comparator group is problematic, but I believe the following provides a reasonable solution.

To overcome the issues discussed above I will use the data for students who have been recorded on HEAT as having participated in very low levels of outreach, specifically only one activity classified under the HE Information Talk activity type, and treat this as the comparator group. I feel this is justified as participation in this one type of activity which typically has high student to staff ratios and usually lasts little longer than an hour, is the least likely of any form of outreach to have a transformational effect on the student. Outcomes for these students will be compared with those for students who have participated in at least three outreach activities: this will be the 'treatment' group. Table 5.7 shows the number of students for whom data are available to construct the matched groups for analysis. A large proportion of the original sample of outreach participants identified in Chapter 4 (N = 17,305) will not be included in the analysis as they fail to meet the eligibility criteria for either the control or treatment group. These students have participated in either one or two activities, with the exception of one HE Information Talk which places students in the comparison group population.

Table 5.7: Population classified as part of the treatment and comparison groups

Analytical Group	N
Treatment Group (experience of at least three activities)	6690
Comparison Group (experience of one HE Information Talk)	1270
Total	**7965**
Individuals not meeting criteria for inclusion in either the Treatment or Comparator group	*9340*

Next I discuss the matching process in the quasi-experimental methodology that will go some way to account for the lack of randomisation in the sample. Incorporating this stage into my approach elevates the design to OFFA's Level 3 standard of evidence (OFFA, 2017a).

5.5.2 The matching process

For this impact evaluation to be robust, the students included in the comparison group (participants of one HE Information Talk) must be so similar to those included in the treatment group (participants of at least three activities) that the two can be regarded as from the same population. Owing to the highly targeted nature of outreach, with more intensive activities supposedly targeted towards the most disadvantaged students (HEFCE, 2007), it is likely that there will be a degree of selection bias within the two groups. In order to correct for this I match students from my treatment and comparison groups based on confounding variables that are known to influence attainment at Key Stage 4, as shown by Sylva *et al*. (2014) and Strand (2014) and national data (DfE, 2016b; 2017a).

The variables on which I match students are critical; six variables have been carefully chosen with justifications provided in Table 5.8 below. It should be noted that, to some extent, students' level of disadvantage and prior attainment at Key Stage 2 have already been controlled for following the removal of non-disadvantaged and high attaining students as part of RQ1. However, these variables are also included as matching characteristics to allow a more refined level of matching treatment with comparison group individuals. Matching students by their level of disadvantage draws on IDACI quintile following positive reports by Crawford and Greaves (2013) who evaluate the accuracy of this indicator for classifying students by their level of educational disadvantage. IDACI is preferred over students' eligibility for free school meals for its ability to classify 'middle' levels of disadvantage rather than focusing on those in relatively extreme income poverty (for a review of proxies for disadvantage see Appendix 3.1).

Table 5.8: Six observed confounding variables on which matching will be based

Match variable	Reason included as a matching variable	Match tolerance
Pupil Characteristics		
Gender	To control for differentials in the Key Stage 4 achievement of boys when compared with girls.	Exact match on gender: Male or Female.
Ethnicity	To control for differentials in Key Stage 4 achievement across ethnic groups.	Exact match on major ethnic group: Asian, Black, Mixed, Other, White.
Pupil Socio-economic Background		
IDACI Quintile	To control for income and economic capital of child.	Exact match on IDACI quintile (1-5) associated with postcode.
Pupil Prior Attainment		
Key Stage (KS) 2 Attainment Level	To control for differences in prior attainment, with Key Stage 2 taken in Year 6 the latest available.	Exact match on Key Stage 2 level: 2-4 (2 and 3 = Low attainment band, 4 = Medium attainment band).
Influence of School		
School performance at Key Stage (KS) 4	To control for school environment and teaching quality.	Exact match on Key Stage 4 performance decile of the school. The main attainment indicator of % of pupils achieving 5+ A*-C including English and maths was used to rank state-funded schools nationally.
National changes in headline achievement measures year on year		
Key Stage (KS) 4 exam year	To control for yearly changes in national qualification standards.	Exact match on academic year Key Stage 4 exam was taken by pupil: 2007-2015.

It is customary when carrying out this type of matching, to have a larger sample of individuals within the comparison group than the treatment group. The larger the pool of comparison individuals available for matching, the more chance matches for each treated individual will be found. Any unmatched comparison individuals are simply discarded. In this case, I have a larger sample within the treatment group than the comparison group. This is because fewer students received only one HE Information Talk than received three or more activities of any type; this should be perceived as a positive finding considering universities are asked to deliver 'long-term outreach' (OfS, 2018a; OFFA, 2011; 2012; 2013; 2014a). However, for my evaluation design, this means that when I carry out the matching process I must find a match for the individual in the comparison group from the treatment group, rather than the other way around. Thus the matched sample will consist of pairs of students who look most similar (on observables) to untreated rather than treated students, with a large proportion of treated students discarded when a match was not found for them. This is visualised in Figure 5.3 below. Reassuringly, I am able to show that, after carrying out the matching process, the matched treatment population arrived at is similar to the original population of outreach recipients that was described at the beginning of this chapter (Tables 5.1 to 5.5) in terms of observed characteristics. For a further validity check, the matching process is performed seven times with no replacement, each time discarding the sample from the treatment population who had been matched in the previous scenario. The results for version one are presented later in this chapter and results for versions two to seven presented in Appendix 5.1. In each version, results follow a similar pattern.

Figure 5.3: Visualisation of matching of treatment to control individuals
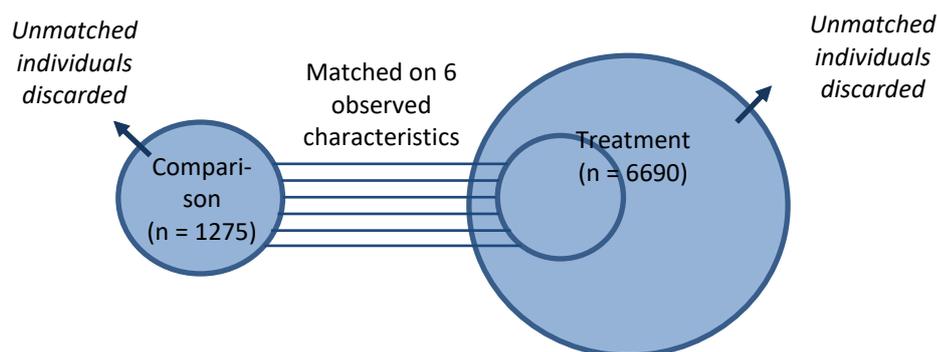
Matching students exactly on the six criteria listed in Table 5.8 generated 817 pairs of students, one participant of outreach with a pair from the comparison group with exactly the same characteristics. This leaves us with a total sample size of 1,634 on which to base the impact evaluation. I next describe this cohort and show that the population, although now far smaller, remains representative of the larger population of outreach participants profiled in Tables 5.1 to 5.5. Data for the treatment and comparison groups are provided separately to show that, following the matching process, characteristics appear at equal rates in both groups.

5.5.3 Describing the treatment and comparison populations

Table 5.9: Gender breakdown of treatment and comparison groups

Gender	Treatment Group	Comparison Group	HEAT Participants
Female	57%	57%	58%
Male	43%	43%	42%
Total	**100%**	**100%**	**100%**

Table 5.10: Ethnic breakdown of treatment and comparison groups

Ethnicity	Treatment Group	Comparison Group	HEAT Participants
White	79%	79%	79%
Asian / Asian British	11%	11%	10%
Black / African / Caribbean / Black British	6%	6%	6%
Mixed / Multiple ethnic groups	3%	3%	3%
Other ethnic group	1%	1%	1%
Total	**100%**	**100%**	**100%**

Table 5.11: Home region of treatment and comparison groups

Home Region	Treatment Group	Comparison Group	HEAT Participants
South East	56%	56%	57%
North East	9%	9%	9%
East of England	7%	7%	7%
Yorkshire and The Humber	7%	7%	7%
London	8%	8%	7%
North West	6%	6%	6%
West Midlands	1%	1%	1%
South West	6%	6%	6%
East Midlands	0%	0%	0%
Total	**100%**	**100%**	**100%**

Table 5.12: Prior attainment at Key Stage 2 of treatment and comparison groups

Gender	Treatment Group	Comparison Group	HEAT Participants
High (>Level 4)	0%	0%	0%
Medium (Level 4)	26%	26%	26%
Low (<Level 4)	74%	74%	74%
Total	**100%**	**100%**	**100%**

Table 5.13: IDACI quintile of treatment and comparison groups

IDACI Quintile	Treatment Group	Comparison Group	HEAT Participants
Quintile 1 (Most deprived)	34%	34%	41%
Quintile 2	59%	59%	48%
Quintile 3	5%	5%	7%
Quintile 4	1%	1%	3%
Quintile 5 (Least deprived)	0%	0%	1%
Unclassified	0%	0%	1%
Total	**100%**	**100%**	**100%**

I also show the number of outreach activities in which students from the treatment and comparison groups have participated. The profile reflects the way the number of activities was used to assign students to one group or the other.

Table 5.14: Number of outreach activities in which each group has participated

Number of outreach activities	Treatment Group	Comparison Group
1	0%	100%
2	0%	0%
3	23%	0%
4	27%	0%
5	8%	0%
6	13%	0%
7+	30%	0%
Total	**100%**	**100%**

5.6 Examining impact: comparing the Key Stage 4 outcomes of the treatment population with those of the comparison group

This section draws on the educational attainment data for the population of outreach participants to examine their performance at Key Stage 4. The following two metrics will be used to examine Key Stage 4 performance, comparing results for the treatment group with those of the comparison group.

1. Achievement of five GCSEs at A*-C including English and Maths

2. The average capped point score of the 'best eight' GCSEs

Performance Metric 1: Achievement of five GCSEs at A*-C including English and Maths

Achievement of five GCSEs at A*-C including English and Maths has been one of the DfE's headline performance indicators at Key Stage 4. In 2015 schools needed to score at least 40%, in combination with other measures, to meet the 'floor standard' and avoid intervention from the government (DfE, 2016c). The importance of reaching this benchmark in determining students' post-16 progression options and subsequent entry to HE, was discussed in depth in the literature review (Crawford, 2014).

Table 5.15 presents the proportion of students from the treatment and comparison groups who achieved five GCSEs at A*-C including English and Maths with the final row showing the percentage point difference. A larger proportion of students in the treatment group achieved this standard of attainment (54.0%), when compared with students in the comparison group (38.6%), giving a +15.4 percentage point difference.

Table 5.16 provides the same data broken down by the prior attainment of students at Key Stage 2. As students from treatment and comparison groups were matched on their prior attainment this variable will not have skewed the results, however, it is important to note that outcomes for students with both medium and low prior attainment are better in the treatment group than the comparison group. However, differentials in performance remain large between medium and low prior attainment groups, suggesting attainment at Key Stage 2 plays a greater role in determining success at Key Stage 4 than participation in outreach.

Table 5.15: Proportion of treatment and comparison groups who achieved five GCSEs at A*-C including English and Maths

Group	Achieved 5 GCSEs at A*-C including Eng. & Maths
Treatment	54.0%
Comparison	38.6%
Difference	*+15.4%*

Table 16: Proportion of treatment and comparison groups who achieved five GCSEs at A*-C including English and Maths by prior attainment at Key Stage 2

Group	Prior attainment at Key Stage 2	Achieved 5 GCSEs at A*-C including Eng. & Maths
Treatment	Medium	64.0%
	Low	19.9%
Comparison	Medium	47.2%
	Low	9.1%
Difference	*Medium*	*+16.8%*
	Low	*+10.8%*

Performance Metric 2: The average capped point score of the 'best eight' GCSEs

The DfE assign all GCSE grades an associated point score, for example A*=58, A=52, B=46, C=40 and so on (DfE, 2015b). A student's total point score is a simple sum of their individual subject grade scores. To account for students taking additional subjects, scores are restricted to include only eight GCSEs, selecting those with the highest grades. Unlike the previous metric, English and Maths are not required subjects, and will not count towards a student's score if they are not one of the best eight subjects. This capped score is available as a standard measure through the NPD and was used by the DfE in Key Stage 4 performance until 2016 when a new measure involving the weighting of particular subjects was introduced (DfE, 2017b). As my data predate these changes, I use the 'best eight' GCSE score.

Consistent with the results from the previous table, Table 5.17 shows that the average capped scores of students in the treatment group were higher than for students in the comparison group, with an average difference of +16.5 points. As each grade is equal to six points, this means that students in the treatment group scored, on average, two grades higher across their best eight GCSEs when compared with students in the comparison group. However, there is extensive deviation from the mean, with a standard deviation score approximately equivalent to 25 GCSE grades. What these data show that the previous metric does not, is the wide variation in attainment within both the treatment and comparison groups. Some students did very well, whilst others performed poorly, also indicated by the minimum and maximum scores presented in Table 5.17. This remains true even after displaying data disaggregated by prior attainment at Key stage 2 (Table 5.18).

This confirms, as we know, there are many variables involved in students' performance at school and, even after controlling for the confounding factors known to influence Key Stage 4 attainment, there remains wide variation in results. This makes it very difficult to predict the effects of participation in

outreach on a young person's attainment at school, an idea returned to in the limitations section that follows this analysis. However, on average, it appears the treatment group has consistently performed better than the comparison group.

What is perhaps surprising to observe is that Key Stage 4 point scores are higher for students in the treatment group with low prior attainment (207.0) when compared with those with medium prior attainment (198.6) (shown in Table 5.18). An advocate for widening participation might be tempted to use this as evidence that participation in outreach can overcome early educational disadvantage for even the lowest achievers. However, this finding is not consistent with the data presented in the previous table, showing a lower proportion of students with low prior attainment achieving the benchmark of five GCSEs at A*-C including English and Maths when compared with students with medium attainment in both treatment and comparison groups.

One possible explanation for this inconsistent message may be differences between the metrics used, particularly the subject composition of each. The first metric requires students to achieve English and Maths, whereas the second does not. Thus with the second metric students can still achieve high average point scores without passing these two core subjects. Considering English and Maths GCSEs are a requirement for entry for many universities (Ratcliffe, 2014), I feel the first metric provides a more meaningful assessment of the attainment needed to progress to HE. However, point scores are useful to show the variation in achievement within the treatment group and remind us to be cautious when claiming the positive impact of outreach on attainment.

Table 5.17: The average capped point score of the 'best eight' GCSEs of the treatment and comparison groups

Group	Average Key Stage 4 point score (capped average across best 8 GCSEs)	Min Score	Max Score	Std. Dev.
Treatment	200.5	2	452.0	150.8
Comparison	184.0	0	464.0	144.7
Difference	*+16.5*	-	-	-

Table 5.18: The average capped point score of the 'best eight' GCSEs of the treatment and comparison groups by prior attainment at Key Stage 2

Group	Prior attainment at Key Stage 2	Average Key Stage 4 point score (capped average across best 8 GCSEs)	Std. Dev.
Treatment	Medium	198.6	153.7
	Low	207.0	140.3
Comparison	Medium	187.1	149.0
	Low	173.5	128.5
Difference	*Medium*	*11.5*	-
	Low	*23.5*	-

Next I make use of the additional tracking data collected by HEAT to examine the subsequent progression patterns of students from the treatment and comparison groups.

5.7 Subsequent progression patterns of students from the treatment and comparison groups

As HEAT collect data on later educational milestones, following Key Stage 4, it seems sensible to examine what happened to students in the treatment and comparison groups after taking their Key Stage 4 exams. The progression patterns for the two groups of students are considered separately for those who did and did not achieve their five GCSE at A*-C including English and Maths. Figure 5.1 shows the data for four subsequent educational milestones: first, the proportion of students from each group who went on to post-16 education; second, of those who were found in post-16 education (also known as Level 3) I examine the qualifications they chose to undertake; and third, I examine whether students were successful in achieving these qualifications. The fourth and final outcome examines the proportion of students within each Key Stage 4 achievement group who progressed to Higher Education. Students who achieved five A*-C grades at GCSE including English and Maths are shown in blue whereas those who did not achieve this Key Stage 4 level are shown in red. A dotted arrow at the top of Figure 5.1 represents the hypothesis posed, albeit tentatively, under this research question (RQ2): that the outreach experienced by students within the treatment group may have improved their attainment and thus moved some students from the low (red) to high (blue) attainment group at Key Stage 4. When comparing progression at each subsequent stage it is important to remember that groups are no longer matched on their participants and this direct control ended after Key Stage 4 (indicated with a dotted line on Figure 1).

Looking at the first of the subsequent progression outcomes, a larger proportion of students who achieved five A*-C grades at GCSE including English and Maths within the treatment group went on to post-16 education when compared with students with the same Key Stage 4 qualifications from the comparison group. Stronger outcomes continue for the treatment group, with a larger proportion achieving a qualification that is equivalent to one A-level pass and then progressing to university, than students with the same Key Stage 4 starting qualifications in the comparison group. A slightly larger proportion of students also chose to take A-levels over a more vocational type of qualification, although BTECs, which were included in the latter category, are increasingly recognised by universities as sufficient entry qualifications.

In light of these trends, the outreach experiences of the treatment group may be put forward as one possible explanation for the more favourable outcomes observed. It is beyond the scope of this chapter to investigate further whether this is the case and here I simply present the data. However, any speculation should be tempered with the knowledge that, for many students, their experience of outreach ended at least three years before their entry to university. Only 20% of students in the treatment group received further outreach after the age of 16.

What does emerge from Figure 5.1 is the comparatively poor outcomes for students who did not achieve five A*-C grades at GCSE including English and Maths, from both the treatment and comparison groups. These students were less likely to progress to post-16 education and, of those who did progress, far more were likely to choose vocational qualifications and fewer were likely to achieve a qualification that is equivalent to three A-levels. Unsurprisingly this has led to lower progression rates to university. This echoes national findings and highlights the importance of Key Stage 4 exams in setting the trajectory of students towards, or away from, HE (Crawford, 2014).

The findings from this analysis present a positive picture in terms of the possible impact of outreach on Key Stage 4 attainment, with improved outcomes for both of the markers of success at Key Stage 4 examined. Data for subsequent milestones suggest that students from the treatment group were then more likely to progress to post-16 education and on, into HE, than the comparison group. Next these findings are discussed critically, including what I might reasonably conclude from this analysis.

Figure 5.1: Progression patterns of the treatment and comparison group populations, broken down by Key Stage 4 achievement

■ Key Stage 4 achievement group: *Achieved* 5 A*-C including English and Maths

■ Key Stage 4 achievement group: *Did not* achieve 5 A*-C including English and Maths
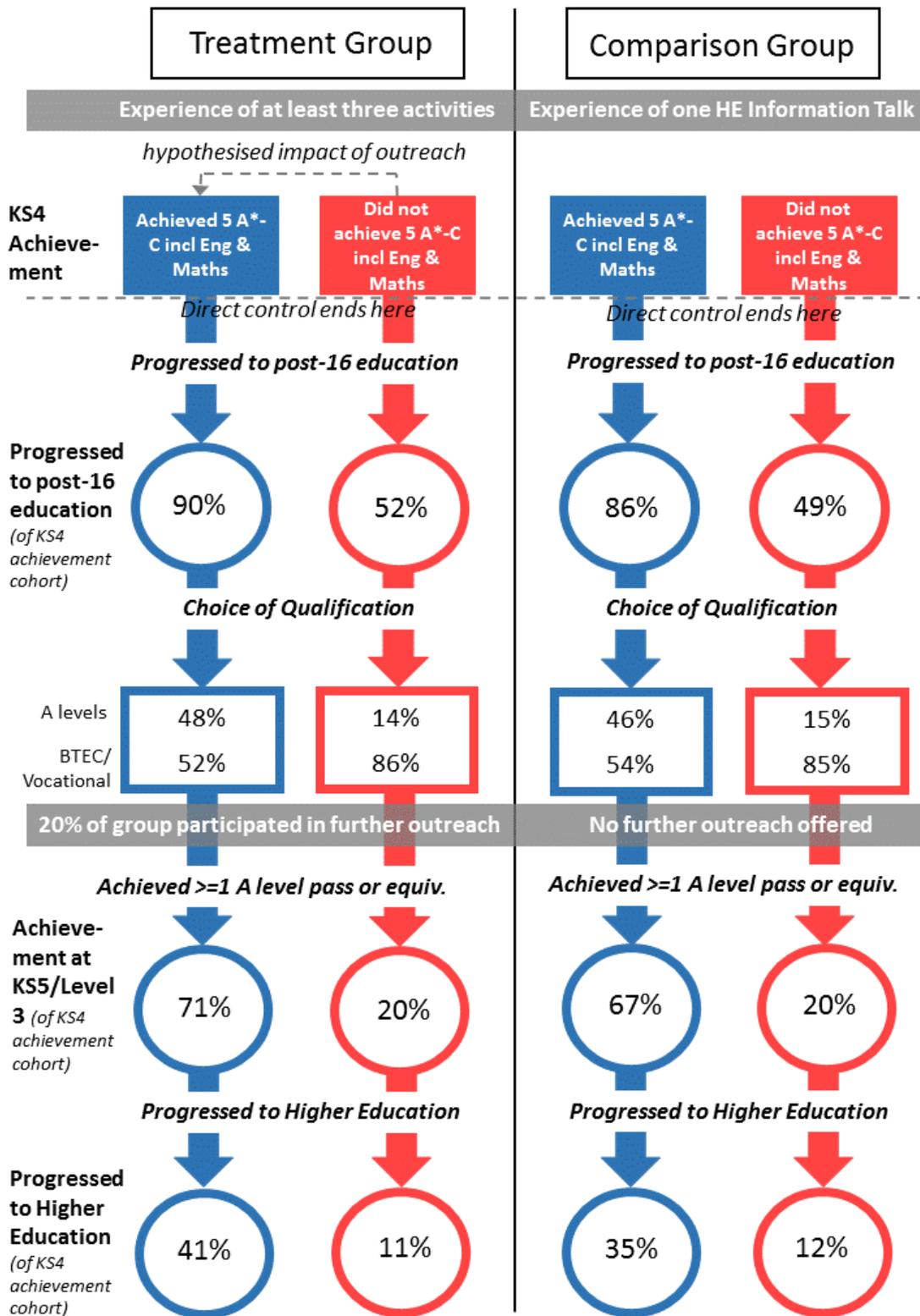
5.8 Challenges and limitations of using HEAT data to evaluate outreach

The challenges and limitations of working with large scale tracking data (known here as HEAT data) to evaluate the impact of outreach can be divided into two categories: issues with selecting a suitable comparator group and wider issues with using large scale tracking data to show the impact of outreach. These challenges are discussed next.

Issues with selecting a suitable comparator or control group

I have already described the matching method followed in this analysis to construct an appropriate comparator group with which to compare the outcomes of the group of outreach participants. Indeed, considerable time was spent to ensure the most robust method within the constraints of the data; the sampling method was discussed at length as were the observed variables on which the matching was carried out. However, as discussed in Section 3.7.2 of the Methodology Chapter, it must be acknowledged that as the method of assigning individuals to the control and treatment groups was not random, there remain confounding factors that have not, and cannot, be controlled for. In the case of this study the unobserved characteristics most likely to be in operation within the dataset fall into the following categories: first, students' psychological characteristics influencing their motivation to engage in their education, second, the effect of the students' schools, such as individual relationships with teachers and additional attainment raising interventions available within the school and third, other contextual factors not included in my analysis such as disability and parents' engagement with their children's education. These factors have not been ignored in my analysis, but it is not possible to account for them entirely. Next I debate the implications of these two confounding variables and discuss the methods I have taken to lessen their influence on the final results.

First, the innate motivation of the student to engage in their education and the effect of this on their Key Stage 4 achievement. This confounding variable is problematic for my study because it could be argued that highly motivated students are more likely to appear in the treatment group than comparator group. This is due to the mechanics of recruitment processes for individual outreach activities. Again, there is likely to be a great deal of variation in the methods used to target and engage with students across the sector. Some universities require students to apply for their activities, for example the Sutton Trust who run Summer Schools on behalf of a number of high tariff universities take applications through their website (Sutton Trust, 2017). Although students must meet a number of proxies for disadvantage, this 'opt-in' approach is likely to yield a group of students who have higher levels of motivation than students with similar backgrounds who chose not to apply. It should be noted, however, that the Sutton Trust require all students who attend one of their Summer Schools

to have previously achieved at least five A or A* grades at GCSE, and so these students would have been removed from the population on which this analysis is conducted for not being recipients of genuine outreach as part of RQ1. Nevertheless, the opt-in approach may have been adopted by other universities within the dataset whose students have been included in this population and I have no indication in my data as to which activities required an opt-in selection process.

Similarly, where teachers select students for participation, these individuals will govern who takes part and this may not be in line with the categories of students for whom outreach is intended. In these cases, teachers' informed assessments of 'potential' will guide access to outreach. Thus the inclusion of students in outreach is not a random process, but teachers may choose those who they feel already have the attitude and ability to succeed in education. This 'teacher-expectation phenomenon' leads to a form of self-fulfilling prophecy (Rubie-Davies, 2006).

What I am therefore concerned about is whether the distribution of these students is likely to differ across the treatment and comparator groups. I do have to question why students in the comparator group have not participated in more activities than a single HE Information Talk. Was this because there were no more opportunities of outreach available to them? Or did they choose to decline further opportunities to participate due to their lower levels of motivation? If students with higher levels of motivation are over represented within the treatment group, it could be argued that I will over-estimate the effect of outreach on improved academic attainment at Key Stage 4.

Although I am not able to control for motivation directly, I did ensure that all students on whom I based my impact analysis met certain proxies for disadvantage that have been shown to correlate with poor academic performance. The proxies selected incorporate elements of low economic, social and cultural capital within the field of education that were identified in the literature review as key determinants of educational success (Bourdieu, 1986) and the future one can envisage for oneself (Stevenson and Clegg, 2011). In addition I was careful to match students based on their prior attainment at Key Stage 2. Several studies referred to in the Literature Review have reported strong relationships between attainment at school and aspirations for the future, likely to be closely related with feelings of motivation (Chowdry *et al.*, 2011; Croll, 2008; Khattab, 2015; Baker *et al.*, 2014). Furthermore, Cummings *et al.* (2012) argue that there is no evidence that high motivation alone will lead to improved academic performance, and St Clair *et al.* (2013) show that the aspirations of students aged 13 to 15 are universally high regardless of socio-economic background. If aspirations amongst this age group are constant, this places a question mark over the extent to which this variable really will skew my results, and thus perhaps it is not so damaging to this analysis that I have no

measure of students' personal motivation in the data. In spite of this it should be noted that when these results were shown to outreach managers interviewed as part of RQ3b, they were not convinced that the difference observed in attainment could be attributed entirely to students' participation in outreach. The majority felt that the targeting practices discussed above would have led to students with higher levels of motivation falling within the treatment group rather than the comparator group.

The second confounding variable refers to the effects of the school on the outcome variable of achievement at Key Stage 4. As attainment at Key Stage 4 is also the key goal of schools and teachers, it could be argued that any improvement observed is actually the result of effective teaching that students received in their schools, rather than participating in outreach. This is highly likely considering students spend substantially more time in school with their teachers than they do participating in a university run outreach activity. In some cases strong and sustained partnerships between universities and schools may have led to a culture of high standards of achievement within the school. Although this should certainly be deemed a successful outcome, it is another example showing how difficult it is to disentangle the direct impact of outreach activities from wider changes within school.

This issue was considered when I devised a suitable comparator group, and one of the matching criteria required students to be matched with students from schools with similar Key Stage 4 performance. Deciles were used rather than quintiles for a finer level of detail. I was also careful to match students in the same year group and used school performance data for that specific year to account for fluctuations over time. In spite of these efforts, it remains that students were matched with students from different, albeit similar, schools and so there is likely to be variation in what was available to individual students from their school. For example, there are a large number of schemes available for secondary schools to draw on to help the literacy levels of their disadvantaged students (Gorard *et al.,* 2017) and I have no additional data to tell us the likely up-take of these schemes by the schools participants within the data attended. I also have to ask why the group of students in the comparator group were only offered a single HE Information Talk. Was this because their school was resistant to university interventions? And thus would these schools also be resistant to all other types of attainment raising schemes?

The extent to which the unobserved variables discussed above will have influenced the final results is uncertain and effort has been taken to lessen any possible effects. Nevertheless, it must be acknowledged that as students were not randomly assigned to treatment and comparator groups, I cannot say with certainty that levels of innate motivation and wider school influences will be distributed equally across the two groups I have compared.

Wider issues with using large scale tracking data to show 'what works' in outreach

The final challenge relates to the ability of, and potential for, large scale tracking data such as that collected by HEAT to add valuable insight into 'what works' in widening participation outreach. The analysis presented in this chapter concluded that there was a positive relationship between participation in outreach and performance at Key Stage 4, albeit with the caveat of the limitations described above. Although this finding is certainly a positive one for practitioners and universities wishing to make a case for continuing the outreach work they are already doing, the findings do not help us understand *how* university-led outreach might have raised attainment in schools, and I am certainly no closer to explaining exactly what we should continue doing in the future to raise attainment further.

I have touched on the different types of activities under which universities record their outreach events (Summer Schools, Subject Tasters, HE Information Talks etc.) (Appendix 2.1). These, alongside other variables collected on outreach activities, such as the number of contact hours students receive, the number of meetings with ambassadors or academic staff and the location of activities all provide variables that are ripe for interrogation in pursuit of an answer to 'what works'. Indeed, these are all metrics the HEAT database has attempted to collect over time. Harrison and Waller (2017a) discuss the desire of practitioners to uncover the 'right' portfolio of activities which, it can be shown unequivocally by data, 'work'. For example, if I could only show the number of hours of outreach students need in order to encourage them to go to university, or know whether a Summer School is a more effective type of activity than a subject taster I could base future outreach on this hard evidence of 'what works'.

However, in the multifaceted field of education, I have to question whether this is achievable. Harrison and Waller (2017a) make a compelling case that the complexity of the social field of education may render it unsuitable for experimental or quasi-experimental research designs and the inherently unpredictable lives of young people may make it impossible to predict the effects of outreach. They warn against taking a reductionist approach whereby a complex phenomenon is reduced to simple fundamental constituents and argue that the transformative effects of outreach on students are unlikely to be linear. They suggest practitioners develop a clear theory of change model, setting out the theoretical mechanisms through which any transformation might be expected to work. I would certainly agree with this and believe the lines of interrogation suggested in the paragraph above encourage an unrealistically simplified approach, often atomising a complex whole. The HEAT activity data variables are further vulnerable to the variation in the way the data are collected, as discussed

earlier. I should also add that I have no way of assessing the quality of the outreach activity that was delivered, including the competence and charisma of the university member of staff or ambassador delivering the intervention and their ability to inspire young people. Individual personalities are likely to play a key role in determining whether each outreach activity is more or less effective (Doyle and Griffin, 2012).

However, I would argue that HEAT data are able to show *overall* correlations of outreach with attainment at a high level. Furthermore, OFFA's recent Standards of Evidence report places quasi-experimental designs, such as the one used in this analysis of HEAT data, as one of the strongest evaluation methods (OFFA, 2017a). This has since been superseded by more recent guidance published after this thesis was submitted (OfS,2019) which asks evaluators to look at quality as well as method and what is appropriate in the context of the activity being evaluated.

In light of this new guidance, and my own experiences of the HEAT tracking data, I advise that analysis based on HEAT data (or any tracking data) follows a methodology that addresses the limits and possibilities of the data. Harrison and Waller (2017a) argue that tracking data are limited in their ability to evaluate the impact of outreach as they are particularly prone to issues of deadweight and leakage (through inappropriate targeting) with no suitable comparator groups. To this I would add the many inconsistencies in the nature of outreach activities and the differing characteristics of those presenting to students. I have attempted, where possible, to find solutions to these issues in this analysis, first through extensive filtering out of outreach participants whose prior attainment suggests were already destined for HE (following RQ1) and second through careful matching of students from the treatment and comparator groups. I started with a population of 223,725 and the final population on which I based this impact analysis was 1,810, less than 1% of the original population. The large sample sizes within HEAT have allowed this, but it will be far more difficult for individual universities to achieve such a rigorous design with their portion of the data alone.

Thus although there are data quality concerns inherent in compiling a national dataset, the very large sample sizes allow me to refine the cohort before carrying out my analysis. HEAT data therefore add value to the debate on evidencing the impact of outreach by showing statistical trends and quantitative analyses of examples of outreach that do seem to have improved outcomes for participants, in this case the outcome of Key Stage 4 attainment. However, in keeping with mixed methods research designs these findings should be complemented with qualitative case studies of student participants. These qualitative data may help to provide a broader understanding of the

underlying causal mechanisms through which disadvantaged students benefit from their experiences of outreach.

Chapter 6: Research Question 3a Analysis

Research Question 3a: Which types of outreach activities are universities delivering to raise attainment in schools and how are they meant to work? Analysis of HEIs' 2018/19 Access Agreements.

6.1 Introduction

In this chapter I seek to answer Research Question (RQ) 3a, and investigate how universities are responding to the new requirement to raise attainment by gaining a better understanding of the specific kinds of outreach Higher Education Institutions (HEIs) are delivering to raise attainment in schools, as a precursor to widening access to higher education. To do this I turn to a new data source: HEI's 2018/19 Access Agreements submitted to OFFA in 2017. I move away from the HEAT data as it is not possible to know from HEAT which, if any, of the activities included in my previous analyses might have been designed with the intention of raising participants' attainment. Rather RQ1 and RQ2 included *all* types of outreach activities recorded by subscribing HEIs, activities that are likely to have had a range of aims. Studying HEIs' Access Agreements should yield more meaningful information about the ways in which HEIs expect their activities to raise students' attainment. According to Harrison and Waller (2017a), an initial clear understanding of the underlying mechanisms through which activities are expected to work is an essential step towards the larger goal of identifying 'what works'. It is my intention that this investigation will help provide this understanding for attainment-raising activities. First, a brief explanation of Access Agreements and their relevance to my investigation.

Access Agreements (hereafter AA) are publically available documents that HEIs submit annually to the HE access regulator to explain their institution's widening participation activities and priorities. At time of writing the regulatory body was the Office for Fair Access (OFFA), now succeeded by the Office for Students (OfS). According to the section of OFFA's website dedicated to introducing AA (OFFA, 2018c):

"Access agreements set out how a higher education provider will sustain or improve access, student success and progression among people from under-represented and disadvantaged groups. They must be approved by the Director of Fair Access as a condition of charging higher tuition fees."

The following analysis focuses on the sections within the 2018/19 AA, published in 2017, where HEIs discuss the measures they are taking to improve access. Although some universities have been submitting their AA annually since 2006/07, the iterations relating to the academic year 2018/19 are

the first in which universities have been asked to set out the measures they are taking to raise attainment in schools. Indeed, the first strategic priority outlined by OFFA in their guidance states:

"We want you to review and develop your access agreement so that it sets out clearly what you are doing and/or plan to do, to:

- increase your work to raise attainment in schools and colleges for those from disadvantaged and under-represented groups, including through outreach and/or strategic relationships"

OFFA (2017b)

Thus the 2018/19 AA should contain the information on the approaches universities are taking to raise attainment in schools that is pertinent to my third RQ. AA are therefore a hugely valuable source of information for my investigation, as every HEI in England has set out, in writing, the activities they are delivering to raise attainment in schools, and these documents are now available to us through OFFA's website.

In spite of their apparent value, there is relatively little commentary on AA in academic literature. What does exist tends to focus on the different discourses institutions use to show their commitment to widening participation within a competitive market system, rather than address the specific nature of activities being delivered. McCaig (2006) and McCaig and Adnett (2009) conducted content analyses of 20 HEIs' AA to show how pre-1992 and post-1992 universities deliver different forms of outreach activity. Drawing on information provided in 2006/07 AA, and then later in 2008/09 AA, the authors found that pre-1992 HEIs tended to focus on the fair access version of widening participation, working with 'bright' students in order to recruit them later to their own institutions without lowering high entry standards. Post-1992 institutions on the other hand were more likely to emphasise their welcoming ethos, taking students from diverse backgrounds (McCaig and Adnett, 2009). However, over time all institutions have been forced to align their approaches to the wider pressure to be financially viable, these having increased under processes of marketization. McCaig (2015) found that by 2012/13 many post-1992 institutions had shifted their widening participation discourses away from inclusivity, towards narratives that emphasised their strong reputation in graduate employability outcomes. Analysing eight AA, Bowl and Hughes (2016) similarly found that universities' commitment to widening participation is heavily influenced by their position in the market. They found that many post-1992 universities were unlikely to market themselves as being widening participation institutions due to the perceived association with a lower position in university league tables. OFFA themselves did publish annual monitoring outcomes from AA, the most recent being for 2015/16 AA (OFFA,

2017b), but these provide only a high level commentary on performance against outcome targets and therefore do not go into detail on specific approaches to outreach.

In their recent topic briefing, *Raising attainment in schools and colleges to widen participation*, OFFA (2018b) did use information from 2018/19 AA to collate a list of seven examples of outreach activities that universities are currently delivering to raise attainment in schools. These are: 1) summer schools, 2) mentoring/tutoring, 3) supplementary schools, 4) academic enrichment programmes, 5) access to university facilities, 6) collaborative partnerships 7) involvement of parents/carers. However, the regulator did not suggest that this list captured all activity being delivered by HEIs, and neither did they provide any further explanation on these activities, or detail as to how or why the activities would raise attainment. The terms used within this list, particularly 'summer schools', give little indication of the processes through which the attainment of students may be raised by participating in these activities. Thus it is felt that a deeper exploration of AA is necessary in order to fully understand the approaches to attainment-raising currently being employed by universities.

Next I discuss my analysis of AA, presenting my findings. I also provide a thorough discussion on the limitations involved in using AA to collate data on the approaches HEIs are taking to raising attainment.

6.2 Analysis

AA were coded following techniques outlined in Chapter 3 to create a typology of common activities that HEIs are delivering to raise attainment in schools. Care was taken to include only those activities HEIs described as part of their work to raise attainment in schools. For example, most HEIs described activities such as trips to campus or information and guidance (IAG) talks about HE in their AA, but only some HEIs suggested that the aim, or partial aim, of these activities was to raise attainment in schools.

Next I present the results from my analysis of AA. This is split into two sections, first I review the typology of common attainment-raising activities that emerged from AA, and try to understand the processes through which each type of activity intends to raise attainment. Second, I examine the proportion of HEIs delivering each of these types of activity.

6.2.1 Developing a typology of attainment-raising activities

Eleven distinct 'Types' of outreach activity emerged from my analysis of AA, all with the overarching aim of raising attainment in schools. These have been arranged into four 'Levels' and are set out in

Figure 6.1 along with examples of activities included in each type. The Levels are lettered rather than numbered to avoid implying there is a hierarchy to their order. Generally, each Level in the typology includes a group of activities with different learning aims or outcomes. Each type of activity within the respective Levels is distinct in its style of delivery, and it is this that makes it sufficiently different from the next type. The labels used to describe each type draw on the common language used by HEIs when describing the activities they were conducting to raise attainment, for example, many HEIs talked about delivering taster sessions or mentoring activities. This did present a number of methodological problems, not least because terms were often used without clear definition.

The lack of clarity provided in AA often posed further challenges when constructing this typology, as many HEIs gave little in the way of detail about the content and/or aims and outcomes of each of their activities. This made it difficult to say with confidence whether activities classified within the same type were directly comparable. When examined critically it appears AA do not tell us as much as it seemed they might and I will give full consideration to these limitations throughout this chapter. In spite of these issues the typology is still of use in describing the broad types of activity that are being delivered and this is discussed below.

Figure 6.1: Typology of common activities delivered by English HEIs that are designed to raise attainment in schools

Source: Constructed from 2018/19 AA. Informed by Hayton and Bengry-Howell (2016)
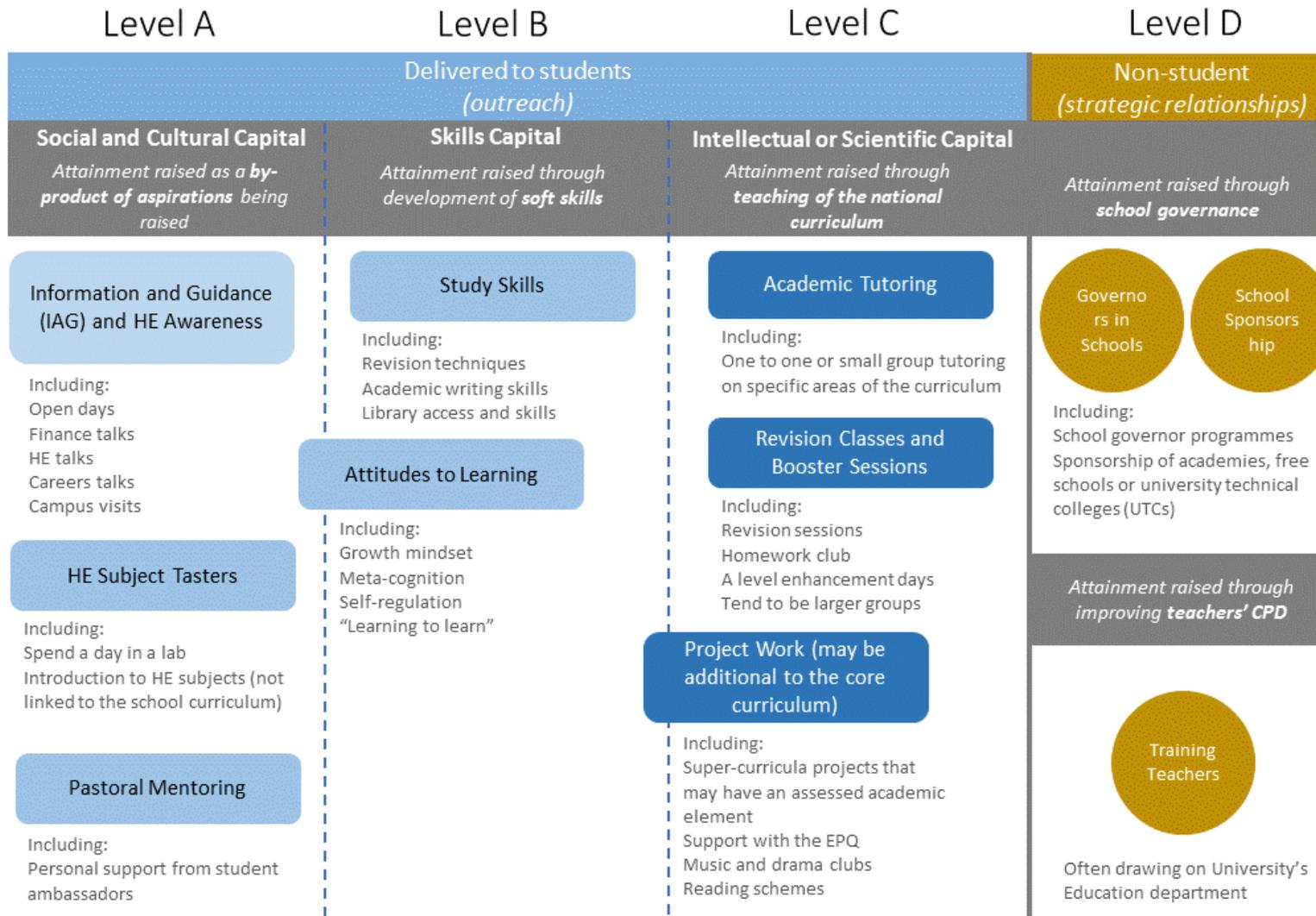
Activities in the typology have been divided into those that involve direct contact with students (Levels A to C shaded in blue), and those that do not (Level D shaded in yellow). These two categories broadly relate to the two categories provided in OFFA's statement quoted on page 2 of this chapter: "outreach and/or strategic relationships" (OFFA, 2017b). OFFA provide further guidance on their website in which they set out that 'outreach' includes working directly with students, whereas 'strategic relationships' include examples such as sponsorship of schools, school governance and influencing schools' curriculum design (OFFA, 2018d). As the research question posed in this chapter focuses on the approaches HEIs are taking through *outreach* to raise attainment in schools, I will spend most time discussing Levels A to C. However, I will not neglect Level D as these activities make up an important strand in HEIs' approaches to raising attainment in schools. Furthermore, the categories are not always distinct and strategic relationships may overlap with outreach; it was clear from some AA statements that certain intensive outreach activities were only offered in university sponsored schools.

Focusing on outreach activities, these are arranged into three broad categories based on the learning outcome of the activity, or the process through which it is intended the attainment of participants will be raised. These are as follows:

- Level A: Activities where attainment is raised as a by-product of aspirations being raised
- Level B: Activities where attainment is raised by helping students develop the soft skills needed for effective learning
- Level C: Activities where attainment is raised by teaching of the national curriculum

Returning to the theoretical work of Bourdieu (1986), the three Levels identified above can be said to help build different types of Bourdieu's capitals for those who participate. Aligning outreach activities in my typology with the types of capital they are meant to develop has been heavily informed by the work of Hayton and Bengry-Howell (2016) who provide a sophisticated theoretical rationale for a series of university-led outreach activities as part of their framework approach to assessing the impact of outreach.

Level A in the typology presented in Figure 6.1, includes activities that are broadly 'aspiration' raising or awareness raising in nature. Although the term 'aspiration' may be widely criticised, not least for its ambiguity and deficit associations (Gewirtz, 2001; Read *et al.*, 2003; Burke, 2012; Marshall and Case, 2010; Gamarnikov and Green, 1999; Leathwood and Hayton, 2002), it is frequently used by HEIs in their AA and so has been used here. These activities aim to develop students' knowledge of HE, including how to navigate the entry process; students' awareness of subjects taught in HE and their

confidence that they will succeed when in HE. Drawing on examples provided by Hayton and Bengry-Howell (2016) these activities aim to build Bourdieu's social and cultural capital within the field of education in participating students. This is based on research showing that students from lower socio-economic groups are less likely to be part of social networks that provide easy access to knowledge about entrance to HE. Indeed a number of studies have found that students with no family history of HE are less likely to progress to university than those whose forebears have been to university (Sullivan *et al.*, 2014; Davies *et al.*, 2014; Gayle *et al.*, 2002; Anders, 2012; Anders and Mickelwright, 2015). Providing further rationale for these types of intervention is research that argues that disadvantaged students are less likely to hold the correct 'habitus' for the field of education, this being cultural norms and subconscious beliefs which, according to Bourdieu, can equip students with a self-confidence enabling easy navigation of the education system (Bourdieu, 1986; Gaddis, 2013; Davies *et al.*, 2014; Whitty *et al.,* 2015). Activities aimed at enhancing students' social and cultural capital in the field of education therefore provide information and guidance on HE and also attempt to demystify university for those students whose background means they are likely to be less familiar with this social field. In their framework Hayton and Bengry-Howell (2016) separate social and cultural activities, but in my typology this level of detail was not possible owing to limited descriptions provided by HEIs in their AA.

Level B relates to the development of the soft skills necessary to succeed in education, with the term 'soft skills' widely referenced by HEIs in their AA. Although not one of Bourdieu's terms, Hayton and Bengry-Howell (2016) refer to 'skills capital' as a way of describing skills ranging from essay writing to independent research, which are essential for successful learning. Activities designed to increase students' capacity for learning through developing their study skills, without actually increasing knowledge in particular subjects, emerged strongly within AA in relation to HEI's work to raise attainment in schools. The teaching of subject knowledge has been classified under Level C, activities which, according to Bourdieu, aim to develop 'intellectual capital' or 'scientific capital' (Bourdieu, 1988). Intellectual and scientific capital both refer to scholarly achievement and therefore within this context may be thought of as activities designed to raise participants' subject knowledge relevant to the national curriculum.

It appears that Levels A to C in the typology presented in Figure 6.1 are progressive in terms of their scope to raise attainment in schools, with Level C having the most relevance to the national curriculum, and the most similarity to the role of teachers in schools. Relevance to the national curriculum *is* important as OFFA are clear in their expectations that outreach should raise attainment as measured in exam results at Key Stages 2 to 5 (OFFA, 2018b) and this has since been reiterated by

the OfS (OfS, 2018b). However, I am by no means suggesting that the activities listed under Level A do not have relevance in an attainment-raising context, although I found justifications for this often lacking in AA.

Linking activities within my typology to their theoretical underpinning, although useful in explaining aims, can only be theoretical and may not translate into practice. Hayton and Bengry-Howell (2016) argue that in practice, outreach activities have rarely been designed with theoretically informed aims in mind, and much of what has been delivered in the past does not lend itself to this type of assessment. Furthermore, the descriptions presented in AA often provide insufficient information on activity content to say with confidence what the learning aim actually is. Aside from the fact that Bourdieu's terms are rarely used in AA, it was often difficult to make even an educated guess as to which type of capital the activity was intended to develop. Thus placing activities into these Levels was not straightforward, largely due to limited information provided on the activities in AA, and as will be noted, two activity types straddle two of the Levels (Figure 6.1).

Next I look at some examples of activities included in each Level of the typology and provide a rationale for how they have been located within it.

Level A: IAG and HE Awareness; HE Subject Tasters and Pastoral Mentoring

The broadly aspirational activities listed under Level A are likely to be familiar to most practitioners working in widening participation. They include activities that are already well established within the sector: HE information and guidance (IAG) and awareness activities, subject tasters and pastoral mentoring. All three of these activities appear in a toolkit for practitioners, developed in partnership with HEFCE in 2012, providing an overview of outreach programmes (HEFCE, 2012). These activity types also appear in HEAT's activity typology referred to in Chapter 5, albeit with slightly different labels. It thus appears that outreach activities delivered since AimHigher are now being re-framed in AA to fit the new objective of raising attainment. As the relationship between aspirations and attainment is still not fully understood, whether this is borne out in practice is unknown (Cummings *et al.*, 2012; Gorard *et al.*, 2012). However, it should also be noted that these are not new activities, but rather a reinvention of what is already being delivered. For example, the first type of activity listed in Level A, where students are provided IAG through talks about HE, has been a major component of delivery to widen access to HE since AimHigher was established in 2004 (Whitty *et al.*, 2015). My analysis of HEAT data in the previous chapter saw that 30% of the cohort on which I based my analysis (who received activities between 2007 and 2015) had participated in an 'HE talk' (HEAT's label for this

type of IAG activity). The following extract from one AA provides an example of how traditional aspiration raising outreach activities are being re-framed as important in raising students' attainment.

"In previous Access Agreements, the University has not focused specifically on supporting attainment in schools as supporting schools in raising aspirations has been a key priority. Although this activity may not have directly affected attainment, it can improve motivation and awareness and therefore impact on attainment."

Similarly, HE Subject Tasters, which should give the student a preview of how a subject is taught in university, were part of the programme of activities developed under AimHigher (HEFCE, 2012). HEAT data used in the previous chapter saw 32% of students having participated in a 'Subject Taster'. Being subject based, these activities may appear to have more relevance to raising attainment than the more generic IAG activities and Hayton and Bengry-Howell (2016) describe these activities as incorporating 'active learning elements' (p48). However, Subject Tasters tend not to link to the school curriculum and so do not include content that mirrors what the participants are currently learning in school. Rather, these activities are designed to "raise aspirations for specific subjects and courses" and "raise awareness of the nature of study at degree level" (HEFCE, 2012, p11). In spite of being mentioned frequently by HEIs in their AA in relation to raising attainment in schools, there is little detail about why or how these activities are designed to raise attainment. The term 'Taster' suffers from a lack of definition and it is likely that one HEI's interpretation of these activities may differ from another. The following passage from an AA hints that Subject Tasters may encourage students to engage at a greater depth with a particular subject, which would then lead to higher attainment, however, there is no indication of the underlying theories of change that are expected to lead to raised attainment for those who participate.

"Students attend a subject-specific programme of academic taster sessions…which seeks to both raise attainment and encourage the students to explore subjects beyond their current syllabus."

The third type of activity listed under Level A, Pastoral Mentoring, posed similar problems when defining its objective in relation to raising attainment. According to HEFCE's (2012) toolkit for practitioners, Mentoring seeks to capitalise on the use of students already in HE, known as student ambassadors, to act as "role models for improving aspirations", providing encouragement and "support with goal mapping" (p11). Support, therefore, appears to be pastoral in nature, with no expectation that student mentors will be providing *academic* mentoring. For example, there is no mention of helping with particular parts of the national curriculum with which the mentee might be struggling. Although Mentoring is an established form of outreach, whether it should appear in the

typology as a type of attainment-raising activity in its own right was difficult to say from the information presented in AA. There was often little information provided by HEIs about what actually occurred during the mentoring sessions in order to raise attainment, making it difficult to judge whether the activity would have been better included under one of the other types of activity. The following example is one of the more clear descriptions of Mentoring.

"We will continue to operate an online mentoring scheme, available for all applicants but particularly targeted at those which the evidence suggests are most vulnerable, typically due to family background. Applicants are matched with a 1st or 2nd year student mentor, studying on their preferred course wherever possible. Mentors support mentees in exploring their course choice and responding to queries about university."

One could argue that this activity would be better placed within the IAG activity type, as the aim of the activity appears to be limited to mentors imparting information about HE and providing guidance in course choice. However, the majority of statements were not so clear in terms of the type of support mentees were expected to deliver and so it was impossible to place them into one of the other types of activity. Given the frequency with which the term 'mentoring' was used in AA in relation to raising attainment in schools, along with the little information provided to describe what was happening, it was felt that Mentoring should be given its own place in the typology. The following statement provides a good example of how little depth of information was often provided on mentoring.

"Mentoring and e-mentoring – [HEI name removed] tutors and mentors working in target schools and colleges on academic and aspiration support via the long established student tutoring and mentoring schemes at [HEI name removed]."

In my typology I have specified that all mentoring is pastoral in nature. This was done so as not to conflate Mentoring with Academic Tutoring, which appears separately in Level C as an activity where students receive teaching or tuition on the national curriculum. A further reason for keeping Mentoring and Academic Tutoring separate was that there was rarely enough information provided to say with absolute confidence whether the mentoring activity being described was pastoral or something more academically oriented. Indeed, the example given above does use the words 'academic' and 'tutoring' alongside 'aspiration support' to describe the mentoring taking place, but there is no information about subjects that would be taught or whether the academic tutoring would be relevant to the national curriculum and so it was felt that this particular activity could not be placed in Level C. In this way I was cautious with my judgements when placing activities into Types, and where

insufficient information was given to classify an activity as belonging to Level B or C, they tended to be 'down-graded' to Level A.

An element of mentoring that did appear to be common across many HEIs was the mentors themselves who tended to be undergraduate student ambassadors. This provides further reasoning for separating Mentoring from Academic Tutoring as one might question the ability of these young people to provide effective tutoring in the national curriculum and although some may be studying for a degree in education or teaching, the majority are unlikely to be doing so. This commonality gave us a degree of confidence that Mentoring activities were correctly listed under Level A, limited to raising attainment through providing broadly aspirational support. However, the background of the person delivering the activity was not used to determine its position in the typology, not least because this information was not always given in AA. Furthermore, as shown later, several activities which were placed into the Academic Tutoring type were in reality being delivered by undergraduate student ambassadors.

As already discussed, the labels used to describe the types of activities in the typology were driven by the common terms used by HEIs in their AA. However, these terms often suffered from a lack of definition, and this was particularly true for activities under Level A. Being so commonplace in outreach, terms like 'mentoring' and 'tasters' are now taken for granted. Yet it is likely that as HEIs develop their own programme of activities, what actually occurs as part of a Mentoring or Subject Taster activity in one HEI may be quite different from what another HEI is delivering under these same activity labels. Next I move on to Level B which includes two types of activity that are less prone to ambiguity.

Level B – Study Skills and Attitudes to Learning

Level B includes activities such as Study Skills which aim to raise attainment through the development of soft skills that are likely to be effective in learning. One could argue that these activities are more likely to improve the attainment of participants than the activities listed under Level A as they teach skills directly relevant to school based learning, rather than relying on the unsubstantiated link between aspirations and attainment.

Activities designed to help students improve their 'study skills' were mentioned by a number of HEIs as part of their approach to raising attainment in schools. Examples of these study skills include skills in critical thinking, independent reading, and writing a strong and convincing argument – although often HEIs provided no examples, simply describing the activity as assisting with 'study skills' with no

further explanation. Like those activities listed under Level A, the Study Skills activity type may not be completely new: study skills, including helping students with revision techniques, are listed in the practitioners' toolkit from 2012 referenced above (HEFCE, 2012) as examples of activities delivered as part of mentoring programmes. This component of mentoring may have been isolated and emphasised by HEIs in their AA as work they are doing to raise attainment in schools.

The second type of activity listed under Level B – Attitudes to Learning - is designed to help students develop soft skills related to improving their attitudes to learning, thus motivating them to achieve higher levels of attainment. These activities are led by psychological educational research and draw on concepts such as Growth Mindset (Dweck, 1999) and Meta-cognition and Self-regulation (Zimmerman, 1995). Research has shown that students tend to learn better if they are aware of strategies that will help them learn and are more knowledgeable about cognition in general (Dweck, 1999; Blackwell *et al.*, 2007; Bransford *et al*., 2000); these ideas have been developed into teaching interventions and already hold currency in schools in the US and UK. I have grouped all references made in AA to these types of psychology-based activities and called them 'Attitudes to Learning'. The type straddles Levels A and B as the aims sometimes fit loosely under raising aspirations or attitudes towards education and HE study, but the content is driven by pedagogy and intends to promote specific skills that research from the field of educational psychology has shown improves learning.

Interventions of this nature have been promoted by the Education Endowment Foundation (EEF), a charity established in 2011 with Government support, to help improve the educational attainment of low income pupils (EEF, 2018). The EEF were later designated by the Government as the 'What Works Centre for Education' and have provided funding for projects testing the effectiveness of a range of teaching interventions aimed at helping disadvantaged pupils. The EEF were signposted by OFFA in a recent briefing to HEIs on raising attainment (OFFA, 2018b) – although this was published after 2018/19 AA were submitted in July 2017. The types of activities grouped under Attitudes to Learning are recommended on the EEF's website as having high impact for low cost. In spite of the high profile of the EEF, only one HEI mentioned the charity's research in their AA, and as shown later, very few HEIs are delivering activities of this style. Although these ideas may not be particularly new, with Dweck's Growth Mindset theories first published in 1999, they do not appear to have featured in the early outreach work conducted under AimHigher.

Level C – Academic Tutoring, Revision Classes or Booster Sessions, and Project Work.

Finally, Level C includes a range of activities which suggest participants will receive teaching of the national curriculum. However, it should be noted that these vary in their intensity and subject focus,

and for some it is unclear exactly how rigorously the content is focused on the relevant Key Stage of the national curriculum. Activities within Level C have been separated into three types, all involving a taught element: Academic Tutoring, Revision Classes or Booster Sessions and Project Work. However, like many of the other types within the typology, these activities often suffered from vague descriptions making it very difficult to tell the exact nature of the teaching taking place. Grouping activities into one of these types was often a 'judgement call' based on very little information.

First, Academic Tutoring included activities that provided the clearest examples of events in which students were receiving extra tuition in particular areas of the national curriculum with which they required assistance. However, as with many of the activities already discussed, the Academic Tutoring activities described in AA were often ambiguous, with many terms implied rather than explicit. The inconsistency in the way these activities were described made it very difficult to decide on any particular criteria that should be required in order for an activity to be included in this type. For example, it makes sense that in order to target individual students' needs Academic Tutoring activities should be delivered one to one or in small groups. Although this often appeared to be the case, the size of the group of students receiving the tutoring was not always mentioned in AA descriptions and so some activities were coded to this type without meeting this condition. Next I will look at examples showing the range of activities that were placed in the Academic Tutoring type, the first providing one of the more detailed descriptions.

"In 2016/17 we created a post within the Student Recruitment Team designed to focus on working with pre-16 students. In partnership with the Team-Up organisation, we began an attainment raising project. Fifteen of our own students have been trained, and are delivering small group workshops and One-to-One sessions in English and Maths to school students in Years 7 to 9. These are mostly in [HEI region removed] with partnership schools, who have identified more than 30 learners with predicted progression grades of D/E for GCSE."

Other examples of Academic Tutoring given by HEIs in their AA were far vaguer in their description. The following statement, for example, refers to working with students to improve their English and mathematics attainment, and so implies some sort of 'academic tutoring', but these words are not actually used and there is no reference to the size of the groups they will be working with. This was, nonetheless, included in the Academic Tutoring type for its reference to specific subjects that are statutory components of the national curriculum.

"Programmes to support English and Maths attainment. We recognise the importance of students attaining a good level of English and Maths and we have developed some small scale projects to support learners in these areas."

However, mention of specific subjects important to the national curriculum was not actually a criterion for inclusion in this type, and other examples were included for their generic references to subject tutoring.

"In 2017, to support [HEI name access activity removed] student attainment, we are working with an online tutoring company to pilot 10 hours of one to one, online subject tutoring for 100 [HEI name access activity removed] students."

In spite of the limited information on which to base decisions when grouping activities into this type, what set Academic Tutoring activities apart from others in Level C was the implied targeting, often focusing on specific subjects important to the national curriculum or delivered one to one or in small group sessions. In contrast, activities included in the 'Revision Classes or Booster Sessions' type appeared to be taught to larger groups, often entire classes, and therefore were less likely to be focused on addressing the academic needs of particular students. For example, the following activity simply mentions 'revision classes', which for the purpose of the typology was enough to place it into this type.

*"Current activities with schools include; in school presentations and workshops; on campus subject taster days; **revision support classes** and team teaching with school staff."*

The Booster Session, part of this activity type, relates to activities where HEIs appeared to be teaching something in addition to what the school might offer. For example:

"The [HEI activity name removed] also provides a unique and dedicated space to focus attention on raising attainment through specific master-classes, revision sessions and practical science classes. Some classes are developed alongside teachers to cover elements of the national curriculum, particularly exposing pupils to practical experiments that may not be available in their schools."

Another example focuses on developing students' mathematics ability beyond what they have learnt in school.

"GCSE enrichment 200 students visit the school once each fortnight to engage in a programme of GCSE enrichment, through which participants are challenged to think more deeply about the mathematics they have learnt at school, and to develop a deeper and more connective understanding of the subject."

It is worth noting here that many of these 'Booster Session' activities were delivered by selective HEIs, designed to raise the attainment of students already achieving well and stretch them to achieve the highest grades required for entry to selective HEIs. One high tariff HEI referred to 'A-Level Enhancement Days' providing HE facilities or expertise to support schools in specific A-level subjects. Another example at GCSE level is provided below.

"[HEI activity name removed] is a three-day Easter course for students in Year 11 specifically designed to raise attainment. The course targets students who have been predicted and are on track for a grade 7 or above in the new mathematics GCSE, and intends to turn 7s into 8s and 8s into 9s."

This example also illustrates the overlap between this activity type and Academic Tutoring. With its reference to mathematics, this activity may have been considered Academic Tutoring were it not for the mention of the 'three-day' course, which suggests this is not a sustained tutoring programme. However, if this particular piece of information had not been included the activity may have been classified differently.

The third activity type, Project Work, includes activities that, like others in Level C provide subject specific academic support; although these appear to be less tied to the national curriculum, often focusing on projects that are supra-curricula. The variety of the content of these activities means the type straddles Level B and Level C, as it was often not clear whether activities were intending to develop the soft skills of Level B or teach the subject knowledge aligned to the national curriculum of Level C.

"Our year 12 summer schools offer students from a WP background with a range of in-depth academic experiences as students work with [HEI name removed] academics and PhD students on a first year degree level research project in a subject area of their choosing. Alongside lectures, seminars and group work, students take part in a skills workshops relevant to their academic discipline. This increases their confidence and builds key transferrable skills to help with their current studies at school and college and to prepare them for university style teaching and learning once they have progressed to higher education."

Other activities may have focused on specific subject areas, but it was not clear the extent to which these were related to the curriculum.

"IT Training activities which provide comprehensive support to Primary and Secondary schools in [HEI region removed], with 400 children a week being taught how to code through [HEI activity name removed] coding in schools programme."

Project Work activities were common amongst specialist HEIs who offered after school or weekend clubs in the Arts.

"We shall continue to provide a small subsidy to our Saturday Art School programme, which offers the opportunity for 9-18 year-olds to participate in a programme of creative activity throughout the autumn and spring terms. This subsidy permits the allocation of free or subsidised places to those from target groups (nominated by schools with low progression to higher education, and/or based within low participation neighbourhoods, low household incomes or young people in care). Approximately 20% of enrolments fall into this category, and there is some evidence of improved attainment at GCSE."

Other HEIs referred to supporting the Extended Project Qualification (EPQ) a self-directed project on a topic of the student's choosing which is equivalent to half an A-level (AQA, 2018). However, it was often unclear from many AA statements whether this support would be limited to helping develop the soft skills included in Level B, the example below describes support provided by library staff.

"EPQ support for teachers and students delivered by Education Officers in the University Library and using library research resources, this will be offered to up to 50 schools (involving over 1000 students) in 2018- 19."

It is clear that there was often overlap within activities categorised under Level C, and often there is much that I do not know about these activities that might have influenced where they are placed on the typology. A further complication arose where a number of HEIs referred to working with third-sector organisations such as IntoUniversity, Brightside and the Brilliant Club when raising attainment. These are charities or social enterprises that work in partnership with HEIs to deliver activities aimed at reducing educational inequalities. Their approaches vary and often HEIs provided even less detail in their AA about the activities conducted through these partnerships when compared with their 'home-grown' activities. The passage below appeared in the same format in four different HEIs' AA.

"The University co-sponsors two IntoUniversity centres in [HEI region removed]; each is a higher education presence in the local community working long-term with young people aged 7-18. These

programmes include after-school Academic Support, Mentoring, aspiration-raising FOCUS programmes including visits to the University, early intervention work at primary schools, tailored secondary school provision, family learning and employability and careers programmes."

Such partnerships appear to make up a key strand of HEIs' approaches to raising attainment in schools, with third sector organisations mentioned by 18 different HEIs, 16 of these being high tariff HEIs. In a recent publication by the Higher Education Policy Institute (HEPI) entitled *New insights from leading thinkers*, Anne-Marie Canning, Head of Widening Participation at King's College London commented that 'working with charities can be galvanising and drive a faster pace of change within the widening participation ecosystem, as they act as trusted connectors between schools, businesses and universities' (Canning, 2017, p38). Although this may be true, it is difficult to understand from AA exactly what level of involvement HEIs have in the activities conducted through these partnerships. In spite of the prevalence with which they are referenced by HEIs in their AA, these partnership activities were not included in my coding of AA and instead I focus only on university-led outreach.

Level D – Governors in Schools, School Sponsorships, and Training Teachers

Next I move away from HEIs' approaches to raising attainment through traditional outreach that has been the focus of this investigation so far, and consider the 'strategic relationships' put forward by OFFA in their recent guidance (OFFA, 2018d). The activities listed under Level D differ from all other types of activities I have discussed up to now as they do not involve direct contact with students. Certainly, when using the HEAT data in RQ1 and RQ2 (Chapters 4 and 5), I examined only activities delivered to students: HEAT being designed around tracking *student* participants into HE renders non-student activities less easy to integrate into the HEAT model. Although strong partnerships between HEIs and schools have long been seen as important for successful outreach (HEFCE, 2007; HEFCE, 2012; DBIS, 2014), it has only been within the last two years' of their AA guidance that OFFA has suggested HEIs become strategically involved in schools' business (OFFA, 2016; 2017b). This shift in approach is logical in light of the new requirement to raise school attainment. When universities were to focus predominantly on raising students' aspirations so that they enter HE, working with students through outreach made sense, now, with the focus shifting to raising attainment, approaches too are shifting to include more involvement in school business.

The activities listed under Level D vary in their level of involvement in school business, from providing professional development opportunities for teachers, to encouraging university staff to sit on school governing boards, with the pinnacle approach being the sponsorship of a school. References to school sponsorship in AA varied in detail, but many were brief, simply stating that their institution was

involved in this. Thus it was often not possible to understand the details of how these arrangements might benefit disadvantaged students from AA alone. A recent HEFCE commissioned report tells how the services provided by HEIs to their sponsored schools are wide-ranging, including governance and management advice, providing enrichment opportunities for students, helping with curriculum design, sharing resources and training teachers (York Consulting, 2016). Academic research on university-school sponsorship models has shown that approaches vary between types of HEIs, with high tariff universities often preferring to set up new free schools which then exist as a university training school for their own institution, rather than taking over existing struggling state schools (Edmond, 2017). The same research found that some high tariff universities have concerns over the reputational risks involved in adopting a failing school.

Although it appears there is likely to be variation in what is being delivered within the activities listed in Level D, particularly in relation to the different models of school sponsorship, there was less ambiguity in the terms used by HEIs in their AA to describe these activities when compared with some of the outreach activities listed under Levels A to C. For example, HEIs simply made reference to whether they sponsored a school or not and so, for the purpose of collating information for the typology, these activities were less prone to vague descriptions.

Before moving on to examine the frequency at which universities are employing these different types of activities to raise attainment, I spend some time summarising the limitations of using AA to create a typology of common attainment-raising activities. The intention of this is to make very clear the many caveats involved in this task, and the caution that has been exercised in the interpretation of the frequency data.

6.3 The limitations of using AA to construct a typology of activities

On the surface, AA provide a hugely valuable resource for a researcher trying to understand the nature of outreach activities being delivered by HEIs. Even more so for my purposes as in their 2018/19 AA HEIs were asked specifically to set out what they are doing to raise attainment in schools (OFFA, 2017b). However, I encountered a number of problems when using AA to construct my typology, foremost, virtually all display a lack of detail when it comes to the nature of the activities being delivered, making the information of limited value in this exercise. Many descriptions of activities also suffered from a lack of definition of terms, with key words like 'mentoring' and 'tasters' used frequently but given little clarity over what this really meant in terms of delivery. These limitations mean there remains much about what HEIs are actually doing to raise attainment that is not provided in AA and thus these documents do not tell us as much as they purport to.

Next I examine the proportion of HEIs reporting in their AA that they are delivering, or planning on delivering, each type of activity in the typology. Before these figures were calculated, all references grouped within an activity type were checked for accuracy and comparability. Activities were then further classified into those that gave a concrete example, those that were more vague in their description, and those that HEIs were planning on delivering in the future. It was felt that future activities sometimes appeared to be a 'wish list', and although well intended had the potential to change and dilute by the time they were delivered, and therefore should be treated separately. With regard to separating vague descriptions from those that were more concrete, it should be noted that some activity types were more prone to vague descriptions than others, for example Pastoral Mentoring, which was often referred to as 'mentoring' with no further elaboration. Two examples of vague references to the Pastoral Mentoring activity type are given below.

"a mentoring programme"

"E-Mentoring for Local Students – online mentoring for schools and colleges"

Academic Tutoring was also prone to vague descriptions, mainly because of its more complex nature; it was often not clear whether tutoring of national curriculum relevant subjects was actually taking place. The two examples below were included under this type but considered to be vague.

"The programme provides an alternative learning environment within a university setting, addressing the academic, social and cultural needs of the cohort to ensure that students complete Year 11 with a minimum of 5 GCSE *A-C including Maths and English."

"Development of 5 University-led curriculum based projects within new specialism areas of Science and Arts."

In spite of these issues I feel the typology does add value to my investigation as through this exercise I have been able to identify 11 broad types of activity being delivered by HEIs to raise attainment in schools. Next I look at the frequency at which each of these 11 types are being delivered, providing a breakdown by the average tariff band of HEIs.

6.4 Frequency of activity type delivery

Table 6.1 provides counts of HEIs for which AA were analysed, broken down by whether they are a non-specialist or specialist HEI, the latter tending to be smaller institutions specialising in the research and teaching of particular subject areas. This breakdown was deemed necessary as, whilst coding AA,

it became clear that the activities delivered by specialist institutions are highly varied and specific to their institutional context. The same conclusion was drawn by McCaig and Adnett (2009) who removed specialist HEIs from their analysis of 20 HEIs' AA as the content was too wide-ranging to provide meaningful comparisons. For the same reason I will focus on the data for non-specialist HEIs, but do provide results for specialist HEIs in Appendix 6.1. The group of non-specialist HEIs are further broken down by their average tariff band in order to examine differences in delivery between types of institution.

Table 6.1: Numbers of HEI 2018/19 AA analysed by institution type and average tariff band

Type of HEI	Number of HEIs
Non-specialist HEIs	91
High Tariff	*31*
Medium Tariff	*23*
Low Tariff	*36*
Tariff Band NA	*1*
Specialist HEIs	32
Total	**123**

Non-specialist HEIs

First, focusing on non-specialist HEIs, Table 6.2 shows the counts and percentages of the 91 non-specialist institutions that made reference to each type of activity in the typology. Percentages reflect the proportion of HEIs making at least one reference to an activity of each type; and so if an HEI described five activities belonging to the same type, this was counted only once. I then show the proportion of HEIs that are intending to develop that activity type for delivering in the future. Percentages from these two columns cannot be summed to calculate the proportion of HEIs either currently or intending on delivering each activity type, as some HEIs appear in both columns, first for an activity they are currently delivering and second for one of the same type they are planning to deliver. Figures 6.2 and 6.3 rank the percentages shown in Table 6.2 from high to low, clearly showing the attainment-raising activities delivered by the largest number of non-specialist HEIs.

Table 6.2: Numbers and percentages of the 91 non-specialist HEIs who referenced each type of activity in their 2018/19 AA

Attainment-raising activity	Level in Typology	HEIs describing activity in their AA		HEI intending on delivering in future	
		N	%	N	%
IAG or HE Awareness	Level A	32	35%	5	5%
HE Subject Tasters	Level A	41	45%	13	14%
Pastoral Mentoring	Level A	29	32%	4	4%
Study Skills	Level B	42	46%	10	11%
Attitudes to Learning	Level B	12	13%	3	3%
Academic Tutoring	Level C	32	35%	29	32%
Revision Classes or Subject Boosters	Level C	28	31%	8	9%
Project Work	Level C	25	27%	4	4%
Training Teachers	Level D	42	46%	11	12%
Governors in Schools	Level D	23	25%	15	16%
School Sponsorship	Level D	46	51%	2	2%

Figure 6.2: Percentage of non-specialist HEIs referencing types of activity in their 2018/19 AA as currently being delivered
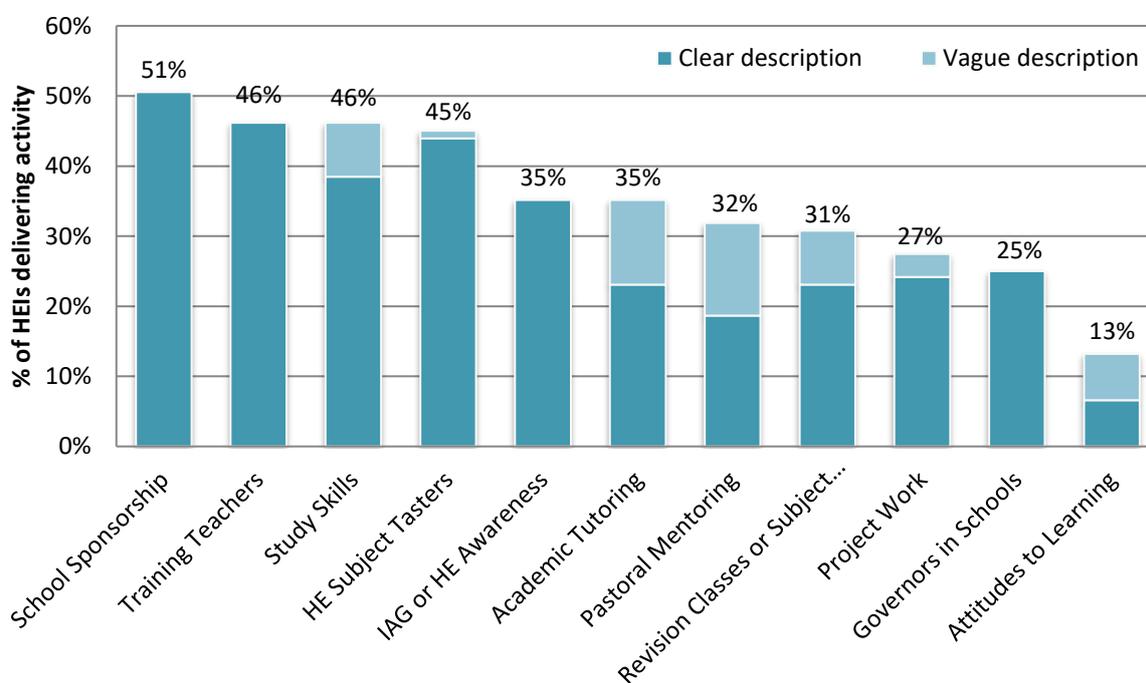
Figure 6.3: Percentage of non-specialist HEIs referencing types of activity in their 2018/19 AA as intending to deliver in the future
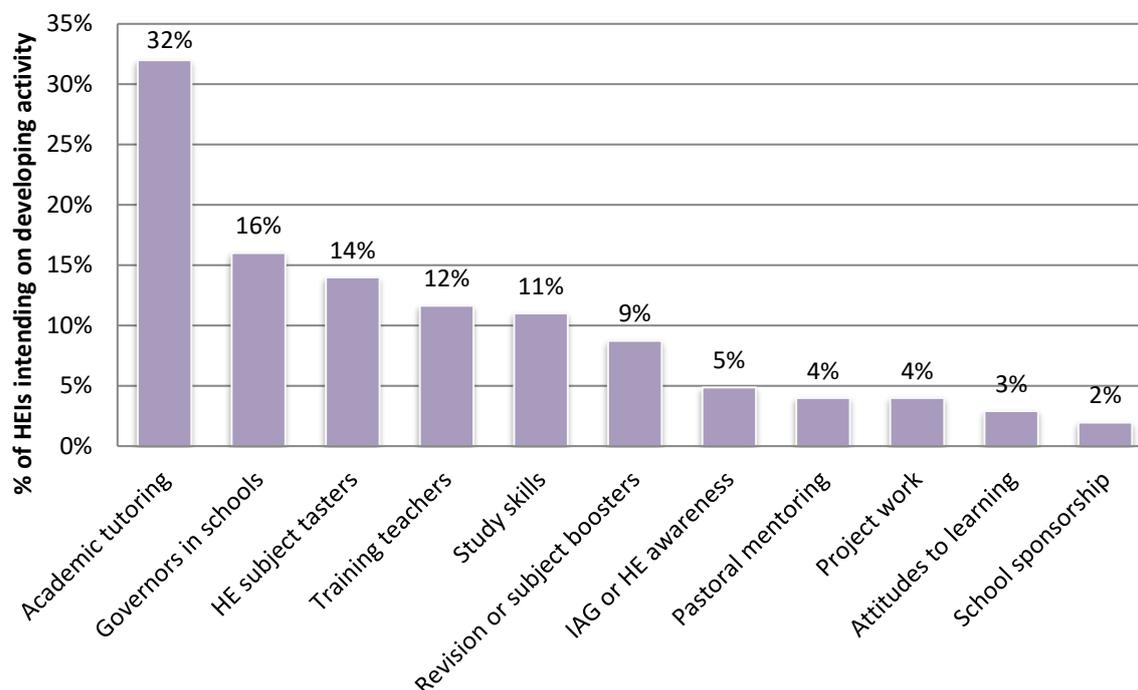
I focus first on Figure 6.2, which shows the types of activities discussed in AA as already being delivered with the aim of raising attainment in schools. The single activity that was referenced by the largest number of HEIs was School Sponsorship, in which 51% (n=46) HEIs stated they were currently engaged. This number is slightly lower than the estimate of 60 HEIs given in a recent Universities UK report (UUK, 2017), although this also included specialist HEIs and FECs. Moving to Figure 6.3, only a further 2% (n=2) of HEIs said that they had firm intentions to sponsor a school in the future. Although not shown in Table 6.2, 30% (28) of HEIs opposed the Government's push for school sponsorship in their AA, setting out clearly why their institution was not in a position to take on this challenge. This resistance from HEIs may be problematic for Government who, in their 2016 Green Paper *Schools that work for everyone*, proposed that *all* universities wishing to charge fees over £6,000 should be required to sponsor an existing state school or set up a new free school (DfE, 2016). However, some universities have been frank in their views against the prospect of enforced university sponsorship of schools. The University of Oxford's Vice-Chancellor, Louise Richardson, responded by saying: 'We're very good at running a university. But we have no experience of running schools, so I think it would be a distraction' (Coughlan, 2016). However, other HEIs have embraced this model including King's College London who are outspoken in their views that universities should sponsor schools to further widening access agendas (Canning, 2017).

A second Level D approach that has emerged as an activity currently being delivered by a large proportion of HEIs in their efforts to raise attainment concerns the training of teachers working in schools with high proportions of disadvantaged pupils. This activity, ranked as the second most popular within the typology, is currently being delivered by 46% (n=42) of non-specialist HEIs. Although the training on offer is likely to vary between different HEIs, many did mention that they drew on expertise from their university's Education departments in order to offer career development opportunities for teachers. Therefore, those HEIs already teaching and researching education are likely to be in a better position to offer this kind of training than those who are not. It may also be the case that this work is already part of certain universities' 'core business' of training teachers. For example, the statements provided below both point to existing work carried out within the university.

"Teacher Training and development - as a provider of Initial Teacher Training programmes (including School Direct consortia) and ongoing development for teachers (including both professional and accredited programmes), [HEI name removed] contributes to improving school-level attainment."

"Our School of [HEI department name removed], which includes our primary and secondary PGCE courses, is committed to working in partnerships with Schools and Trusts in the region. Central to the strategy for the School is [HEI name removed]'s commitment to quality of teaching as one of the most significant factors shaping the futures of children and young people today. With a long history of work in initial teacher education (ITE) through our Primary and Secondary PGCE programmes, the School of [HEI department name removed] makes an important contribution to raising standards, to realising the potential of teachers and, in turn, of their pupils."

There was, yet again, variation within this type of activity and some HEIs described activities that appeared to focus on training teachers in providing guidance with the HE application process, rather than improving quality of teaching, although this was still positioned in an attainment-raising context.

"We hold teacher conferences relating to specific subject areas throughout the year as well as an HE Advisors' conference in the summer term which provides the latest UCAS, Student Finance England, Admissions and course information to staff who support progression in their institution."

Although these Level D approaches are interesting, they are perhaps beyond the scope of this research question which focuses on outreach activities, although it is acknowledged some of these activities may still be considered outreach by some.

Amongst the most popular *outreach* activities involving direct contact with students are Study Skills (46%) and HE Subject Tasters (45%) (Figure 6.2). Although there do not appear to be any particular trends in delivery by typology Level, with some activities from both Levels A and B more popular than others, Level C activities are all ranked within the bottom half of activities currently being delivered to raise attainment. It is interesting to note that, although ranked fifth out of the eleven activities in terms of frequency of delivery, 35% of HEIs profess to be delivering traditional IAG and HE Awareness activities as part of their efforts to raise attainment in schools. Less traditional activities such as those included in the Attitudes to Learning type are the least likely to be delivered, with only 13% (n=12) of HEIs indicating they were currently doing this form of outreach.

Moving on to Figure 6.3, addressing the approaches that HEIs intend on developing in the future to raise attainment, a clear pattern emerges. The most frequently referenced type of activity for development was Academic Tutoring, with 32% (n=29) of HEIs setting out plans to deliver these types of outreach activities to help raise attainment in schools. Therefore, in order to raise attainment in schools, it appears that HEIs envisage they must deliver outreach activities that aim to increase subject knowledge directly, by teaching of the national curriculum. Although other forms of outreach are being delivered, it is this area in which universities plan to strengthen and extend their outreach activity. The overlap here with the role of the school and teacher is clear, and I will return to this later. For now it is worth noting that OFFA are not clear in their expectations here; they do not say explicitly that HEIs should take on the role of teacher by tutoring groups of students, but they do say that universities' activities could support 'subject knowledge' and set out that activities should raise exam results (OFFA, 2018b). Guidance as to how to go about this appears to be limited.

Breakdown by Average HEI Tariff

Next I examine how the proportion of HEIs referencing each type of activity in their AA differs depending on the average tariff band of the institution. Table 6.3 shows the proportion of High, Medium and Low tariff HEIs currently delivering each type of attainment-raising activity in the typology. Figure 6.4 shows these data graphically to allow easy comparison across types of HEI.

With the exception of the three Level D activities (School Sponsorship, Governors in Schools and Training Teachers), High tariff HEI were more likely than Medium and Low tariff to have referenced every type of attainment-raising activity in the typology. High tariff HEIs thus appear to be drawing on a broader range of approaches through outreach when raising attainment in schools. Although this may suggest that High tariff HEIs are doing *more* to raise attainment in schools, I cannot know this from the data presented here. As discussed in relation to Table 6.2, multiple references to the same

type of activity have only been counted once, and so an HEI delivering five activities classified under the same type will only appear once in Table 6.3 and Figure 6.4, whereas an HEI also delivering five activities, but classified under five different types of outreach, will appear five times. Thus the data do not show numbers of activities but rather just the proportion of High, Medium and Low tariff HEIs who made reference to each type of activity in their AA.

Table 6.3: Numbers and percentages of the non-specialist HEIs who referenced each type of activity in their 2018/19 AA, broken down by average tariff band

Attainment-raising activity	High Tariff HEIs (N=31)		Medium Tariff HEI (N=23)		Low Tariff HEI (N=36)	
	N	%	N	%	N	%
School Sponsorship	15	48%	13	57%	17	47%
Study Skills	23	74%	7	30%	12	33%
Training Teachers	15	48%	8	35%	19	53%
HE Subject Tasters	16	52%	8	35%	16	44%
IAG or HE Awareness	12	39%	6	26%	14	39%
Academic Tutoring	16	52%	8	35%	8	22%
Pastoral Mentoring	13	42%	5	22%	11	31%
Revision Classes or Subject Boosters	17	55%	4	17%	7	19%
Project Work	14	45%	3	13%	8	22%
Governors in Schools	7	23%	6	26%	10	28%
Attitudes to Learning	8	26%	1	4%	3	8%

Figure 6.4: Percentage of non-specialist HEIs referencing types of activity in their 2018/19 AA as currently being delivered, broken down by average tariff band
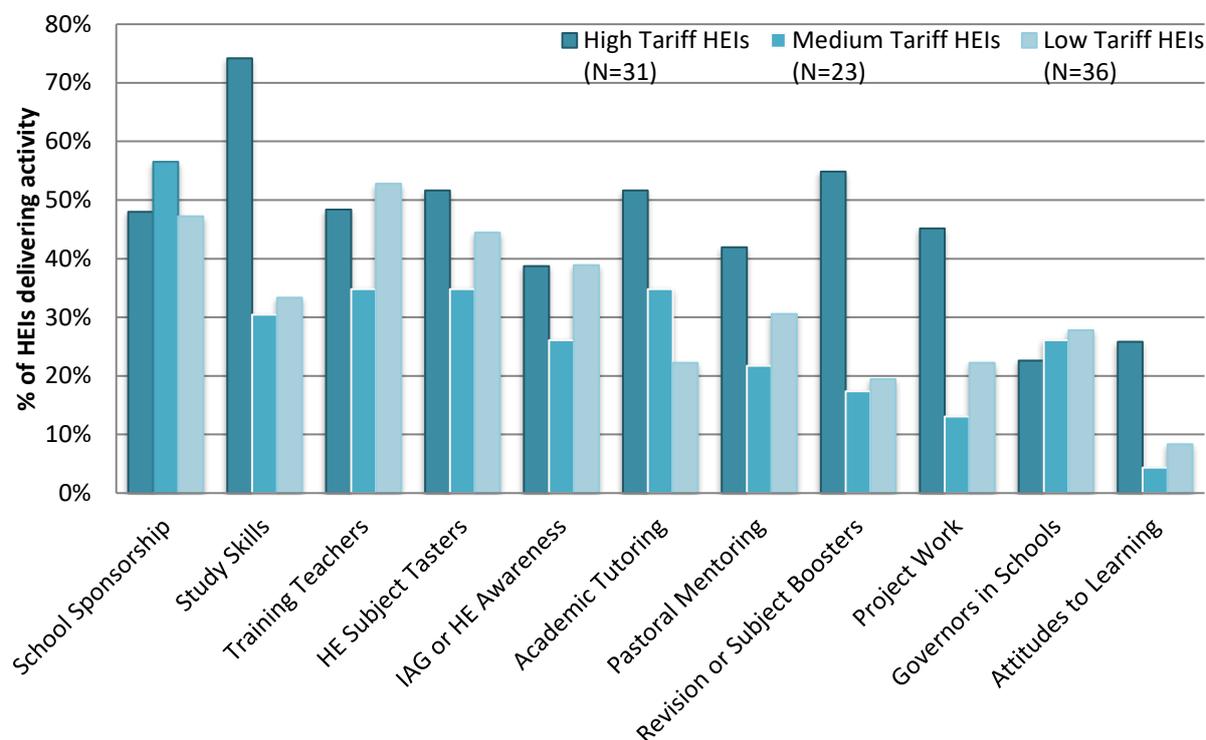

In spite of this caveat, it is clear from both Table 6.3 and Figure 6.4 that High tariff HEIs are considerably more likely to be delivering some of the types of activity than Medium and Low tariff HEIs. Study Skills was mentioned by 74% of High tariff HEIs (compared with 30% of Medium and 33% of Low tariff HEIs), Revision or Subject Boosters was mentioned by 55% (17% Medium and 19% Low tariff) and Project Work was mentioned by 45% (13% Medium and 22% Low tariff). Differences between the proportions of HEIs delivering other types of activities were smaller and the picture was varied across the different types of activity. Again, caution should be taken when interpreting these data as sample sizes are small when HEIs are broken down by their average tariff band (with only 26 Medium tariff HEIs). A small sample when combined with the limitations involved in the coding process, discussed above, may lead to anomalous results.

For this reason, data for activities that HEIs are intending on delivering in the future are not presented for all activity types as numbers here became too small to be useful. I only show the proportion of HEIs by tariff band intending on developing Academic Tutoring activities, the top ranked activity for future delivering in Figure 6.3. Table 6.4 and Figure 6.5 show that Medium Tariff HEIs were more likely to intend on developing this activity as part of their work to raise attainment in schools, although this activity remained the top ranked for future delivery for all tariff bands.

Table 6.4: Numbers and percentages of non-specialist HEIs referencing types of activity in their 2018/19 AA as intending to deliver in the future

Attainment-raising activity	High Tariff HEIs (N=31)		Medium Tariff HEI (N=23)		Low Tariff HEI (N=36)	
	N	%	N	%	N	%
Academic tutoring	13	23%	10	43%	13	33%

Figure 6.5: Percentage of non-specialist HEIs referencing types of activity in their 2018/19 AA as intending to deliver in the future
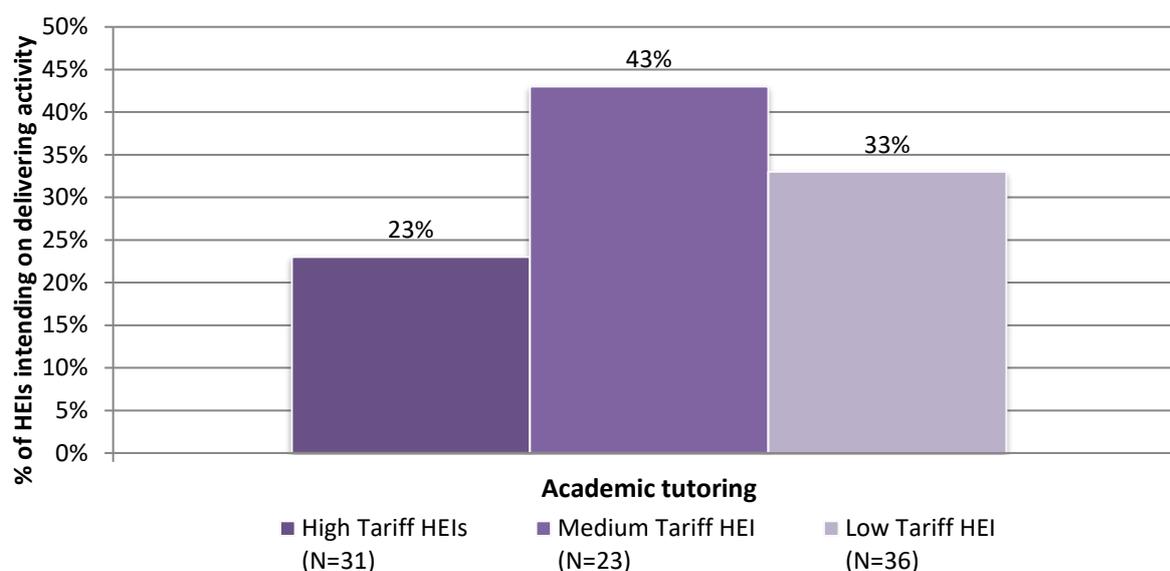
6.5 Conclusion

This chapter has drawn on information presented by HEIs in their 2018/19 AA to better understand the approaches - through outreach - that universities are adopting to fulfil their new brief to raise attainment in schools. In spite of the methodological issues involved in using AA for this purpose, I was able to construct the typology of eleven common attainment-raising activities presented in Figure 6.1. These activities are varied in their theoretical aims and modes of delivery, ranging from outreach activities that involve direct contact with students to activities concerned with building strategic relationships with schools, such as school sponsorship. Analysis of frequency of delivery across HEIs shows that these strategic relationships currently form a key strand to HEIs' work to raise attainment in school, with School Sponsorship the activity HEIs were most likely to discuss as part of their work to raise attainment. However, for this RQ I have focused on approaches through outreach, this being consistent with the previous two RQs which have considered the targeting and effectiveness of outreach delivered directly to students in raising attainment in schools, rather than non-student facing

activities such as working with teachers and school governors (termed strategic relationships). Focusing only on outreach provides ample room for discussion as the link between outreach activities and raising student attainment is fraught with uncertainty.

Up to 45% of HEIs made reference to one or more traditional styles of aspiration-raising outreach activity when discussing their work to raise attainment. These activities, including IAG and HE Awareness, Subject Tasters and Pastoral Mentoring, are likely to have been delivered for a number of years, previously under the guise of raising aspirations (HEFCE, 2012). Although it is certainly plausible that work to raise aspirations can also raise attainment, research into this area is yet to establish a clear causal relationship between the two (Cummings *et al*., 2012; Gorard *et al*., 2012). The danger of continuing to run these activities, but reframing them in a context of raising attainment, is that they become attainment-raising activities in name only, and their design may remain unchanged from what has traditionally been delivered by universities in their outreach work. If this were the case, attainment-raising would be reduced to rhetoric rather than action. A further issue with these aspiration-raising activities is whether they attempt to raise aspirations directly relating to school level attainment, or rather the nature of the aspiration raising is more generic. For example, an activity that provides information about the importance of school attainment in order to enter university could, arguably, have more of a basis for raising attainment than a more generic aspiration activity, such as where students are given a tour of a university campus. The approaches taken by universities to raise attainment through raising aspirations are diverse and generalising activities should be avoided. However, as was shown in the passages presented above, AA provide little in the way of detailed information into the processes through which these activities are expected to work.

In addition to these aspiration-raising activities, HEIs also report to be already delivering activities that appear to involve some sort of teaching of the national curriculum in order to raise attainment. Academic Tutoring activities are already being delivered by 35% of HEIs and 31% describe Revision Classes or Booster Sessions. Academic Tutoring emerges clearly as a growth area for outreach that is aimed at raising attainment, with 32% of HEIs proposing they will develop Academic Tutoring styles of activities for the future.

In spite of the apparent willingness of HEIs to undertake Academic Tutoring, it must be acknowledged that this type of activity which aims to support learning by carrying out supplemental work in small groups or one to one, is far more complex an exchange than the traditional aspiration or IAG activities described above. The skill of the tutor, and perhaps the relationship with the teacher who may be managing the tutoring activity, is likely to be critical to the success of the activities. Evidence supports

this, the Government's What Works centre for education – the Education Endowment Foundation (EEF) – suggest that intensive one to one or small group tuition can be effective in raising attainment (EEF, 2014), but this is dependent on the quality of teaching within the school (Gorard *et al*., 2014). Other research has also shown teaching quality to be a key factor in improving attainment amongst low income pupils (Demie and Mclean, 2015). Therefore, it is likely that the effectiveness of Academic Tutoring activities run by universities will depend heavily on the expertise of the individuals delivering the tutoring, who will, in turn, depend heavily on the success of the teachers delivering the school curriculum. The formula for success is therefore a complex one and it may be virtually impossible to disentangle the influence of the universities' activities from that of the teachers and wider school.

It is increasingly apparent that activities that aim to raise attainment in schools by supporting students' learning, such as those in Level C of the typology, are more complex. In spite of concerns about aspiration-raising activities within an attainment-raising context, it appears that raising attainment directly poses even more problems. Traditionally, universities have separated their outreach from teaching by focusing on raising other types of Bourdieu's capitals (social, cultural and skills), with intellectual capital being the responsibility of the school itself. It now seems that there is increasing overlap between the role of universities' outreach and the role of the school or teacher. With the new brief from OFFA to raise attainment, it appears logical that HEIs could develop their activities in this way, although how universities will add value here is still unclear. I have certainly not been able to uncover this from analysis of AA.

These issues aside, there remain other details of these activities, largely to whom they are being delivered, which are important if attainment-raising activities are to fit within the overarching objective of widening access to HE. Here I return to the ideas discussed in RQ1, where I identified the critical importance of engaging the 'right' students in outreach, those who were not already on track to progress to higher education, known by Harrison and Waller (2017b) as 'deadweight'. I discussed how the attainment of five GCSEs including English and mathematics were critical for future progression options and thus the activities HEIs are delivering to raise attainment should, theoretically, be targeted towards helping students achieve these qualifications. However, this information, along with the other details that might elucidate how attainment-raising activities are expected to work are not consistently reported in AA. AA actually tell us less than the HEAT data with regard to the students who were selected to participate in these activities, their age and prior attainment being key parts of the analyses presented in RQ1 and 2.

In order to uncover this information for the attainment-raising outreach activities that are the focus of this chapter, it is necessary that I speak directly to those responsible for managing outreach departments within HEIs. Therefore the next chapter will continue to address RQ3, but in more depth and detail, through interviews with 30 widening participation managers working in a sample of non-specialist HEIs. I will use the attainment-raising activity typology developed through the analysis presented in this chapter (Figure 6.1) when speaking to practitioners about what they are delivering to guide the discussion. Questions will aim to uncover details on how HEIs' attainment-raising outreach activities are helping to address the educational inequalities of students identified in RQ1.

Chapter 7: Research Question 3b Analysis

Research Question 3b: Which types of outreach activities are universities delivering to raise attainment in schools and how are they meant to work? An in-depth analysis of data from interviews with widening participation managers.

7.1 Introduction

The chapter is based around data collected through interviews with Widening Participation Outreach Managers from a range of 30 non-specialist HEIs (Higher Education Institutions). The primary purpose of the interviews was to explore with these managers the following two elements:

1. First, to understand the practical strategies universities are taking to address the new government requirement to raise attainment in schools. This included questioning on the specific activities being delivered to raise attainment in schools and why they thought these activities would be successful.

2. Second, I sought to explore the underlying perspectives of these individuals in regard to the role of their HEI, and the higher education sector in general, in raising attainment in schools.

From the pilot survey (Chapter 3) it was clear that the opinions of these often highly experienced managers working in senior roles in universities, were likely to yield valuable insights relevant to my study. Up to this point the data used in this thesis could be criticised for being decontextualized in nature, removed from its practical application; it is believed this data source will remedy this.

The total sample of 30 HEIs makes up 33% of all non-specialist HEIs in England that submitted Access Agreements for the academic year 2018/19 (n=91). Tables 7.1 and 7.2 show the types of HEI that participated in this research and Table 7.3 shows their location. Efforts were made to obtain a sample of HEIs from across the sector and thus it is asserted that the findings from the interview data can be considered representative of attitudes and behaviours of non-specialist HEIs in England.

Table 7.1: Number of participating HEIs by HEI tariff band

Tariff band of HEI	Number of participating HEIs	% of all HEIs in England
High tariff HEI	10	33%
Medium tariff HEI	10	33%
Low tariff HEI	10	33%
Total	**30**	**33%**

Table 7.2: Number of participating HEIs by HEI tariff band

Pre/Post-1992 HEI	Number of participating HEIs	% of all HEIs in England
Pre-1992 HEI	12	30%
Post-1992 HEI	18	35%
Total	**30**	**33%**

Table 7.3: Number of participating HEIs by HEI region

Region of HEI	Number of participating HEIs	% of all HEIs in England
East Midlands	2	25%
Eastern England	2	33%
Greater London	6	29%
North East	2	40%
North West	5	45%
South East	5	36%
South West	3	38%
West Midlands	2	22%
Yorkshire & Humberside	3	33%
Total	**30**	**33%**

Analysis has focused on identifying key themes that emerged, particularly where ideas and views recurred. However, these themes nearly always represent a preponderance only, and are often subject to counterexamples within the data. Where possible, propensities towards certain attitudes and strategies have been quantified with descriptive statistics. In addition illustrative quotations are used to highlight key themes. Themes have been selected and ordered to provide a coherent account of the interview discussions. However, these themes do not cover all that was discussed in the interviews, but rather emphasis was placed on commonalities. It is acknowledged that the process of choosing the themes deemed important was heavily subjective and based on my own questioning and interpretation of responses. Nevertheless, it is believed that if further samples of managers from the same total population were questioned again at this time, very similar responses would be generated. I am confident of this as the sampling scheme adopted saw saturation in responses well before the full sample of participants was reached.

The following discussion is split into three sections. First, a brief reminder of the policy as set out in recent guidance from the Office for Students (OfS, 2018b) is provided. Second, I move on to analyse interview responses, summarising the overarching attitudes towards the policy to provide context for the discussion that follows. Third, I consider the types of outreach activities that universities are delivering to raise attainment, exploring the challenges involved in defining activities as 'attainment

raising'. I provide some explanation of the reasons these activities have been chosen and why they are expected to work. I also consider the variety in terms of the students who are being selected or targeted for inclusion in these activities.

7.2 The policy: a reminder of what it entails and why it was proposed

In recent guidance for English HEIs when filling out their 2019/20 Access and Participation Plans (replacement of the institutional Access Agreements discussed in previous chapters), universities were asked to set-out how they 'will work with schools and colleges to support the attainment of those from underrepresented groups' (OfS, 2018b, p31).

Citing attainment in Key Stage 4 exams (taken at 15 or 16 years old) as the biggest predictor of participation in Higher Education (Crawford, 2014), the guidance recommends that attainment interventions should be targeted at students before they take these exams. A topic briefing (OFFA, 2018b) is also signposted to explain that disadvantaged students are less likely to achieve the five GCSEs at grades A*-C including English and Maths critical to future Higher Education progression. Thus, it is within this context that the Government are asking universities to work to tackle the accumulated educational disadvantage that has shown to lead to differences in participation rates by age 18 or 19. The guidance provides the following quotation to further justify their requirement for universities to raise school attainment through their outreach work: 'No matter how much support is provided to students from disadvantaged backgrounds, they will not get into university unless they reach the required academic standards' (TeachFirst, 2017, cited in OfS, 2018b, p31).

Although the OfS are clear that universities must work to raise attainment, they have been less clear in exactly how this should be achieved and what is expected in terms of impact. The issue here is largely one of timing – with meaningful guidance published two years after the new OfS focus on attainment. This new focus took the form of a statement in the 2016 Green Paper, *Schools that work for everyone* announcing that '…universities could and should play a direct role in raising attainment in schools to widen access, and for this to be made a condition of their fair access requirements' (DfE, 2016a, p18). The following year (2017), OFFA asked universities to set out in their Access Agreements how they would increase the work they were doing to raise attainment in schools and colleges (OFFA, 2017b, p1). In 2018, before being superseded by the OfS, OFFA released a topic briefing entitled *Raising attainment in schools and colleges to widen participation* in which they gave example metrics that could be used to evaluate the success of attainment-raising outreach activities. The first example given is 'Improved academic grades (particularly in teacher, Key Stage 2 or GCSE assessments)' (OFFA, 2018b, p12). This topic briefing was republished under the OfS and so does appear to remain current.

Thus universities found themselves in a position where all guidance from the regulator appeared to suggest that, not only would they be expected to raise attainment in schools through their outreach activities, but they would also need to demonstrate that these activities improved the exam grades of those who participate. This was the point at which the interviews for this research were conducted and it is clear from interview responses that it was a worrying position for many of the WP managers interviewed to find themselves in.

However, in December 2018 and February 2019, two reports commissioned by the OfS suggest that the regulator may be taking a more nuanced approach with regards to what they expect in terms of the impact of attainment raising outreach. The reports provide guidance to universities which suggests that the OfS are satisfied with outreach activities that support attainment indirectly. However, unfortunately both of these reports had not yet been published at the time the interviews were conducted and so WP managers were not talking with this knowledge.

The first of the two reports, published in December 2018, three months after the final interview was conducted and over a year after HEIs were asked to set out how they were raising attainment in their AA (OFFA, 2017b), investigates the evaluation of outreach interventions for under 16 year olds (Harrison *et al*., 2018a). The research identifies that measuring the impact of attainment raising outreach directly, on exam grades is problematic.

"Certain types of impact were felt to be particularly difficult to capture. For example, 13 per cent of HEPs had found it very difficult to measure gains in learning or attainment, partly due to difficulties in getting data (see above), but also as the metrics available (e.g. jumps in grades) were insufficiently sensitive to pick up small or moderate effect sizes." (Harrison *et al*., 2018a, p23).

These same concerns were expressed in the interviews conducted for this research (discussed below). Following on from this, the same report recommends the use of intermediate steps in evaluating outreach activities drawing on a theory of change approach.

"Under a theory of change approach, the purpose of evaluation is to evidence the links in the logic chain and especially those where the validity of the assumptions made is most questionable [...] These intermediate steps might be derived from a consideration of existing activities, the research literature or social theory, and might make use of established concepts from sociology (e.g. cultural capital), psychology (e.g. self-efficacy) or other social science disciplines." (Harrison *et al*., 2018b, p8-9).

The guidance goes on to state that using intermediate steps to measure the impact of outreach activities shortens the timescales for measured outcomes. This allows stronger causal claims than measuring impact on very long-term outcomes where "multiple confounding factors make it harder to disentangle influences on young people's decision-making" (Harrison *et al*., 2018b, p9).

The guidance does not discuss whether intermediate steps should be used to measure the impact of attainment raising activities *per se*, and these types of activities are not mentioned explicitly. Rather, the guidance encourages the use of intermediate steps to alleviate the problems involved in demonstrating that participation in outreach at a young age (before 16 years old) may lead to their later progression to HE at age 18.

The second report published in February 2019, now two years after HEIs were asked to set out how they were raising attainment in their AA (OFFA, 2017b and one month after this thesis was submitted, outlines standards of evidence when evaluating the impact of outreach. Although measuring impact on exam grades such as GCSE is used as an example of good practice when used in a robust research design (in, for example a counter-factual analysis similar to the analysis carried out under RQ2), the report also notes the importance of measuring smaller elements of a 'big picture' goal (OfS, 2019, p12). Like the intermediate steps discussed in the first report, these smaller elements relate to concepts such as building self-efficacy and resilience, these being on the journey to raised attainment and subsequent progression to HE. This suggests that the OfS will support activities that indirectly support attainment as long as they are able to evidence meaningful change within a clear theoretical framework. It will emerge over the following pages that, even without this knowledge, universities have chosen to adopt activities that indirectly support attainment. This research is therefore useful in seeing how these activities are being implemented, and the theoretical framework within which they are constructed.

Before turning to the interview responses, it is perhaps also worth noting that the OfS have the following disclaimer in relation to the second of the two reports discussed above written in red on their website: 'These reports are independent research which we have commissioned. As such, neither necessarily reflects the views or official position of the OfS.' The first report is also clearly labelled as being authored by independent researchers and so one can assume the same disclaimer would apply. It is therefore the opinion of this researcher that, in spite of these more nuanced guidance documents, the OfS's expectations in relation to evaluating outreach activities to raise attainment remains ambiguous. With these thoughts about the policy in mind, I next examine the attitudes and strategies that emerged from interviews with outreach managers from 30 HEIs.

7.3 Analysis

7.3.1 Overarching attitudes towards the policy

First I address general attitudes towards the policy requirement for university outreach to take on the aim of raising attainment in schools, and the level of approval with which this has been met amongst interview participants. The extent to which the policy is met with acceptance is important, not least because the point at which the policy will be enacted is wholly constructed by the individual universities themselves. Within education, there is always the possibility of resistance and policy is often remade as it is actioned and effected, with practitioners acting as 'street level bureaucrats' (Lipsky, 1980, p1). Reynolds and Saunders (1987) describe the policy implementation process as an Implementation Staircase, where policy can shift and be reshaped by stakeholders at the bottom of the staircase (in this case outreach managers in charge of implementing outreach) in a way that looks very different from what the policy makers at the top of the staircase appear to have imagined. The consequence is that policies take on 'multiple agendas, attitudes, values and sets of meaning' (Trowler, 2001, p12).

According to Trowler (2002), within the higher education sector, policy enactment will be in line with the agendas of and pressures on the universities. Two specific pressures emerged throughout the interviews as having shaped the way this particular policy is being enacted. These were not asked about directly, but emerged as strong themes nonetheless. First, the pressure on universities to evaluate and show the impact of their outreach activities (DBIS, 2014; OFFA, 2015a; HEFCE, 2016b; OFFA, 2017b),some outreach managers feeling that there was now an expectation that outreach would have a demonstrable impact on performance in standard academic measures. Although the new guidance might suggest otherwise, the precise expectations remain ambiguous. The second pressure was the need to recruit students in a competitive market-place, or for many higher tariff, selective universities, to recruit widening participation students to diversity their student intakes. This recruitment focus has seen a divergence from the collaborative spirit of AimHigher, but the acceptability of this is beyond the scope of this chapter.

These pressures are not new and have been written about elsewhere (McCaig, 2015; Harrison and Waller, 2017a; 2017b; Rainford, 2017), but are important nonetheless as they influence the ways in which this particular policy, to raise attainment in schools, is being interpreted and implemented on the ground. For example, one participant stated that whatever they delivered under outreach needed to "work for the university".

Neither of these pressures sits easily with activities that are designed to tackle educational disadvantage, and the detail of this will be explored throughout this chapter.

With this in mind, it is logical to think that overarching support for this particular policy amongst the managers interviewed is essential if it is to be enacted in the way policy-makers had first intended: to raise levels of attainment so that larger numbers of disadvantaged students can progress to higher education. To examine the overarching popularity of the policy all participants were asked whether they thought raising attainment in schools should be within the responsibilities of university outreach teams. Responses, which were free form, were coded into three categories, presented along with frequencies in Figure 7.1.

Figure 7.1: Should raising attainment in schools be within the responsibilities of university outreach teams?
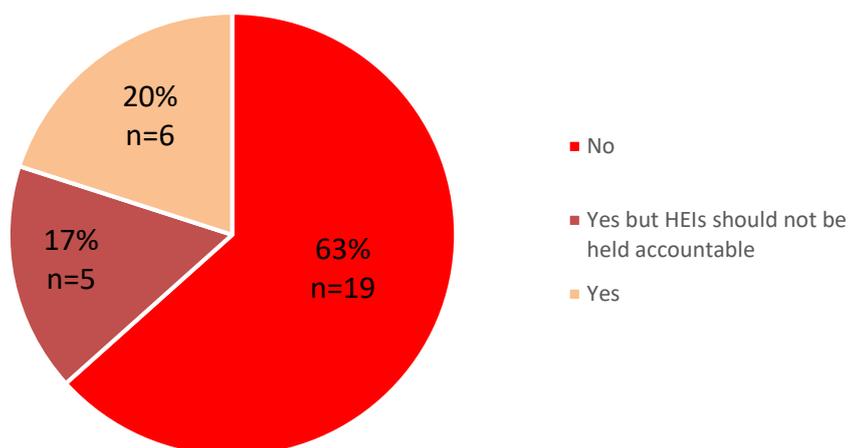
General attitudes to the policy amongst outreach managers are less than sanguine. Managers from 63% of HEIs interviewed (n=19) did not feel that raising attainment in schools should be within the responsibility of university outreach teams. A smaller proportion (17%, n=5) felt that although universities were able to contribute to raising attainment in schools, they should not be held accountable for their contribution. For many of these participants, increasing requirements from the OfS to show the impact of the work being delivered had led to concerns that they would be held accountable for schools' performances. I return to the difficulties of evaluating activities in terms of their measurable impact on national exams later, but this emerged as a key concern moderating the extent to which some interview participants were prepared to endorse the policy. A further 20% (n=6) stated that raising attainment in schools was an area for which universities should take responsibility, but these accounts were often muted by concerns that outreach teams may only be able to work in partnership with schools to *support*, or *contribute* to, attainment, and gains may be minimal.

There were no differences when these attitudes were considered by the type of university in which the respondent worked (categories presented in Table 7.1 and 7.2). However, differences did occur in relation to the work history of interviewees. Negative attitudes towards the policy were more common amongst interviewees who had themselves trained and worked as school teachers. Although the sample was small (n=10) 80% of these former teachers felt that the policy change was inappropriate. These individuals provide a uniquely specialist perspective as they have experience in both the university outreach and school sectors.

Explanations provided for the scepticism towards the policy can be grouped into two arguments. First, those who questioned the ability for university outreach to have an impact on students' attainment due to the limited student contact time of even the most intensive activities. Second, several interviewees questioned whether universities had the expertise to raise attainment in the national curriculum, in which many had little or no prior knowledge or experience. Quotations are provided next to illustrate each of these arguments. It should be noted that these concerns were raised by many interviewees, even those who aligned themselves favourably with the policy in Figure 7.1

Under the first argument, one participant, who was also an ex-teacher, made the following point relating to the limited contact time outreach teams have with students.

"It is daft to say that WP can do a pseudo teacher job and have the level of contact with individuals that will massively materially affect their attainment at school. I think that is a really important starting point because in the discussion, which has very much been driven at a government level and been pushed through OFFA, we have elided these complexities and there have been assumptions made about the intensity of contact with young people from WP teams and there are multiple interventions but these might be six or seven interventions across a year. If I was teaching somebody in a school I would be seeing them every day for 40 weeks of the year. So expectations, realistic expectations are important here."

It is reasonable to question whether the limited time school students spend engaged in outreach interventions could ever improve attainment. The argument is even more persuasive when considered alongside the longstanding debate over school effectiveness. Some have questioned in the literature whether even schools themselves can moderate wider social effects influencing young people's attainment, such as their family and socio-economic background. Some argue that the causes of inequalities in attainment are beyond the influence of school (Ball, 2010) with differences in student attainment between schools largely explained by the differences in their student intakes (Gorard, 2010b). This suggests that the particular school a student attends makes little difference to their

attainment outcomes, thus prompting the conclusion that policy makers may be wrong to believe that educational policy can ever cause reform. Others, however, believe that schools can indeed play a role in mitigating the impact of wider social inequalities (Dyson and Raffo, 2007; Shain, 2016; Mannion and Mercer 2016). In spite of this ongoing debate the managers interviewed felt that any impact on attainment made by university outreach activities will be minimal in relation to, and perhaps inseparable from, school effects. Even the most intensive activities described by interviewees tend to consist of no more than a one hour interaction per week for ten to twelve weeks. This issue was touched upon in one of the recent guidance report discussed at the beginning of this chapter (Harrison *et al.*, 2018). Here practitioners raised concerns in interviews that the metrics used to show impact on attainment (e.g. GCSE grades) were 'insufficiently sensitive' to detect changes that may be attributable to participating in outreach activities (p23).

Second, many argued that outreach teams lacked the expertise to make an impact here, with outreach staff rarely having a knowledge of pedagogy, the national curriculum or the experience in the classroom that schools have.

"Outreach practitioners don't have teaching skills and up to date knowledge of education and the right pedagogy to know how to make an impact here".

This lack of expertise with regard to teaching to the national curriculum was not limited to staff working in outreach teams, others questioned whether academic staff would have the relevant knowledge.

"Our academics, I think they are good at what we do in terms of research and teaching current undergrads and getting them to explore areas and in terms of raising aspirations for secondary school students and primary school students. But are we good at teaching to the test and the curriculum? Well no, we have no expertise in that area. I don't know why we've been selected to do that".

Concerns about a lack of expertise often led people to question whether universities should be asked to try to raise attainment, with one interviewee talking about "mission drift" and several alluding to the idea that outreach teams were going 'off track' with this particular remit. Several of the interview participants observed that the role of universities in raising attainment needed to be debated within the sector before the policy had been made, and they did not feel this debate had taken place. Currently there was not a convincing rationale as to why universities were being asked to raise attainment within schools and this made the policy conceptually difficult to justify within their

institutions. Difficulties were also observed around the short term nature of policy making in the past, with some questioning whether this particular policy would stand the test of time.

"A lot of senior people who are pro WP in the institution think we have got no relevant experience to go in and think that we would be able to raise attainment where schools are unable to do that when that's all their funding is for, why can't they do that core job? I also think where the government has chopped and changed its focus so often it worries people that you get on to a bandwagon and you can't get off it."

"I feel really strongly about this because I don't honestly believe that it should be universities' role to actually have to raise attainment in schools at that level. We should be raising progression, the attainment of our own students, and graduate level employment which is what our staff are trained to do."

In spite of the uncertainty amongst interview participants about whether universities can and should contribute to raising attainment in schools, 77% (n=23) of those interviewed were prepared to talk about an outreach activity that they were already delivering, or planning to deliver, to raise attainment. These ranged from subject specific GCSE and A-level tutoring, subject enrichment classes, primary reading schemes, sessions designed to promote a growth mindset and revision classes. Most interviewees genuinely believed that these activities would support, or contribute, to raising students' attainment and they felt confident about the way their university had operationalised the new policy requirement. However, it is interesting to note this was then not congruent with many of their overarching opinions about whether universities should be given this remit. I shall examine the range of activities discussed in the next section. But first I consider the 23% (n=7) of interviewees who were not prepared to talk about an activity that they were delivering to raise attainment. These interviewees were often amongst the most reflective and contemplative with regard to the policy, stating that they felt they did not have a clear sense of what constituted an attainment raising outreach activity. The quotation below illustrates this lack of clarity.

"Well it's a tricky question because it's about thinking about how we look at attainment. If you see aspiration raising and awareness raising as linked to achievement, then yes. If we are thinking about activity that is directed specifically at improving GCSE grades, improving literacy and improving numeracy directly, the answer would be no."

It is useful to draw on the above quotation to demonstrate the confusion around what an attainment raising activity is meant to achieve. At the time the interviews were conducted, there had been no

clear guidance as to whether the OfS were asking universities to raise attainment directly, by teaching to the national curriculum, or if activities that aimed to raise attainment indirectly would satisfy their requirements. Although the two recent reports discussed at the beginning of this chapter have gone some way to clarify this, universities had already been asked to design and implement attainment raising activities and it is these that will be reviewed next.

When looking more closely at the types of activities being delivered to raise attainment, it is likely that the devil will lie in the detail of the activities themselves, when it comes to their ability to tackle the educational disadvantage for which the policy was originally set up. Returning to the Implementation Staircase (Reynolds and Saunders, 1987), I critically examine the shape of activities, when enacted, in relation to their ability to fulfil the policy's original aims.

7.3.2 Which outreach activities are universities delivering to raise attainment?

Interviewees were asked to choose their main or most important attainment raising outreach activity and explain its key aims and how it was expected to work. To allow comparisons across interviews, interviewees were asked to look at the Activity Typology developed from the analysis of 2018/19 Access Agreements presented in Chapter 6 (provided again in Figure 7.2) and align their chosen activity with the closest Level and Type on the typology. As decided in the previous chapter, for consistency, interview participants were asked to focus on outreach activities (Levels A-C) rather than the strategic relationships of Level D.

Figure 7.2 Typology of common activities delivered by English HEIs that are designed to raise attainment in schools

Source: Constructed from 2018/19 AA (originally shown as Figure 6.1). Informed by Hayton and Bengry-Howell (2016)
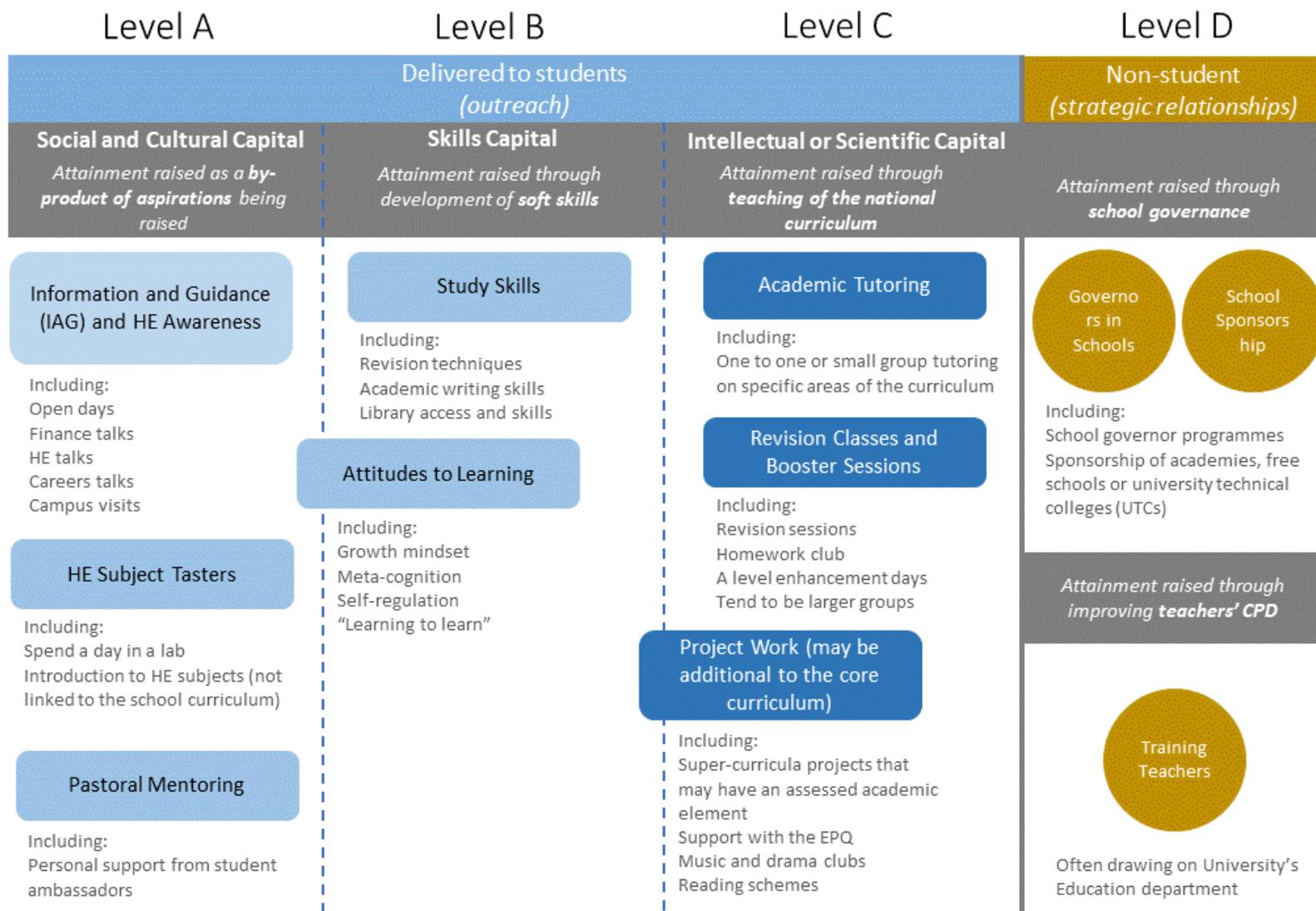
It was emphasised to interview participants, as was done in the previous chapter, that the areas covered in levels A-C may not be mutually exclusive and that, for example, some activities may seek to achieve a number of different aims. In spite of this, interviewees were asked to align their activity under the Level that best described the main aims.

A summary of the 'Level' of each activity described by interview participants is presented in Figure 7.3, and Table 7.4 provides the more refined 'Types' of these activities. As discussed above, 23% of participants did not believe that any of their activities could be thought of as having an impact on attainment and these are recorded as 'None'.

Interview participants were most likely to choose an activity that fell within Level C on Figure 7.2. Level C activities are those that have the aim of raising attainment by raising Bourdieu's (1988) intellectual capital. A discussion linking the Levels with Bourdieu's theoretical work can be found in Chapter 6. In this context Level C activities are described as being the most similar to the teaching that takes place in schools, whereby students are taught about subject knowledge relevant to the national curriculum. Figure 7.3 shows that 63% (n=19) of interviewees elected to talk about an activity that they classified within Level C. When this percentage is recalculated based only on those who were prepared to talk about an activity (thus excluding the 'None' group), the proportion choosing to discuss a Level C activity rises to 83%. This suggests that the strategy chosen by most universities to operationalise the new requirement to raise attainment includes directly raising intellectual capital through teaching of national curriculum based material. This is in spite of concerns that outreach teams may lack the expertise to do this type of work. The majority of activities were referred to as 'Academic Tutoring', with 65% (n=15) of all activities discussed classified as belonging to this Type when categorised by the interviewees themselves (Table 7.4).

Figure 7.3: Levels of activities currently being delivered to raise attainment in schools
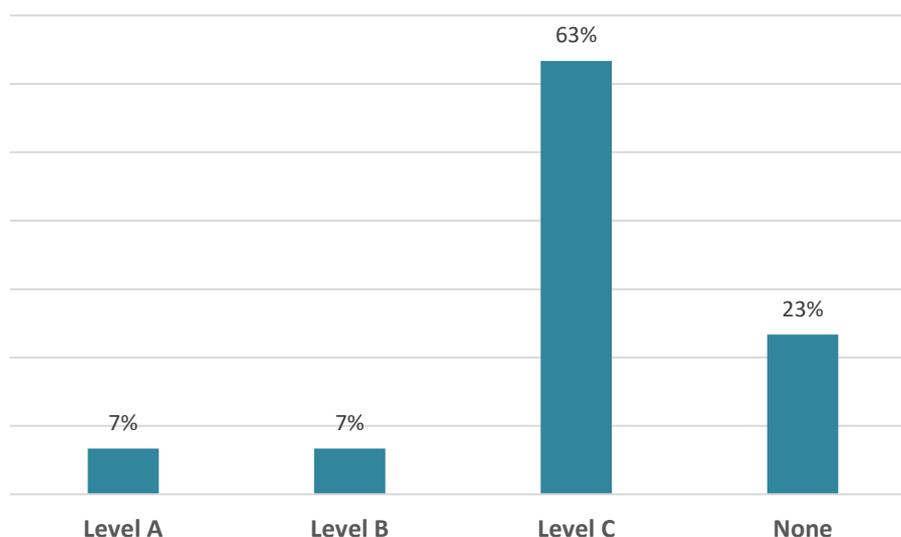
Table 7.4: Types of activities currently being delivered to raise attainment in schools

Attainment-raising activity	Level in Typology	HEIs describing activity	
		N	%
IAG or HE Awareness	Level A	1	4%
HE Subject Tasters	Level A	1	4%
Pastoral Mentoring	Level A	0	0%
Study Skills	Level B	1	4%
Attitudes to Learning	Level B	1	4%
Academic Tutoring	Level C	15	65%
Revision Classes or Subject Boosters	Level C	2	9%
Project Work	Level C	2	9%
Total of activities discussed		**23**	**100%**
None		7	*23%*
Total of interview participants		**30**	**100%**

The Activity Typology (Figure 7.2) often prompted a useful discussion around what an attainment raising activity should look like. The outcomes of these discussions highlighted some of the broader challenges identified by interview participants in delivering outreach work that raises attainment, and these are separated into three sections below: issues with defining what constituted an attainment raising activity, issues with showing impact, and issues with the role of student ambassadors in delivering these activities.

7.3.3 What constitutes an attainment raising outreach activity?

There emerged differences in interviewees' perceptions around what should be considered an 'attainment-raising activity'. Although most found the classification of Level B (developing skills capital) and Level C (developing intellectual capital) unproblematic in their attainment raising potential, issues arose when Level A (developing social or cultural capital) were also thought of as attainment-raising activities. The Activity Typology indicates, albeit with little explanation, that for Level A activities, attainment might be raised as a precursor to social or cultural capital being raised in relation to the field of education. Loosely known in the sector as 'aspiration-raising activities', these activities are designed to bring about attitudinal shifts, including developing students' knowledge and awareness of higher education. Several interview participants commented that they did not think the activities listed under Level A should be considered as attainment-raising activities as they did not believe they could have that impact, even as a by-product. This stands in marked contrast to the position that was taken in many Access Agreements where at least one type of Level A activity was referenced as having the ability to raise attainment by 45% of HEIs (see Table 6.2 in previous chapter), although it is acknowledged that these may be different HEIs from those of the interviewees. The quotation below provides an example of why the attainment raising abilities of Level A activities might be questioned.

"if you spend a day in a lab is that really going to help you raise attainment? More likely to give you an attitudinal shift than actually anything more substantive."

For others, the link between activities seeking to raising social or cultural capital and raising attainment was less problematic and they found it easy to accept that Level A activities could have an indirect impact on attainment. However, for many, particular types of activities within Level A were more likely to have a positive impact on attainment than others, suggesting perhaps that there was too much diversity within this Level. For example, it was felt a talk on the student loans system might not be aligned with attainment raising, whereas any activity that related to a subject area, such as a taster of a university lecture, might. The justification put forward by many was that although no teaching of the curriculum was involved, experiencing an inspiring subject-based activity outside of the classroom might work to spark or stimulate interest in that specific subject, which might then lead students to work harder at school and thus attain higher grades. A similar explanation was provided for activities giving accurate information about careers. If students were made aware of the subjects and grades required for progression towards a certain career, they would work harder at school to ensure that that career remained a viable option for their future. Indeed, there is evidence that raising

students' awareness of the salaries they could earn if they pursued a certain career can influence their decision making in terms of subject choice (Davies *et al*., 2017), but this has not been specifically linked to improvements in attainment. Although not mentioned by interviewees explicitly, parallels can be drawn between these theorised transformations and the possible selves research presented in the Literature Review (Markus and Nurius (1986). For these interviewees, attainment-raising activities involved showing students a clear pathway towards a future career that was both possible and achievable for them.

In spite of this, theories underpinning why Level A activities might raise attainment were often not well developed and interviewees seemed uncertain about the processes involved. As a consequence, this analysis will not focus on Level A but rather those areas in Level C where interview participants placed the attainment work their universities were doing. In spite of the mixed views around whether Level A activities should be considered as raising attainment or not, it is perhaps revealing that only two interviewees elected to discuss an activity within Level A when asked to choose their most important attainment raising activity.

Many went on to explain that although they thought Level A activities might raise attainment they were less confident that this could ever be shown in terms of grade increases, and it appeared to be this need to evidence impact that was driving their choice of activity. Referring to Level A activities one participant made the following comment.

"Although I do think that for some those activities can lead to gains in things we know are linked to attainment, like motivation and confidence, I doubt we could ever prove that in terms of hard stats."

This speaks to the unclear and unestablished relationship between aspirations and attainment that was discussed in the Literature Review (Cummings *et al*., 2012; Gorard and See, 2013). Although there is some evidence that the attitudes, aspirations and behaviours of young people may play an important role in explaining the attainment gap between higher and lower socio-economic groups (Goodman and Gregg, 2010; Ball, 2010; Reay *et al*., 2013), it is as yet unproven whether interventions to raise these aspirations or change attitudes towards education could lead to improvements in attainment (Gorard and See, 2013; Carter-Wall and Whitfield, 2012). Thus it is unclear whether outreach interventions designed to provide students with the social or cultural capital that is needed to succeed in education will translate directly into improved attainment.

7.3.4 The need to show impact

The requirement to show the impact of their activities was of fundamental importance to interviewees and it became clear that this was the reason many HEIs were choosing to deliver Level C activities. Particularly, the perceived pressure to show the impact on individual student's grades was cited as a reason justifying the move to Level C activities over those in Level A where links with attainment appeared more tenuous.

"In terms of us being able to say, 'We've made a difference due to our intervention', we have to do something directly with a group of students to help them pass their exams, so we can measure our outcomes."

"The very draconian evaluation that we are now being asked to do is like prove that you put in a pound of pork and prove that you got those 12 sausages out."

Thus, at time of interviewing, WP managers were designing activities that they felt would have the best chance of having a direct impact on participants' attainment. This position may have changed since the publication of the two guidance reports which suggest that activities which indirectly support attainment would satisfy the OfS's requirements. Drawing on the quotations above, it is felt by this researcher that this message must be emphasised by the OfS themselves to avoid universities focusing on direct attainment raising.

Returning to the challenge of showing impact on Key Stage grades, interview participants were ambivalent about whether it would ever be possible to show impact in this way. For some, they thought that working closely with a group of students on curriculum based material (Level C) *might* yield positive outcomes in terms of grade increases, whereas others were less confident that an impact on attainment would ever be detectable. I will build on these ideas later in the chapter when I focus on specific attainment-raising activities. For now it is worth noting that many activities currently being delivered to raise attainment, although aligned with a Level C activity, aiming to raise intellectual capital, tended to be embedded within a larger flagship activity that also aimed to build students' social or cultural capital through other experiences for example a campus visit or listening to a talk aiming to inspire or motivate or mentoring from student ambassadors aiming to act as a trusted source of information. This was not seen as problematic by interview participants in conceptual terms, but rather, concerns were raised over whether it would be possible to isolate the additional impact of a new activity on students who were already engaging in now well-established activities as part of a long term intervention.

Furthermore, nearly all participants remarked that the majority of their entire outreach offer currently fell within Level A. There remained a strong belief that aspirational activities were an important part of universities' outreach mission and that these activities did have a positive impact on future progression to higher education and it would be a mistake to stop delivering them. Harrison and Waller (2017b) found similar views amongst ex-AimHigher managers, and this legacy appears to remain true for outreach managers today. There was consensus amongst the managers interviewed that they would be unlikely to reduce the Level Apart of their outreach offer, even though they were now being asked to focus on raising attainment.

Building on this point, the picture is varied in relation to whether the activities discussed by interview participants were new activities to raise attainment, or work already being delivered. For example, 61% (n=14) of interview participants who were prepared to talk about their institution's attainment-raising activities remarked that they had already been delivering the activity before the new requirement was released. For some (22%, n=5) this was as early as under AimHigher, and they were now developing them further as a response to the guidance. Others indicated (17%, n=4 that the new policy requirement had prompted them to look at their existing outreach offer and reconsider which activities might raise attainment, reframing them in this context even when this may not have been their original aim.

"This programme was not set up to directly go in to address attainment and raise it. But where there has been that change of tack then we are looking at, well, have we got evidence that it potentially raised attainment or not? And I think that can be said for a number of different initiatives, not just here but across the board."

The fluidity in relation to what could be classified as an attainment-raising activity perhaps stems from the underlying sense of confusion regarding the expectations as to what universities should be doing to raise attainment and how they can best contribute. Is it enough to raise attainment indirectly through developing social or cultural capital? Or do universities need to raise intellectual capital directly through teaching? The two recent guidance reports suggest the former might now be acceptable but at the time of interviewing this was not known and a perceived pressure to show impact on grades in standard tests seems to encourage the latter approach. Owing to these unanswered questions, HEIs perhaps appear arbitrary in their approaches to the policy, relabelling existing activities, or adding small-scale attainment activities to larger flagship programmes. Although small-scale activities appear acceptable within the latest guidance provided (OfS, 2018b), it is questionable whether this work could ever amount to differences at a national level in terms of the

proportion of students who achieve adequate grades to enter higher education. Once more I am reminded of the Implementation Staircase effect. Rather, HEIs may be in a stronger position if they were to put forward, as a consortium, a more strategic response to the policy objective – even if this were to push back on the requirement and set limits around what they feel HEIs should, and can, do when it comes to raising attainment in schools.

7.3.5 The role of student ambassadors

A further challenge identified by most interview participants was the role of student ambassadors, who are typically undergraduate students although in some cases postgraduates, in delivering activities. As discussed in the Literature Review, research has identified many benefits of employing student ambassadors to deliver activities, and as a result they are at the forefront of delivery today (Gartland, 2015). In spite of this, concerns were raised by WP managers over the training, experience and skills of ambassadors, who are unlikely to have the expertise that is normally associated with teaching. Indeed, adequate tutor training was raised in the Literature Review as a prerequisite for effective tutoring activities, although this need not be professional training. For many, the decision to continue using student ambassadors to deliver attainment-raising activities was a financial one. Several interview participants commented that they were working with limited budgets and for any new activities there was pressure to keep costs to a minimum. Thus many attainment-raising activities were being delivered by student ambassadors rather than teaching professionals.

The quality of the information student ambassadors are able to provide has been questioned elsewhere (Gartland, 2013; 2014; Slack *et al.*, 2012; Ylolen, 2010) and this is even more pertinent to the success of attainment-raising activities, where accuracy of information relating to the curriculum is so important. I will revisit this challenge in the next section when I move on to consider the mechanisms or processes by which particular attainment-raising activities are expected to work.

Having dealt with the broader challenges of implementing outreach activities to raise attainment, I next move on to examine the specific activities being delivered. When assessing whether outreach activities are effective, the higher education sector has come under some criticism for being unable to clearly articulate the mechanisms for change that underpin these activities and lead to the desired outcome. According to Harrison and Waller (2017a), a clear 'theory of change' is a pre-requisite for a successful activity, allowing us to identify the changes that are expected to occur for students who engage in the intervention. Weiss (1995) defines a theory of change quite simply as a theory of how and why an initiative works. It could be argued that, owing to the unclear role of universities in raising

attainment in schools and the ambivalent views on how attainment-raising activities should be conceived, a clear theory of change is even more important for attainment-raising activities.

In the context of this thesis, I would expect the theories of change put forward for attainment-raising activities to show how engagement in outreach leads to the development of Bourdieu's intellectual capital. However, it is also important to consider the unique position of universities and the ways in which they are best able to contribute to this intellectual capital development. What, at source, the government's attainment raising strategy is seeking is how those students who may have comparatively low levels of all of Bourdieu's capitals within the field of education, might achieve an increase in attainment through the efforts of universities when the vehicles of both school and family have not succeeded. Although many interviewees were uncertain about how activities seeking to develop social or cultural capital in the field of education could ever lead to an increase in attainment, it may be the development of these types of capital in which universities have the most to contribute. Indeed, the report by Harrison et al. (2018, p9) suggests that activities should draw on "established concepts from sociology (e.g. cultural capital), psychology (e.g. self-efficacy) or other social science disciplines" and so it is interesting to see whether universities are drawing on these when designing attainment-raising activities. The next section examines how attainment-raising activities are thought to raise attainment, incorporating all of Bourdieu's capitals.

7.4 What are the theories of change for attainment-raising activities?

Interview participants were asked to discuss how they expected their chosen activity to work to raise attainment. Discussions included whether attainment would be raised directly, or through intermediate-level personal outcome objectives that were thought to then lead to raised attainment. In doing this I lay out the theory of change steps explaining the interview participant's perception of how the input (the activity itself) would achieve the complex business of raising a student's attainment at school. It is perhaps unsurprising that many different theories are offered, some of which appear to contradict ideas presented earlier in this chapter.

Whilst most interview participants who discussed an attainment-raising activity (83%) classified their activity as belonging within Level C, suggesting work that is designed to directly raise attainment through raising intellectual capital related to the national curriculum, this direct mechanism was often not what was presented in their theory of change. The terminology used and the detail of concepts varied between interview participants, but generally, the mechanisms by which attainment-raising activities were expected to work included influencing constructs that Bourdieusian analysis might consider elements of social or cultural capital within the field of education. These consisted of a

number of attitudinal or psycho-social characteristics such as developing self-confidence, self-efficacy, resilience, motivation, engagement in school, building inspiring relationships with role models and teaching a love of learning. One or a number of these attitudinal shifts may have been put forward as occurring as a result of a single activity. Thus it appears that the majority of universities interviewed are choosing to implement attainment-raising activities that support attainment indirectly by augmenting the intermediate steps that can be theoretically linked to a final rise in attainment. This is in spite of the lack of clarity over what an attainment-raising activity should consist of. It was also suggested that some activities would also develop academic skills such as skills in critical thinking, the ability to synthesize and evaluate, academic writing skills and time management skills, aligned with Level B.

Taking a different approach, a minority of interview participants claimed that their activities would increase subject knowledge and raise intellectual capital directly by teaching. In these models there were no intermediate steps and it was thought that attainment would be raised as a direct result of the subject knowledge received during the activity.

Within the interview responses there was a great deal of variation in the depth of detail and explanation provided. However, Academic Tutoring was by far the single most popular choice (cited by 65% of participants) and so I shall focus on this particular type of outreach activity, with its smaller set of associated theories of change, to examine more closely the processes through which attainment raising is expected to be achieved.

7.4.1 A lens on Academic Tutoring

In this section I set out five different theories of change that were provided in regard to Academic Tutoring when delivered in an outreach context. Thus in spite of narrowing the focus to this one type of activity, there remains a great deal of diversity in the way this one type of activity is delivered. Academic Tutoring appeared to mean different things to different interview participants and there was variety in terms of how it was being delivered. For example a common model was to place student ambassadors in classrooms to act as classroom assistants and for teachers to choose how and whom these assistants supported. Other models took place out of school time, such as homework clubs which could have been delivered in school, in the community or on a university campus. There was also variety in the age of the school students being tutored, with examples given from primary school and throughout secondary school up to year 13. There was less variation in the backgrounds of the tutors themselves, with nearly all tutoring delivered by student ambassadors. There were only three cases where trained teachers had been employed specifically for this role. Thus the prevailing model

for Academic Tutoring, when delivered in an outreach context, was to arrange for student ambassadors to act as tutors and this was adopted by 80% of interviewees who spoke about Academic Tutoring. As previously discussed, this has obvious appeals in terms of keeping costs low but challenges in relation to training and expertise. To reiterate ideas presented in the Literature Review, this kind of Academic Tutoring can be likened to cross-age peer tutoring. Research on peer tutoring suggests that tutors need not be trained teaching professionals in order to see effective outcomes for tutees.

In spite of this interview participants were questioned over the extent to which they thought student ambassadors were able to fulfil the role of tutor and whether it was plausible that students of this level could raise intellectual capital relevant to the national curriculum. Student ambassadors are rarely trained teachers and so this provided a common sense check, important for all good theories of change (Connell *et al.*, 1995). A minority of interviewees felt confident that their student ambassadors were capable of acting as teachers and directly raising subject knowledge. Others were uncertain, suggesting that it was perhaps more plausible for tutoring delivered to primary school students than to older year groups such as GCSE and A-level. Taking a different stance, others stated explicitly that the student ambassadors were *not* there to teach, they did not have this expertise and so their role was to help raise attainment in other ways, often by acting as an inspirational role model. This idea chimes with the research on peer tutoring discussed in the Literature Review which identified the importance of meaningful relationship developing between tutor and tutee in creating a learning environment in which the tutee could feel free to ask questions. Frequently, it was this distinction that appeared to drive the theory of change put forward: whether interviewees believed it reasonable to expect student ambassadors to raise subject knowledge *directly*, through teaching, or whether any raised attainment would more likely be the result of an *indirect* process.

Figure 7.4 shows the theory of change put forward by interview participants who conceived Academic Tutoring as having a direct impact on attainment. The process is fairly straightforward, whereby student ambassadors teach subject knowledge to pass on intellectual capital, which then leads to tutees achieving higher levels of attainment. Four of the 15 (27%) HEIs interviewed delivering Academic Tutoring believed that this direct impact on attainment was possible using this model. These WP managers are perhaps simplifying the theoretical context within which Academic Tutoring activities can raise attainment. This will cause problems when evaluating activities as an impact on final exam grades may not be detectable.

However, a much more common response was that student ambassadors were not there to teach or impart subject knowledge, and any increase in attainment would be caused by an indirect process. Rather, models posited an interconnected set of psycho-social processes which would then lead to improved attainment. These included raised confidence, raised self-efficacy, raised motivation and raised engagement. Providing psycho-social support tailored to the needs of the individual has been reported as effective elsewhere (Rogers, 2009). Although not incorporated explicitly into the theories of change put forward, these psycho-social concepts can be linked to theory discussed in the Literature Review such as increasing academic self-efficacy (Bandura, 1997) or imagining new possible selves that tutored students might become in the future (Stevenson and Clegg, 2011). In this context tutoring appears to be developing students' habitus within the field of education into one that orients them towards achieving the qualifications needed for HE. This is implicit in the concepts of raising motivation or confidence towards learning.

An important initial step on which the process of raised attainment was often based relied on the building of a close and supportive tutor and tutee relationship. It was suggested that student ambassadors were in a unique position to cultivate this relationship, being only slightly older and seen by tutees as an inspirational role model figure. A number of slightly different theories of change were put forward, although all included a step whereby this relationship was built. Indeed, research into peer tutoring also foregrounds the building of meaningful relationships between tutor and tutee as important for successful outcomes (Masten and Reed, 2002; McDaniel and Besnoy, 2019; Damon and Phepls, 1989). The involvement of student ambassadors in outreach activities has been predicated on a similar idea, research has shown they act as role models, trusted by school students who are only a few years younger (Gartland, 2013; Slack et al., 2012; Sanders and Higham, 2012; Doyle and Griffin, 2012) However, research by Gartland (2015), suggests that this relationship does not develop in every context, and it is critical that ambassadors see themselves as equals to the students they are tutoring. As this intermediate step appears critical to the success of the academic tutoring activities proposed by interviewees, further research is needed to test whether and under what conditions this occurs in Academic Tutoring activities..

The four process chains shown in Figures 7.5 to 7.8 thus cover the indirect mechanisms suggested by the remaining 11 (73%) of HEIs interviewed delivering Academic Tutoring. It should be noted that Figure 7.8 is slightly different in that this was put forward as a theory of change to help already high achieving students achieve the highest grades – a topic I will return to in more detail in the next section (3.3).

Figure 7.4: Theoretical direct impact of Academic Tutoring on attainment – put forward by 27% (n=4) of participants choosing to discuss an Academic Tutoring activity

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┌─────────────────┐      ┌─────────────────┐      ┌─────────────────┐
│ Student         │      │ Tutees gain     │      │ Tutees achieve  │
│ ambassadors     │  →   │ increased       │  →   │ stronger        │
│ deliver subject │      │ knowledge in    │      │ attainment in   │
│ specific tutoring│     │ tutored subject │      │ tutored subject │
└─────────────────┘      └─────────────────┘      └─────────────────┘
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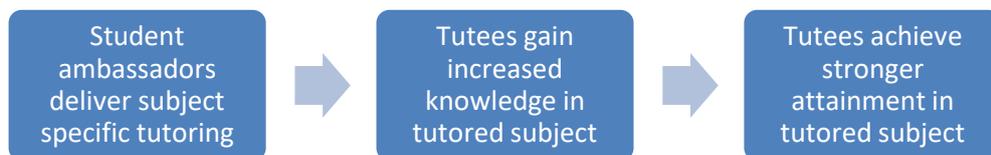
Figure 7.5: Theoretical indirect impact of Academic Tutoring on attainment One – put forward by 27% (n=4) of participants choosing to discuss an Academic Tutoring activity

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┌─────────────┐   ┌─────────────┐   ┌─────────────┐   ┌─────────────┐
│ Student     │   │ Tutees see  │   │ Tutees      │   │ Tutees      │
│ ambassadors │ → │ tutor as    │ → │ motivated to│ → │ achieve     │
│ deliver     │   │ postivie    │   │ engage in   │   │ stronger    │
│ subject     │   │ role model  │   │ class       │   │ attainment  │
│ specific    │   │ and are     │   │             │   │ in tutored  │
│ tutoring    │   │ inspired to │   │             │   │ subject     │
│             │   │ "be like    │   │             │   │             │
│             │   │ them"       │   │             │   │             │
└─────────────┘   └─────────────┘   └─────────────┘   └─────────────┘
```
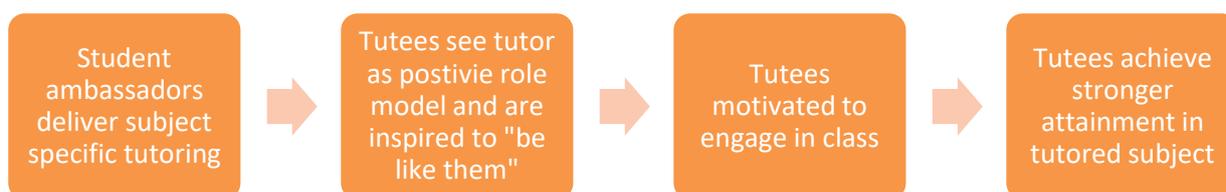
Figure 7.6: Theoretical indirect impact of Academic Tutoring on attainment Two – put forward by 20% (n=3) of participants choosing to discuss an Academic Tutoring activity

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┌─────────────┐   ┌─────────────┐   ┌─────────────┐   ┌─────────────┐
│ Student     │   │ Tutees build│   │ Tutees build│   │ Tutees      │
│ ambassadors │ → │ strong      │ → │ self-       │ → │ achieve     │
│ deliver     │   │ relationships│  │ confidence  │   │ stronger    │
│ subject     │   │ with tutor  │   │ and/or self-│   │ attainment  │
│ specific    │   │ and feel    │   │ efficacy    │   │ in tutored  │
│ tutoring    │   │ supported   │   │             │   │ subject     │
│             │   │ academically│   │             │   │             │
└─────────────┘   └─────────────┘   └─────────────┘   └─────────────┘
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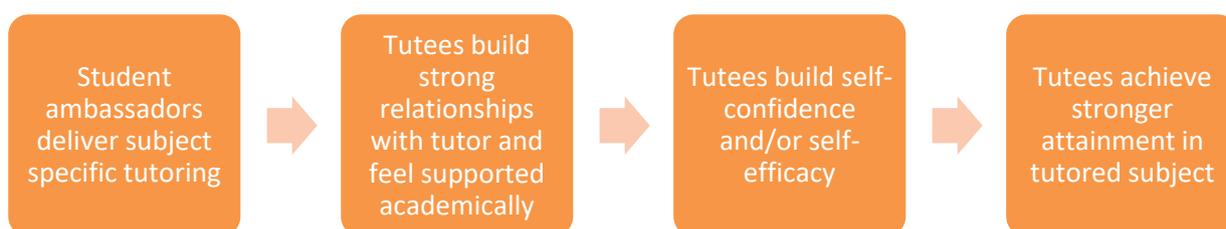
Figure 7.7: Theoretical indirect impact of Academic Tutoring on attainment Three – put forward by 13% (n=2) of participants choosing to discuss an Academic Tutoring activity

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┌──────────┐  ┌──────────┐  ┌──────────┐  ┌──────────┐  ┌──────────┐
│ Student  │  │ Tutee    │  │ Tutees   │  │ Tutees   │  │ Tutees   │
│ ambassad-│→ │ feels    │→ │ build    │→ │ motivated│→ │ achieve  │
│ ors      │  │ supported│  │ confidence│ │ to engage│  │ stronger │
│ deliver  │  │ by their │  │ in tutored│ │ in class │  │ attainment│
│ subject  │  │ tutor to │  │ subject   │ │          │  │ in tutored│
│ specific │  │ ask      │  │           │ │          │  │ subject  │
│ tutoring │  │ questions│  │           │ │          │  │          │
│          │  │ that they│  │           │ │          │  │          │
│          │  │ didn't   │  │           │ │          │  │          │
│          │  │ want to  │  │           │ │          │  │          │
│          │  │ ask in   │  │           │ │          │  │          │
│          │  │ class    │  │           │ │          │  │          │
└──────────┘  └──────────┘  └──────────┘  └──────────┘  └──────────┘
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Figure 7.8: Theoretical indirect impact of Academic Tutoring on attainment Four (high attaining students) – put forward by 13% (n=2) of participants choosing to discuss an Academic Tutoring activity
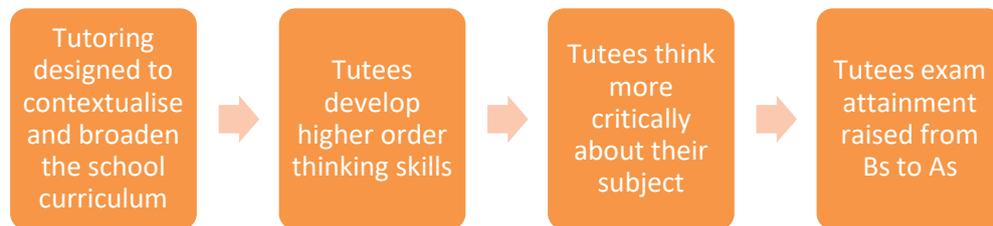
Although all processes end with a theorised improvement in attainment of the tutored students, nearly all interviewees (82%, n=9), when putting forward an indirect theory of change (Figures 7.5 to 7.8), felt that evaluation of these activities may never show a causal impact on attainment. So although these activities were described as having the aim of raising attainment, when interviewees were asked to express the theory of change or the actual mechanisms of how they might work to raise attainment, they were reluctant to see this as a probable outcome. Thus the theories of change put forward by the majority of interview participants for Academic Tutoring appear to offer an incomplete picture of the process of change that I am seeking. This is perhaps inevitable given the uncertainty surrounding the role of universities in raising attainment.

For some this was due to the complexity of the task of raising attainment. Some interviewees commented that outreach activities could not be viewed as scientific interventions that would inexorably lead to the desired output. Harrison and Waller (2017a, p83) warn of slipping into this 'reductionist mindset' in relation to outreach activities. Building on this difficulty to show impact on attainment, others put forward ideas about the myriad confounding variables against which outreach interventions cannot compete. These included negative variables such as home environments that are unsuitable for working, poor teaching and negative messages from teachers and parents as well as positive variables such as the other interventions delivered by the school and the influence of the school environment and support from teachers, family and peers. These ideas are supported in the literature as making up the complex interconnected network of influences on young people (Kintrea *et al.*, 2015; Hodkinson and Sparkes, 1997). For others issues were more practical, for example lack of access to tutees' examination data and small sample sizes rendering it impossible to show statistically significant results. Several interviewees (n=6) described how becoming a member of HEAT and contributing to a national dataset whereby data are aggregated for universities (such as that used in RQ2) provided hope that I would be able to show the impact policy makers demanded from the sector.

It was however clear that almost all were unsure about the methodologies that should be followed to make these claims.

Several widening participation commentators have noted the over-emphasis on the desire for measurable final outcomes (Burke, 2012; David, 2010). In light of the arguments above, there is a need to focus the measurement of attainment-raising activities on the intermediate outcomes put forward in Figures 7.5-7.8, such as self-confidence and self-efficacy towards education, rather than the final outcome of attainment in standardised tests. Although it is perhaps easiest to measure attainment in terms of grades and point scores, I need to think about what universities can realistically achieve through outreach in relation to attainment. As argued by interview participants, working with students to develop their self-efficacy towards a subject is achievable, and it is hoped that this will translate into higher grades, but many other variables beyond a HEI's control may also affect this final outcome.

Measurement of these intermediate outcomes would thus require a more nuanced understanding of attainment raising in relation to outreach activities. For example, it might be more useful to think about outreach activities as helping students develop their identities towards learning, building cultural capital in order to build intellectual capital, rather than simply gaining knowledge about a subject (Hodkinson and Macleod, 2010). Archer *et al*. (2010) comment on the complexity of this process, showing how learners construct their identity around specific subjects and their education more generally, with this then having implications for their feelings of self-efficacy in relation to their schooling. Other research has shown the importance of identities, particularly the idea of habitus and identities associated with social class, in influencing all areas of educational decision making, including later progression to higher education (Reay *et al*., 2005; Reay *et al*., 2010). Students' attitudes towards education are shaped by notions of familiarity and comfort, linked to what they feel is achievable for 'people like us' (Bourdieu, 1990b) and thus disadvantaged students may find it more difficult to overcome feelings of being an outsider in higher education which is typically portrayed as a middle class pursuit. Although learners' identities and self-efficacy may not be of interest to policy-makers when compared with hard attainment outcomes, engaging in these constructs may provide a more sensible way forward for universities when entering the complex arena of attainment-raising outreach.

There does appear to be a degree of mismatch between the ideas put forward here and those expressed earlier in the chapter in relation to Level A activities. Many were sceptical about whether Level A activities should be classified as attainment-raising activities. Yet some of these activities – particularly Pastoral Mentoring – could be theorised to work on the same basis as described in Figures

7.5-7.7, whereby a supportive relationship with a student ambassador leads to increased confidence, self-efficacy and motivation. In this context student ambassadors may provide knowledge and information about pathways into HE, including the entry qualifications required, encouraging students to envisage HE as a viable option, thus forming a new possible self (Stevenson and Clegg, 2011). The reasons disadvantaged students are less likely to achieve at school are complex, but the solutions put forward through university interventions are always relatively simple. Broadly, outreach activities tend to provide advice and guidance and psycho-social support, and the attainment-raising activities described by interviewees appear to be no different here.

This does, however, raise questions about whether the Academic Tutoring that was described in many of the interviews really *is* tutoring, or whether mentoring or coaching would better describe the process. The only difference is that Academic Tutoring appears to be centred around discussing curriculum related material. It remains unclear whether outreach teams are 'looking in the right place' when doing this, especially as the national curriculum is something in which, by their own admission, they lack expertise. On the other hand, by choosing to focus on the intermediate steps outlined in figures 7.2-7.5 universities are showing that their attainment-raising activities are designed within a clear theoretical framework. In spite of this there are assumptions around the nature of the tutor-tutee relationship: these were always described as successful, being strong and supportive and having the potential to cause complex attitudinal and behavioural shifts in the tutee. However, research suggests that didactic processes of teaching when delivered by student ambassadors have not produced successful tutor-tutee relationships and may actually be detrimental to school student's self-efficacy in relation to their subject (Gartland, 2015).

Thus it seems that the Implementation Staircase of this particular policy includes a number of steps and twists and turns that may render the enacted policy unable to achieve its original objective. Next I examine the types of students towards whom the attainment-raising activities discussed in the interviews are being targeted. Putting aside whether attainment activities 'make sense' or not, it is reasonable to think that the participating students should be those for whom the policy was originally intended. Below I discuss how this is not always the case.

7.5 Which students are engaging in attainment-raising activities?

All interviewees were asked to provide information about the backgrounds of the students selected for inclusion in the attainment raising activity they chose to discuss. Until now I have observed relatively little variation in the nature of the attainment-raising activities being delivered by different

types of HEI (categories provided in Tables 7.1 and 7.2), but strong differences do emerge in the backgrounds of the students who are targeted for inclusion in these activities.

High tariff HEIs were almost exclusively targeting their attainment-raising activities towards students who were already attaining higher grades at school. Interviewees from these HEIs spoke of requiring students to have achieved good GCSE grades in order to be eligible to participate. This was often explained within the context of the high tariff entry requirements for that particular university. Thus high tariff HEIs appeared to be working to raise the attainment of already high attaining students to allow them entry to their own institution. The following quote is indicative of this practice.

"[HEI name] is very hard to get into, it's mainly As and A*s so we are looking for students who are Bs but could be As so they have to have pretty good GCSEs to get into [HEI activity name] and the idea is to give them that little extra boost to help raise their attainment".

To extend this line of enquiry all interviewees were asked directly whether they were working with the students identified in Chapter 4 (RQ1) as most in need of attainment-raising activities. Here I isolated those who were not likely to achieve five good GCSEs as those to whom attainment-raising activities might best be targeted. This was in light of the same evidence referenced in the OfS (2018b) guidance discussed at the beginning of this chapter - that students need to achieve this benchmark in order that higher education remains a viable option for their future (Crawford, 2014). Although not exclusively, the majority of high tariff HEIs (80%, n=8 of 10 high tariff HEIs) responded that they did not engage with these students in any of their outreach activities as they were already under pressure from the OfS to diversify the student intake to their own university and these students were not seen as potential applicants. The following quote provides an honest account of the pressures high tariff universities are facing.

"But we are under huge pressure to show even more so now with OfS, they are just going to be judging us on outcomes and the outcome they are concerned about is [HEI name]'s intake. Now if I go and work with a million, if there are million, C/D borderline students at GCSE, 0.01% of them are ever going to end up getting the A-level grades they need to get to [HEI name]. So there is no point in that work happening."

Whilst this practice is not specific to attainment-raising activities, and has been reported elsewhere in relation to general outreach delivery (Rainford, 2017), it remains true following this shift in policy direction.

Thus for high tariff universities, attainment-raising activities were often aligned with the tariff requirements of their own institutions in order that disadvantaged students may be recruited. An example of this was given in the theory of change presented in Figure 7.8 which describes raising the A-level grades of students from Bs to As). Throughout this research I have attempted to separate the widening participation agenda from the fair access agenda, focusing on the national goals of widening participation to higher education. The practical strategies employed by high tariff HEIs in relation to raising attainment are illustrative of why this is necessary. It could be argued that the attainment-raising activities presented by the majority of high tariff HEIs will do little to achieve the national goal of widening participation, but rather only seek to reallocate that participation by raising attainment to attend high tariff HEIs (Harrison and Waller, 2017b). Furthermore, by selecting only those students who already meet certain levels of academic attainment, this ignores the societal and structural issues that start early in the life courses of many disadvantaged young people and accumulate to shape academic attainment. Returning to Bourdieu (1986) young people from working class backgrounds may lack the appropriate habitus or a self-confidence enabling successful navigation of the education system, which ultimately affects educational achievement and attainment. This means that achieving even the B grades at A-level that this particular high tariff HEI are attempting to raise to A grades are an unlikely future prospect. Thus, although it is wholly possible that working with some students to raise A-level grades from Bs to As may indeed help improve the progression opportunities of certain students, this is unlikely to tackle the issues of educational disadvantage that have been reported as driving the differences in participation rates to higher education as a whole (Crawford, 2014). This issue speaks to Harrison and Waller's (2017b) 'deadweight' effect raised in previous chapters where resource is targeted towards those who were already likely to progress to higher education.

Contrastingly, medium and low tariff universities talked about their intention to target and work with lower achieving students and many (65%, n=13 of 20 medium and low tariff HEIs) said that they intended to engage specifically with the students who were not expected to achieve five good GCSE. One university mentioned targeting low Key Stage 2 achievers although others were less specific about individual targeting and talked about working within schools where Key Stage 4 results were below the national average. Although ostensibly congruent with the policy aims, there were problems here too. For most (85%, n=17), targeting of individuals was negotiated through the school teachers themselves, and it was these actors who appear to have the final say over which students attended. Several interview participants said that they were clear with teachers that their programmes were not 'Gifted and Talented' schemes, whilst others talked about asking teachers to identify those with 'potential'. Thus although medium and low tariff universities were clear about their *intention* to work with lower attaining students, the level of information provided to teachers regarding the students to

be engaged was often vague and processes of selection were not entirely clear. The extent to which the students being selected for participation in outreach require, or already possess, Bourdieu's capitals relevant to education is therefore entirely the decision of their teachers.

When questioned on this, some interviewees suggested the explicit targeting of students who were not expected to achieve five good GCSEs was not something they felt was appropriate. Some talked about schools not wanting to release these specific students as raising achievement amongst 'borderline' students is a prime concern of schools themselves (Gillborn and Youdell, 2000 and Williams *et al.*, 2010), and as a result teachers felt these students should be in the classroom and participating in lessons. However, when activities were opened up to whole classes, this was less of an issue. Thus, in terms of engaging with students whom I have identified as most 'in need' of work to support their attainment, interview participants talked about barriers in accessing these particular students. For those who were less confident in the improvements their activities could make on these students' attainment, it was felt that this was the right decision by schools where, after all, the staff were professionally trained to help these students.

These findings support data presented in Chapter 4 which shows high tariff HEIs working with higher attaining students and medium and low tariff HEIs with lower attaining students, although not explicitly. Owing to the differences in the academic attainment of the students engaged in attainment-raising activities, one could argue that medium and low tariff universities are working towards tackling educational disadvantage, whereas high tariff universities are focused on the recruitment of suitably qualified students. However, medium and lower tariff universities were also beholden to the needs of recruiting students, but for different reasons. Several warned of the financial struggles faced by their institution which meant that widening participation could not be a priority for them. Rather, this activity must yield students, and thus income for their institution. The following quote from a low tariff, post-1992 HEI explains this.

"A lot of what passes for WP in most universities, whether they will claim this or not, in most, not all there are some very good exceptions, but in most institutions it is about raising aspirations to come to your particular institution. And attainment raising is not working for that type of recruitment activity really, not directly or quickly in general"

A small number (n=3) of lower tariff HEIs questioned whether attainment-raising activities were relevant to them, as some did not have a minimum entry requirement, particularly at GCSE level. Thus the pressure faced by universities to recruit students, either to diversify their student body (high tariff universities) or to secure a sufficient number of students to generate income for the university (some

medium and lower tariff universities) appears to add to the numerous challenges preventing universities from engaging meaningfully in work that raises attainment in schools.

7.6 Conclusion

In summary, responses from the sample of 30 outreach managers were largely negative and very cautious towards the new government requirement that universities' widening participation initiatives should take on the aim of raising attainment in schools. Concerns were raised over the feasibility for universities to have any impact on attainment within the constraints of their current outreach delivery models. First, it was suggested that the time spent with students on outreach activities was not sufficient to bring about a change in student attainment, and second many questioned whether those delivering university-led outreach had the relevant expertise to effect this change. Whether those delivering outreach are student ambassadors or academic staff, neither group is trained in the subject matter of the national curriculum.

What appeared to be the greatest cause for concern, preventing outreach managers from supporting this new policy direction, was the tension between the task in hand, to raise attainment, and a further requirement ubiquitous in widening participation work - to provide evidence of impact. Here there appears a dichotomy, with many outreach managers believing that it may never be possible to show the impact of their individual activities on students' attainment that the government are asking, with so many other confounding variables also affecting students' educational outcomes. For this reason, there is a great deal of resistance from outreach managers in relation to setting outcomes-based targets for attainment. Yet recent guidance from the OfS lists 'at least one outcome-focused target to raise attainment in schools and colleges' as the fourth bullet point in their checklist of requirements for HEIs when creating their Access and Participation Plans (OfS, 2018a, p28), and so it appears this particular condition may be difficult to contest.

In spite of these tensions, the majority of managers interviewed were willing to discuss activities that they were currently delivering and they believed would *support* or *contribute* to raised attainment. The majority of institutions had chosen to deliver some sort of Academic Tutoring activity in order to fulfil the attainment raising requirement. This type of tutoring tended to be delivered by student ambassadors and was based around national curriculum content. When asked to explain why and how these activities were expected to raise attainment, the proposed theories of change were varied. The majority of outreach managers were not prepared to claim that the activities were able to raise attainment directly (although some managers were), but that this was likely to be achieved via indirect mechanisms. The mechanism or process of change that appeared to 'make sense' to most

interviewees was that the support provided by student ambassador tutors would lead to an increase in motivation or self-efficacy in the tutee. These changes included increased confidence or self-efficacy in the tutored subject, or feelings of inspiration drawn from working closely with a student ambassador, both of which, it was hypothesised by the interviewees, would lead to raised motivation to work hard at school and hopefully to higher academic attainment. For Bourdieu, these managers were describing processes of building cultural capital and helping students develop a middle class habitus, equipping them to successfully navigate their own education.

Concepts like 'confidence' and 'motivation' are well researched in psychology (Dweck, 1999; Eccles *et al*., 1983, Vallerand and Bissonnette, 1992, Vallerand *et al*., 1992), and although clearly complex, there is evidence that self-efficacy in particular can effect educational attainment through its effect on motivation (Jinks and Morgan, 1999; Pajares and Schunk, 2001 and Zimmerman *et al*., 1992). Self-efficacy, concerned with the judgements of personal capability (Bandura, 1997), has been shown to be malleable and open to alteration (Schunk and Ertmer, 2000). For example, students with high perceptions of self-efficacy were more likely to persevere with a task than students with low self-efficacy perceptions (Bandura and Schunk, 1981). Whether this research informed the theories of change presented in interviews it is not possible to say and perhaps a deeper engagement in this literature and would strengthen the design of Academic Tutoring outreach activities and their associated theories of change.

Nevertheless, if it is psycho-social areas such as confidence and motivation in which universities believe they can *realistically* contribute to raised attainment, perhaps these are what should be measured. Thus, proxies for attainment, rather than attainment itself may be more acceptable measures for the universities' outreach teams when evaluating their activities. Standard self-efficacy measures are already available to reliably measure changes in self-efficacy (Bandura, 2001) thus reducing the need for self-reported measures, the use of which has been criticised in the evaluation of outreach activities for their social desirability and priming effects (Harrison and Waller, 2017a). Although these constructs may be of less significance to policy makers than attainment itself, my research suggests that they are perhaps the most logical contribution for universities to make. Encouragingly, recent guidance commissioned by the OfS does suggest that using these constructs as a proxy for attainment may now be acceptable (Harrison *et al*., 2018a; OfS, 2019), although this research shows that these messages need to be strengthened to avoid different interpretations of the policy amongst WP managers.

Moving towards an evaluation model that allows universities to show how they have raised these constructs, in lieu of attainment itself, may encourage deeper engagement with the psycho-social concepts. For example, outreach teams are more likely to think about their specific activities and why they lead to raised attainment, for example, whether the strong tutor-tutee relationships on which they were basing their theories of change, were actually being built. From this I would hope to see different types of activities, rather than the strong movement towards Academic Tutoring, which appears to be a weak replication of what is already occurring within schools. Rather than 'what works' this will encourage a 'what makes sense' approach to evaluation that puts limits around the role of universities in raising attainment in schools.

Chapter 8: Discussion

In the final chapter of this thesis I bring together the findings from my analysis, further developing emergent themes and relating them, where relevant, to the wider context. The purpose of this research was to investigate the potential of university-led outreach to raise student attainment in schools as a precursor to widening access to Higher Education (HE). Research presented in the Literature Review identified students' prior attainment as the greatest barrier to disadvantaged young people when accessing HE (Crawford, 2014; Chowdry *et al.*, 2013). Thus, in theory at least, it is logical to conclude that in order to widen participation in HE, university outreach should be refocused towards raising the attainment of future applicants whilst they are still in school. Following this theoretical conclusion, the analysis chapters of this thesis (chapters 6 and 7) examined the practical responses employed by Higher Education Institutions (HEIs) in their outreach work to raise this attainment, with this objective also becoming a requirement of the regulator in 2017 (OfS, 2018b).

Research Questions (RQ) 1 and 2 drew on HEAT's quantitative dataset of historical outreach delivery. RQ1 examined the proportion of outreach delivered between 2004/05 and 2015/16 that had the potential to widen access to HE by raising pre-entry qualifications to the standard required for entry to HE. RQ2 then incorporated these data into a quasi-experimental research design in order to demonstrate how tracking data can be used to show impact, with a full debate of the limitations involved in doing this. RQ3 drew on two qualitative data sources to better understand the nature of attainment-raising outreach being delivered by HEIs. Throughout my analysis the role of university outreach in raising attainment in schools has become less clear, marred by inconsistencies and impracticalities. While the theoretical argument involving universities may have been compelling, the case is far more complicated when it comes to implementing the policy on the ground.

Bringing together the RQs and analyses presented in this thesis, four discussion points will be developed in this final chapter. First, that the majority of outreach is not targeted towards the 'right' students in order to tackle the socio-economic inequalities in access to HE, and that the increasingly neoliberal climate in which HEIs must operate is only serving to promote this practice. Second, that university-led outreach may only ever be able to have an indirect influence on school level attainment, and that this is incompatible with the current demand from Government for accountability by universities. Third, I discuss the value of the aggregate HEAT dataset, suggesting its real value is not as a 'scientific' predictor of impact evaluation; rather, its strength is in its capacity to monitor and show high level trends in delivery. Finally, I discuss the future direction of outreach, considering where the priorities should lie within the wider aims of furthering social justice.

8.1 Discussion point 1: Targeting the 'right' students in need of attainment raising interventions

Taking this first point, and reflecting on analysis provided under RQ1 (Chapter 4), less than one fifth (17%) of students who participated in outreach during the eleven year monitoring period were classed as 'in need of intervention' in order to raise their attainment in preparation for HE entry. All other students in the cohort of outreach participants (83%) could thus be considered part of Harrison and Waller's (2017b) 'deadweight', already on track to enter HE, or 'leakage', those for whom the policy was not intended. The HEAT dataset has provided the first opportunity to quantify the proportion of outreach being directed in this way.

Continuing with this line of enquiry, the analysis investigated changes over time: data showed a decline in the proportion of outreach being targeted towards students most in need of support to raise their attainment. Smaller proportions in this group were recorded in the latest reporting year (2015/16), compared with a time when AimHigher was at its peak (2007/08-2009/10). A loss of collaborative working and the intensification of marketization within the HE sector have been blamed for these trends (McCaig, 2015) alongside an increasing focus on institution level targets (Harrison and Waller, 2017a). The result has been a tendency towards outreach that is focused on recruitment *to* particular institutions, rather than on outreach which provides impartial advice about which HEI to choose and it thus more likely to be tailored to students' needs. It is not surprising, therefore, that the HEAT data show such a decline, as working with the students identified here as most in need of outreach is neither an easy nor a quick way for universities to meet their priority of ensuring adequate recruitment.

Furthermore, different types of universities are delivering outreach to different categories of students. Medium and low tariff HEIs are more likely than high tariff HEIs to deliver outreach that meets the Government's widening access brief, in other words, they engage with students in need of intervention to raise their attainment to the standard required for entry to *any* HEI. High tariff HEIs are working with already high attaining students in order to encourage their progression to their own selective institutions. As well as shown through data in RQ1, this finding was supported by data from the interviews conducted under RQ3 where managers working in high tariff universities often reported that their priority was to recruit disadvantaged students to their own institutions in line with the Government's fair access agenda. While widening participation seems to be a one-size-fits-all policy, with the most laudable of aims, in practice, it is being interpreted and implemented in very different ways across the sector. This is arguably because through widening participation Government

has been trying to achieve more than one aim: both widening access, and ensuring that this access is fairly distributed. However, Government has not been sufficiently precise in its guidance regarding policy implementation. This has allowed significant drift and hence variation in outreach delivery on the ground. Although this variation has been reported elsewhere (McCaig, 2015; Rainford, 2017), this research provides new evidence quantifying this variation (RQ1), as well as evidence that these practices are continuing under the most recent policy development - to raise attainment (RQ3).

Thus it appears that medium and low tariff HEIs are doing the 'heavy lifting' when it comes to increasing HE participation rates for disadvantaged students, working with students who are less likely to enter the system. High tariff HEIs, on the other hand, are able to operate an almost predatory style of outreach where they work with students already intending on entering HE, to encourage their progression to a higher tariff university. It follows, therefore, that this could prevent the progression of these students to a non-high tariff university. With national tax data showing the greater monetary value of degrees from higher tariff universities (Belfield *et al.*, 2018), this type of work is perhaps justified as arguments can be made for academic elitism (Huisman, 2008). However, it must be acknowledged that within the context of widening participation, the approach adopted by high tariff HEIs is likely to do very little to raise progression rates for disadvantaged students overall. Yet attainment-raising outreach also emerged as problematic for some low tariff HEIs. Although data from RQ1 suggested that lower tariff HEIs were doing the most to tackle educational disadvantage by working with students who would not otherwise have entered HE, findings from the interviews showed that some universities were struggling to see how the attainment raising policy was relevant to them. Some of the most inclusive HEIs do not impose a minimum standard qualification for entry and therefore outreach managers felt it did not make sense for their outreach to contribute to attainment-raising prior to students entering university. And so, like many high tariff HEIs, these lower tariff HEIs were also interpreting the policy within the context of their own institutional recruitment. Raising attainment is thus problematic across the sector, for different reasons.

Returning to Reynolds and Saunders' (1987) policy Implementation Staircase, a lack of clarity from policy makers at the top may be partly to blame for the drift in the implementation of the policy on the ground. This research exposes the different versions of outreach being conducted by different types of HEI and casts doubt over whether this will fulfil the overarching policy objectives. The findings raised in this discussion point require further interrogation by Government. Following this, regulators should provide clearer guidance on the targeting of students for inclusion in outreach, including the proportion to be engaged before the age of 16, and a measure of their prior attainment levels. This would ensure that a larger proportion of outreach was delivered to those most at risk of educational

disadvantage. Building on this point, it is recommended that Government advice on how outreach should be targeted and delivered needs to be less porous, much more precise and detailed, always acknowledging the different roles of HEIs across the sector. Currently, policies relating to widening participation are enacted differently by different types of HEI, and this should be explicitly recognised by Government. In Chapter 4 (RQ1), data showing changes in trends in delivery of outreach over time could often be linked to advice from governmental policy briefings and reports. This provides some evidence that policy guidance, when clear, can have a positive impact on what is being delivered on the ground. Without this advice it could be argued that HEIs will be left to interpret the policy in line with their own agendas. With pressures from an increasingly competitive market place, this is likely to prioritise recruitment objectives over genuine and impartial outreach that tackles educational disadvantage.

8.2 Discussion point 2: Clear expectations around attainment-raising in schools

The second point of this discussion relates to placing limits on what it is reasonable to expect university outreach to achieve in terms of raising the prior attainment of students whilst still at school. Setting aside the issues around targeting, raised in point 1, the impact universities are realistically able to make on school attainment is likely to be minimal. Although the case for university-led outreach to become concerned with raising prior attainment is theoretically strong, and this researcher is supportive of this policy direction, practical issues mean limits must be placed on what is achievable in terms of tangible outcomes. Encouragingly, the two reports published after the interviews for this research were conducted suggest the OfS are softening their rhetoric in relation to showing the impact of attainment-raising activities. The reports support the use of outcome measures that focus on the intermediate steps on the journey to raised attainment (such as self-efficacy), rather than only those that measure attainment directly (such as GCSE grades). This was a serious concern of the WP managers interviewed and appeared to be driving their largely negative attitudes towards the requirement for university outreach to raise attainment.

Thus it is recommended this message is conveyed explicitly in relation to raising attainment and communicated directly from the OfS – which it currently is not. Without this clarity, there is a risk that universities may continue to interpret the requirement to raise attainment in schools as one that is less nuanced than the OfS had in mind and expects direct involvement in teaching to the national curriculum.

Returning to the negative attitudes towards the requirement that outreach should aim to raise attainment in schools, there are likely to be other factors driving these views. The intensification of

marketisation within the HE system has led to increased pressure on universities to recruit students to their own institutions. Data from RQ1 suggests the blurring of lines between outreach and recruitment activities and some of the more candid interviewees confirmed this, stating they were under pressure from within their institutions to ensure that money spent on outreach was able to contribute towards progression to the university itself (rather than the sector as a whole). Outreach designed to raise attainment sits less well with these aims, the students in need of help with their attainment are less likely to be in a position to progress to HE within the near future and thus this type of outreach will do little to help meet recruitment targets.

In spite of these negative views, the majority of managers interviewed felt confident that their attainment-raising outreach activities were having a positive impact. Owing to the popularity of academic tutoring activities to raise attainment through outreach, a further recommendation, aimed at university outreach teams, can be made. The academic tutoring activities that were described by interviewees had commonalities with cross-age peer-tutoring interventions on which there is an extensive literature base. One specific commonality which was part of all theory of change models described in interviews was the strong and trusting relationship that would develop between tutor and tutee. This intermediate step is also seen as critical to the success of peer-tutoring and so its place in the theory of change models is supported by the literature. Given the importance of this, it is thus recommended that universities do not assume that this relationship occurs, but rather, evaluators test this stage when evaluating the activity. This is needed in light of research by Gartland (2015) which argues that when student ambassadors are put in a teaching role, they may not be well received by outreach participants. Further research is needed to test under what conditions a meaningful relationship can flourish within the context of an academic tutoring outreach activity.

Finally, I return briefly to the theoretical justification for attainment raising outreach. Outreach has now metamorphosed into work focusing on getting students over the attainment hurdle, rather than providing training to help them prepare for life at university. This makes sense when I consider targets aimed at improving access to HE in isolation which, for the sake of narrowing the focus of this thesis, I have done up until now. However, this makes less sense when considered in relation to student retention and success once at university. National data show that disadvantaged students are less likely to complete their degrees and achieve a Good Degree, known in the sector as 'student success' and also considered part of HEIs' widening participation remit (HEFCE, 2018; OfS, 2018a). Within this wider context, outreach that only supports pre-entry qualifications could be seen as wasted, even damaging. This is particularly true for disadvantaged students who report entering HE to be a strongly emotional process (Christie *et al*., 2008), the alleged feelings of not belonging are likely to be amplified

if they are also finding it difficult to achieve high marks. Thus, a more fruitful area for consideration may be for attainment-raising outreach to focus on providing students with the skills to help them thrive once in HE. I will return to this point later in this chapter, but for now I note that, even theoretically, raising students' pre-entry exam attainment may not be a sound way to tackle educational disadvantage in light of issues with student success. Arguably, universities do have the expertise to raise students' capacity for critical thinking, important for success in HE, and this could be achieved through outreach work, but this may not help students pass their pre-entry exams and subsequent access to HE. Yet helping students develop skills which would enable them to thrive academically (not socially), at university may be a more reasonable, practical and also theoretically justifiable form of attainment-raising outreach.

8.3 Discussion point 3: Showing impact and the value of the aggregate HEAT dataset

The second RQ of this thesis drew on the historically collected aggregate tracking dataset from HEAT to attempt to provide the much in-demand 'evidence of impact' in relation to participating in outreach. In this RQ I come closest to tackling the 'what works' question to which many in the sector are seeking an answer. In line with the overarching topic of this thesis, I examined the impact of outreach participation on attainment – specifically Key Stage 4 (GCSE) exams. Drawing on a quasi-experimental method, the findings were positive, with 54.0% of students from the outreach participant or 'treatment' group achieving five A*-C grades at GCSE including their English and maths compared with 38.6% from the matched comparison group, a +15.4 percentage point difference. Yet aggregate tracking data may not be the panacea for evaluation that some had hoped.

Setting aside the debates surrounding the appropriateness of experimental and quasi-experimental methods in educational research, I found my data limited in its ability to answer the 'what works' question. It was clear upon interrogation of the data that I would only be able to examine the overall impact of participating in outreach, rather than which parts of outreach might be working better than others, with too much variation in terms of delivery and data recording across the sector. That so many individuals are involved in the data collection process means precision in data quality is almost impossible to achieve. This will surely be disappointing for many practitioners who ask regularly what kinds of outreach activities they should be delivering.

Furthermore, findings from the interviews cast doubt over the extent to which the positive result can be considered reliable. When outreach managers were asked what they thought of the findings from the analysis, over 60% commented that this difference in achievement should not be entirely

attributed to participation in outreach, stating they were unconvinced that the treatment and comparator groups were truly similar. This scepticism stemmed from their personal observations that many students attending outreach activities demonstrated some sort of intrinsic motivation to progress in their educational journey. This selection may have been governed by teachers who identify some students as a having 'potential' or through application processes whereby students decide themselves to attend outreach activities. Either way, interviewees felt that this innate motivation had not been accounted for, even after the matching process. Nonetheless, many managers felt optimistic about their institution being a member of HEAT and contributing data to form a collective evidence base in the future. There seems to be a contradiction here, the evidence generated under RQ2 was felt to be unconvincing, and yet many are hopeful that HEAT's tracking data, when aggregated, will provide evidence of impact for the sector.

Perhaps a refocus around the purpose of HEAT is needed. Such high expectations of HEAT's aggregate tracking data to show the impact of outreach may be distracting from its real value: as a monitoring dataset giving details of the outreach being delivered by HEIs in England. Particularly in light of the inability of Access Agreement (AA) data to provide us with accurate and reliable information about the kinds of students to whom HEIs are delivering outreach (RQ3a), the HEAT data shown in RQ1 could add real insight for regulators. For example, returning to my recommended shift in emphasis from the 'what works' to the 'what makes sense' approach to raising attainment in schools, HEAT was able to provide some evidence of the high levels of deadweight and leakage in outreach delivered for this purpose. As the geographical spread of data recorded on HEAT's database increases over time, these data should also have the ability to show gaps in outreach delivery across the country, highlighting areas where students are missing out on outreach opportunities alongside gaps in specific categories of students receiving outreach.

In spite of this potential, this ambition appears a fairly low priority for regulators who are increasingly fixated on narrow definitions of 'what works'. Recent consultation regarding the approach that Government will take to regulating access and participation work, through the new Access and Participation Plans (OfS, 2018e), sees a shift towards measuring the 'outcomes' of participants rather than the backgrounds of who is actually being selected to participate. In this approach, evidence from RQ2, which meets high criteria according to OFFA's (2017a) guidance on how to evaluate, would surely be considered robust evidence, and yet my interview participants felt that the outcomes observed were not entirely attributable to outreach. Although this guidance has now been superseded (Harrison *et al.*, 2018; OfS, 2019), the real value of HEAT's tracking data may lie elsewhere.

It is recommended that all HEIs in England are encouraged to use HEAT to record their outreach delivery, through Government incentives. The HEAT database would provide a standard way for HEIs to report data to the regulator, reducing the time consuming process of completing lengthy Access and Participation Plan documents (previously AA) and provide Government with access to standardised data for outreach delivered across the country, thus providing an holistic picture of outreach being delivered on the ground, and to whom it was being delivered.

8.4 Discussion point 4: Outreach, where next?

The final point of this discussion chapter relates to the future of outreach delivery. To summarise the arguments made earlier in this chapter, the policy requiring HEIs to raise attainment in schools is fraught with practical difficulties and evidence from this research suggests that outreach may never have the impact on attainment levels at the scale needed to see a marked increase in HE participation amongst disadvantaged students. So, if attainment-raising on the scale needed is unlikely, I appear to have arrived at a theoretical and practical stumbling block. If the political consensus is that the socio-economic inequalities in HE participation need to be addressed, and that this stems from disadvantaged students not achieving the necessary entry requirements, then *how* can this be resolved?

If attainment in schools is the greatest hurdle to HE access then it is logical to conclude that resource must be directed towards raising this attainment. Yet the argument for why this resource should be funnelled through universities via their outreach interventions is not entirely convincing. There is currently very little evidence of the efficacy of outreach in augmenting pupil attainment, and evidence from the interviews conducted in this thesis reveal many objections towards the policy amongst outreach managers in universities. Rather, it is asserted that funding could be spent more effectively by schools directly, where staff are trained to deal with raising attainment. Yet frustratingly, this is where there has been a reduction in real term spending (Sibieta, 2018) and teachers are crying out for more investment from Government (Weale, 2018). Even the most recent budget has failed to prioritise education – a small amount having been given for 'the little extras' (Hammond, 2018).

But Government have very little regulatory power to redirect funds from outreach to schools following the changes made to the HE funding model. By introducing tuition fees, the money currently funding the HE sector, and therefore outreach delivery, now belongs to universities and can no longer be reallocated to other parts of the education system where it might be utilised more effectively.. On the other hand, it is worth noting that even if the Government were to redirect this money, it would do little to challenge the status quo. The problem of social inequalities in educational outcomes is far

more complex, being structural and systemic in its origins, and the £230 million spent by HEIs on access in 2016/17 (OfS, 2018f) would do very little to tackle this even if it were absorbed into schools' budgets. A far more radical approach is needed and I will return to this later.

For now, I consider what universities can do under the current funding conditions. If universities are not able to contribute significantly to raising attainment in schools, then I turn to an area where they do have autonomy: setting the attainment level required for entry. Far more can be achieved by lowering entry requirements, and removing prior attainment as a barrier to entry. Such practices have become known as contextual admission schemes and represent a potentially powerful way to improve HE participation rates for disadvantaged students who lack the necessary attainment levels for entry. Contextual admissions schemes involve using additional information about a student's socio-economic background, or other background context, in order to offer them entry with lower grades (Mountford-Zimdars *et al.*, 2016; Boliver *et al*., 2015). Such schemes are likely to be far more cost effective when compared with outreach interventions to raise attainment. Even if outreach interventions were to be effective in raising attainment, which is still in doubt, the number of students whom HEIs are able to work with is comparatively small. Contextual admissions schemes, if administered effectively, would lower entry requirements for those students whose grades may have improved as a result of participating in outreach as well as all other students within the newly eligible grade band whom they did not engage in outreach. These measures would also aid entry for mature students no longer in the school system for whom there is currently little support (Callender and Thompson, 2018), and who would not benefit from plans to raise attainment in schools.

Although a potentially powerful tool, contextual admissions schemes are not a form of outreach *per se*, and so this avenue does not help forge a path for future outreach delivery. Nonetheless, if the pressure were taken off universities to raise attainment in schools, attainment-raising outreach could focus on what was realistic to achieve. I have already touched on the need to develop students' critical thinking skills in order that they might thrive once in HE, and I believe this to be an important area where outreach designed to raise attainment could add value. A pertinent example here is the case of students who have entered HE with a BTEC qualification: evidence suggests that many students who enter HE via this qualification route lack the skills needed to succeed in HE (HEFCE, 2018). BTEC students enter HE with a qualification that *does* provides access to many universities, thus removing the attainment barrier, but *does not* appear to equip students with the skills they need to succeed once there. Attainment-raising outreach could feasibly fill this deficit, working with potential applicants to raise their skills in critical analysis and reflection (and the like for different subjects) before entry. In this sense, attainment-raising outreach would have the aim of supporting success

once in HE, rather than supporting pre-entry qualifications. Moreover, universities are equipped with the expertise to do this rather than raising attainment in GCSE English and maths. This is not to say that outreach should not be designed to tackle educational disadvantage for younger students, and HEIs should be more closely monitored on the extent to which they are working with students before the critical age of 16, identified in RQ1 as most in need of support. But attainment-raising may be more palatable for practitioners and the managers interviewed if it were reframed under student success objectives.

Finally, I would like to end this discussion chapter by re-examining the policy aim behind widening HE access, and review whether this really is the route to a fairer society, as promised by government (Cabinet Office, 2011; 2012b; May, 2016; Goldthorpe, 2013; Vignoles, 2013). The Government's intention is to continue to force up the young progression rate for disadvantaged students (DBIS, 2016) in an attempt to close the gap between the most and least affluent in society entering HE. These are laudable aims but my research has led us to question whether university-led outreach can achieve this goal on the scale government wish to see. Reay (2012) argues that a truly equitable education system is not possible within an inequitable wider society, as educational structures reflect the societies that build them. In England, inequality is tolerated and socially accepted and therefore, social inequalities will always be there, although these may change in form. Francis *et al.* (2017) support this, stating that current debates in educational policy sometimes 'forget' that social inequalities are deep-rooted; they have been a part of British education since it was introduced, and they remain firmly ingrained today. The neoliberal education system in England operates to preserve these inequalities. Returning to Bourdieu, the importance of parents' choice and involvement in their children's education ensures middle class parents pass on their own privileged capitals to prepare their children for success in education. These processes form the intergenerational transmission of the middle class habitus, or sense of entitlement to education, which ensures achievement within the field (Reay *et al.*, 2005; Reay *et al.*, 2010). Weis *et al.* (2014) describe this as producing a type of 'class warfare', where middle class parents mobilise their cultural, social and economic capital to invest and strategize in their children's education, thus ensuring they have a better chance than other people's children (Reay *et al.*, 2013). Outreach designed to 'fill up' these capitals does not deal with the cause of the inequalities and one could argue that real social progress will not materialise in practice.

Furthermore, these inequalities persist in different forms. Following the sector's massification and expansion the middle classes have created new ways to mobilise their capitals and thus maintain their position in the hierarchy. We see at surface level that far more disadvantaged students attend HE today than ever in history, and this paints a picture of more equitable access and thus social progress.

However, in order to maintain their class advantage, middle classes have managed to further differentiate the system into one that is steeply hierarchical and stratified, with the preference being to attend a high status elite university. Disadvantaged students tend to attend lower tariff institutions (Boliver, 2013) and as already discussed, graduates from these institutions tend to have lower earning potential (Belfield *et al.*, 2018). Thus, the social inequalities in the HE system have remained, although in a different and more complex form. It has to be said, however, that there are exceptions to this general pattern with some students from disadvantaged backgrounds being high level achievers (Thiele *et al.*, 2016).

Rather than the ideology of social mobility and poverty of aspiration that has prevailed in Government rhetoric, what is required is an educational approach that recognises and values working class as well as middle class 'ways of knowing'. This would perceive vocational routes of progression as equally valuable as academic pathways, rather than the former being seen as inferior (Reay, 2012). To achieve this, parity of income must be waiting at the end of both pathways. A socially just educational system can only materialise in a society where economic distance between individuals is reduced, ensuring those following vocational routes can earn as much money as those on academic paths. Such radical change would call for a redistributive earnings and taxation process that is certainly beyond the scope of this thesis and even the regulators of the HE sector.

But some change in some form *is* on the horizon for HE in England; at time of writing universities are awaiting the outcome of the Government's review of post-18 education and funding (DfE, 2018). There is speculation that student tuition fees may be reduced from their current level of £9,250 per year to £6,500, with universities bracing themselves for the financial uncertainty this will bring (Coughlan, 2018a). The review follows estimates made by the Institute for Fiscal Studies (IFS) that 45% of the loans borrowed by those entering higher education in 2017 will not be repaid by students in their working lives, and so must eventually be subsidised from the public purse (IFS, 2017).

It is anticipated that the reduction in fees may be applied only to subjects with lower average graduate earning potential, such as arts and humanities (Coughlan, 2018b). Students choosing to study subjects associated with a higher average wage premium, such as medicine and science, may continue to be charged higher fees, or higher fees still. Such changes would suggest that Government was trying to encourage further differentiation within the English HE system, following criticism from the National Audit Office that 'There is no meaningful price competition in the sector to drive down prices for the benefit of the student and taxpayer' (NAO, 2017, p9). In the context of this research, I have to question what impact such potential changes could have on disadvantaged students. Further differentiation

within the sector, where some subjects are seen as being of a higher status than others could impact negatively on disadvantaged students, as it might encourage their progression on to cheaper courses. A HE system which promotes greater choice, but choice influenced by cost and middle class knowhow rather than which programmes would serve the student best, is likely to favour higher social classes with their greater disposable income and cultural capital. Both the Russell Group and MillionPlus group of post-1992 universities have cautioned against this putative proposal, saying it would not encourage social mobility (Morgan, 2018), and so would apparently contradict the very aims of Government policy for widening participation.

There is also evidence leading us to question the idea that some courses really do provide greater value for money for students than others. Analyses of graduate wage premium tend to focus in averages rather than distributions (Davies *et al*., 2013). Moreover, research by the IFS shows that the earning potential of graduates is heavily dependent on the earnings of their own parents. Even after completing the same degrees from the same universities, graduates whose parents earned more went on to earn higher salaries than their peers from poorer families (IFS, 2016). This suggests that even after success within higher education, the influence of intergenerational economic, social and cultural capital transferred from parents to their children cannot be overridden when it comes to employment opportunities. Forcing further differentiation within the sector may only act to exacerbate the socially reproduced inequalities already observed.

Furthermore, it is as yet unclear whether, or how, the Government will fund universities if fees were to be reduced. Add to this declining numbers of applicants to universities, down by 5% for UK students in the 2017 application cycle, and a further 2% in the 2018 application cycle (UCAS, 2018), and the financial landscape becomes increasingly uncertain for the HE sector. Falling applications have been blamed partly on demographic changes, specifically a dip in the number of 18 year olds in England, although there is increasing concern over student debt and media reports questioning the benefits of going to university (Sodha, 2018). Whether or not the recent fall in applications is the start of a trend of decline awaits to be seen. Besides declining student numbers and the possibility of declining student fees, universities also face the challenges posed by Brexit, not least the likelihood of losing EU staff and vital research funding (Swain, 2018). All these factors accumulate to destabilize higher education, challenging universities' financial sustainability and autonomy.

In such uncertain financial times for universities, it could be speculated that funds currently available to widen participation may be diverted to other parts of university business seen as more pressing by those in charge. For example, to ensure adequate numbers of students are recruited, guaranteeing

income from fees, recruitment work is likely to take priority over outreach. Thus there may be further reductions in the types of students identified in RQ1 (Chapter 4) engaged in outreach, with the corollary being engagement of students seen as quick-wins for recruitment - those already in post-16 education on track to gain sufficient qualification for entry.

In reaction to concerns over the way widening participation policy is enacted by universities, the most likely move from the OfS will be to increase regulation. In an article for *The Daily Telegraph*, Sir Michael Barber, chair of the OfS said 'We will not hesitate to use our powers when necessary to improve access and participation' (Barber, 2018). But if the ways in which these powers are wielded are not perceived to be appropriate by universities, this could risk a further loss of good will, as already observed in interview responses reported in Chapter 7 in relation to the new requirement to demonstrate that outreach can raise attainment. As universities' financial sustainability is in jeopardy, and regulation is increased, outreach could change (adversely), from something a university 'wants to do' to something they 'have to do'. Indeed, concerns were expressed by some widening participation managers interviewed under RQ3b, (Chapter 7) that outreach had already moved from part of their institution's social responsibility to a box ticking exercise with less and less buy-in from senior leadership.

In spite of these disheartening thoughts I remain hopeful that positive outcomes will come from the Government's review. It is hoped that the Government's review of post-18 funding will take this opportunity to consider how they might go further and improve provision for part-time and mature students, as well as looking at the post-18 education opportunities available in Further Education Colleges, which are currently underfunded. Ensuring adequate provision for mature students should also be made a focus for university-led outreach delivered in the future. Flexible learning, for example, part-time courses have declined considerably (Callender and Thompson, 2018) and as Government participation targets currently only measure progression amongst young people (DBIS, 2016), mature students are largely neglected in outreach. This was visible from analysis of HEAT data in Chapter 4 where only 5% of those who participated in outreach between 2004/05 and 2015/16 were classified as mature. Yet ensuring flexible learning opportunities are available for mature students is an important vehicle for social mobility, offering a 'second chance' for those whose attainment (or other circumstances) meant they were unable to progress straight from school. Improved part-time options are needed to provide routes into higher education for mature students whose work or family responsibilities make full-time study impractical.

A wider consideration of the whole post-18 system is required in order to offer people a financially viable choice between academic routes and technical education such as the new T levels already

introduced and increasing apprenticeships to compete with (and complement) academic routes. Providing opportunities for a rich and diverse mix of qualifications and providers is essential for social justice, social mobility and the country's long term economic health. For those young people still in school, outreach should be embedded within the school's careers offer – which should be strengthened, placing opportunities for study in higher education alongside other routes.

In conclusion I bring the focus back to the main topic of this thesis – HEIs' role in raising attainment in order to widen HE access – and make the following recommendations.

8.5 Recommendations

Recommendation 1: Government should review targeting practices in relation to the educational stage and attainment of the students whom universities are engaging in outreach. Guidance should be released to encourage HEIs to engage larger proportions of students in outreach before the age of 16 and/or their Key Stage 4 (GCSE) exams. This practice would target students before their academic pathways are set and their attitudes to education become engrained. Guidance should also be clear that HEIs must prioritise those students whose attainment suggests they are not on track to progress to HE without assistance.

Recommendation 2: Universities' widening participation targets should be extended to reflect the collaborative nature of widening access. As well as the current institution-level targets measuring the background of students universities recruit to their own institutions, additional targets should be introduced to measure the contribution each university makes to progression to the sector as a whole or sub regionally to encourage collaboration locally. These targets should be held in equal regard to institution-level targets.

Recommendation 3: Government should be clear about the evidence they require in relation to university outreach that raises attainment in schools. There is currently a concern from WP outreach managers that universities will be held to account over schools' performances or be expected to show that outreach participants have achieved improved exam grades. Messages included in the two recent guidance documents commissioned by the OfS should be re-publicised and fully endorsed by the regulator perhaps through a topic briefing.

Recommendation 4: HEAT should be utilised for its monitoring capacity. Government should investigate using HEAT as a mechanism to provide the Office for Students (OfS) with data on the types

of students receiving outreach and where they live in the country. HEAT should remain independent of Government and provide impartial advice to support a properly informed regulatory system.

8.6 Next steps for this research

This thesis has prompted further research in three related but nonetheless different areas: first, in her work with the HEAT data, this author aims to exploit the aggregate dataset for its monitoring potential to a far greater extent in the future. As the use of HEAT increases across the HE sector, the implementation of minimum standards of data collection could yield data of higher quality, which could be used to compile a dataset of outreach delivered across England. Analysis of this dataset would then reveal 'gaps' in delivery where resources could be focused.

Owing to the popularity of Academic Tutoring activities delivered to raise attainment, a second strand of research could investigate the benefits and limitations of Academic Tutoring in this capacity. Of particular interest would be Academic Tutoring that is delivered by student ambassadors. In a small-scale study, with one university, the theory of change for the Academic Tutoring being delivered would first be articulated in order to understand the expected mechanisms behind how and why attainment might be improved amongst participants. This would then be tested through a research design which would draw on HEAT's attainment outcomes and triangulate findings with qualitative approaches, such as interviews with students and teachers. When using attainment outcomes, the research design would allow for the construction of a comparator group where innate motivation could be argued to be the same as within the treatment group. If successful, the study could be expanded to other universities.

A third avenue for research would aim to better understand 'what makes sense' in terms of the activities universities deliver to young students to support their attainment. Unlike Academic Tutoring activities these approaches may be more creative and adopt a less reductionist approach in their potential to raise attainment. Qualitative research may prove a valuable research tool when trying to understand the value that university outreach could add to tackling educational disadvantage.

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Appendix

Appendix 2.1

Table A1 provides a summary of HEAT's activity typology including examples of activities commonly run within each type,

Table A1: HEAT Activity Typology

Activity Type	What activities should this be used for?	Examples
Summer School	One or more days of intensive activity involving a visit to a university aimed at providing a real insight into university life and all that it entails. Residential and non residential. May also be an Easter School!	• Year 9 Residential Summer School • Year 11 Easter School
Mentoring	One to one, group or peer mentoring sessions. High intensive activity designed with a range of student outcomes but involving a relationship between a student mentee and a mentor and normally involving more than one session	• Peer Mentoring • Post Graduate Mentoring • A-level Psychology Mentoring • GCSE English group mentoring
Visit	General visits to HE including an open day or HE fair. This activity type is different from a taster in HE as it does not involve HE subject input.	• General Campus Visit • Visit to the university halls and library • Open day at the university • HE fairs
HE Information Talk	Light touch talks delivered by ambassadors and HE staff on a range of progression subjects and HE related topics These activities are not normally delivered on an HE campus.	• Introducing HE? • Life on an HE campus? • What does it mean to be a university student? • HE finance • Assembly talk on HE
Conference	An event held within an institution, community venue or workplace, usually 1 day or less. Can be subject specific or aimed at a particular group of people.	• Performing Arts Conference • National Care Leavers Group • Politics Conference
Taster	Subject taster days involving low intensive introduction to an HE subject. These are designed to get the student thinking about a subject or to increase their awareness of the range of subjects at a university	• Taster in Forensic Science • Harry Potter Day • Explosive science taster • Foreign Languages Taster Day • Humanities Taster Day
Master Class	Master classes are normally intensive sessions designed to increase knowledge,	• Science Revision Sessions • Essay writing skills

	skills and understanding. They may be used to help students with their Key Stage 4 or Key Stage 5 study and contribute to increase attainment). Study skills and revision sessions will also be classified as master classes. This activity type differs also differs from a Taster as the subjects covered are not necessarily HE subject specific.	• How to get an "A" in English? • Improving my maths • How to write a UCAS application

Appendix 3.1

In Appendix 3.1 we review the indicators used by HEIs to target widening participation students and assess their appropriateness as measures for socio-economic class drawing on Bourdieu's framework.

Indicators used by HEIs to target widening participation students

In 2007, HEFCE published their most recent advice on targeting, stating that, in order to reduce the social gap in HE participation, HEIs should deliver their outreach activities to those with the potential to benefit from HE in:

 "lower socio-economic groups who live in areas of relative deprivation where participation in higher education is low" (HEFCE, 2007).

This statement is nearly a decade old; but it was reiterated by OFFA in their targeting advice published in 2014 (OFFA, 2014a).

Taking the first part of HEFCE's statement, to target those in "lower socio-economic groups" a number of government papers advise using the occupation class classification NS-SEC, focusing on groups 4 to 8 (HEFCE, 2007; Greenbank, 2006; HEFCE, 2014b; OFFA, 2014b). However, targeting a student based on their parent's occupation has proven highly challenging for practitioners as it is nearly impossible to gather the data for outreach participants still in school prior to including them in the outreach activity (Harrison and Hatt, 2010). Instead, proxies for socio-economic status have been relied on as classifications to identify outreach recipients. A summary of the proxy indicators used by HEAT currently use when targeting disadvantaged students for inclusion in outreach activities is provided in the first column of Table A2 with subsequent columns giving more detail and a justification for each indicator. Indicators are then critiqued over the following paragraphs, when we again turn to Bourdieu's capitals (Bourdieu, 1986) to make sense of the selection of indicators used to target

Appendix

students belonging to low socio-economic groups. We conclude this section with the recommendation that several indicators should be drawn on, and combined, in order to assess the different types of capital that may combine to make up educational disadvantage. This allows for a more sophisticated assessment of social class than relying on NS-SEC, or any one indicator, alone.

Table A2: Summary of indicators used by HEIs to target individuals with outreach activities

Targeting Indicator	Criteria to qualify for targeting	Type of Capital	Alignment with HEFCE Targeting Advice	Level of Collection
Free School Meal (FSM)	FSM Claimant	Economic	Proxies for low socio-economic group	Individual
Family experience of HE	First Gen. HE	Cultural		Individual
IMD	Q1 or 2	Economic	Areas of relative disadvantage	Area
IDACI	Q1 or 2	Economic		Area
Acorn	Disadvantaged groups (M,O,P,Q)	Economic		Area
POLAR	Q1 or 2	Social	Areas where participation in HE is low	Area
School average HE applications	Below average	Social		School
School Type	State School	Economic	Fair Access	School

A critique of the indicators listed in Table A2

Indicators commonly used by practitioners to target outreach activities fall into three levels of collection (see final column in Table A2): individual-level, area-level and school-level, and each have their own limitations. The individual level indicators include whether a student is eligible for Free School Meals (FSM) and if they will be the first in their family to attend HE (Hatt *et al*., 2005). FSM eligibility is used to assess a student's economic capital as the indicator directly relates to household income – families claiming Income Support, Job Seekers Allowance or a number of Child or Working Tax Credits among others are eligible for FSM (Taylor, 2018). Use of the indicator can be justified through the knowledge that children claiming FSM have lower levels of attainment at school and are less likely to continue to HE (Gorard, 2013). However, Hobbs and Vignoles (2010) argue that FSM is not a perfect proxy for social class because it reflects actual claimants rather than those eligible and should not be used as a sole proxy for socio-economic status. Others criticise FSM as identifying only people in extreme financial circumstances. For example, only 15% of school pupils claim FSM, but 52% of the population work in occupations belonging to NS-SEC groups 4-8 (House of Commons, 2014). As

Harrison and Hatt (2010) note, focusing on extreme deprivation is unlikely to reach all whom WP is designed to help.

The targeting of students who have no experience of HE participation in their family (known as First Generation HE) may measure Bourdieu's cultural capital. The rationale for the indicator is grounded in the theory that children tend to inherit their parents' education level, with parents who attended university themselves more likely to have this aspiration for their offspring (Gofen, 2009). It is argued that where there is a history of HE within a family, both parents and children feel a sense of entitlement and belonging towards this level of education (Thomas and Quinn, 2003), described by Bourdieu as their habitus or a "feel for the game" (Lau, 2004; Bathmaker *et al.,* 2013). This confidence then aids students when negotiating the challenges involved in progressing to HE. Use of this indicator to target outreach activities is directly supported in policy documents which reference students with "no HE in their backgrounds" (HEFCE, 2007). In spite of this endorsement caution should be followed with indicators such as this as the information is self-reported by the student themselves and therefore unverified with large amounts of data missing due to non-response, resulting in questions over validity (Boliver *et al.,* 2015). Hatt *et al.* (2005) also found this indicator lacking as a proxy for social class as, when they asked the parents of a sample of students with no parental experience in HE, only 35% self-reported as employed in a manual occupation. Although the authors did acknowledge that parents may have misreported their occupation, either unintentionally or intentionally in order to appear more qualified when representing their child to a university.

Area level indicators, reflecting the relative disadvantage of the area in which a student lives provide additional information reflecting a student's background, not captured by the FSM or First Generation HE indicators alone. In addition, area based measures are relatively easily available as they require collecting only students' postcodes, data that are easier to come by than sensitive personal information such as whether a student is in receipt of FSM. Area based indicators use the student's postcode to capture those living "in areas of relative deprivation" set out in the second part of HEFCE's 2007 targeting statement. Targeting based on area measures are endorsed in policy documents and include the government's Index of Multiple Deprivation (IMD) and Income Deprivation Affecting Children Index (IDACI) (DCLG, 2014) as well as POLAR (HEFCE, 2007), and commercially available datasets such as Acorn (CACI) and Mosaic (Experian) (Boliver *et.al.,* 2015). IMD and IDACI draw heavily on domains of deprivation that relate to a person's economic status, such as their income, employment status and housing and living environment and therefore can most closely be said to measure economic capital (DCLG, 2015).

Area based measures are justified by research showing that, due to the spatial concentration of people of similar class, income levels and education, where a person lives is a strong predictor of their personal circumstances including academic performance (Park *et al.* 1967; Glennerster *et al.,* 1990; Webber and Butler, 2007). However, critics claim that it is an 'ecological fallacy' to assume all people living in the same area have the same characteristics (Boliver *et al*., 2015) and that such area based measures of deprivation are lacking due to their inefficiency and incompleteness (Lee *et al.,* 1995). Batey and Brown (1997) recognise this, noting that using administrative boundaries to target individuals will lead to the inevitable inclusion of unsuitable participants (inefficiency) and exclusion of those who are suitable but live in the wrong area (incompleteness). Tunstall and Lupton (2003) argue that there will always be a trade-off in this regard when using area based measures of deprivation although they did find the IMD effective in reaching some sub-groups, particularly children. In spite of the concerns raised over area based measures, by far the most widespread indicator used in widening participation is an area based measure that relates to the final part of HEFCE's statement "areas where participation in HE is low", measured using POLAR.

Since 2005 HEFCE have used a performance measure they developed in-house to examine the social gap in HE participation: full-time young participation by POLAR (Participation Of Local Areas) quintile (HEFCE, 2005). When it was launched HEFCE announced that, for the first time, POLAR provided us with a measure "sufficiently accurate to monitor inequalities in participation over short periods of time" (HEFCE, 2005 p3). Pointing to a lack of data quality for both occupation and income, HEFCE saw POLAR as the most accurate indicator currently available to measure the participation of advantaged and disadvantaged groups (HEFCE, 2005). Reflecting on POLAR in relation to Bourdieu's social class, this indicator measures historical educational disadvantage within an area and therefore may reflect the social networks to which students have access in their home community. Thus to some extent, the indicator measures a student's social capital. However, one could also argue that POLAR may be used as an indicator for economic capital due to the higher earning power of university graduates. Nevertheless, as it is based only on historical HE participation within an area, POLAR is limited in its ability to assess social class.

Targeting all outreach delivery towards students living in LPNs alone is unlikely to fully capture those people the widening participation agenda sets out to help. Research by Harrison and Hatt (2010) questions the validity of POLAR as a measure for socio-economic disadvantage. Although there is a positive relationship between low participation in HE and socio-economic disadvantage when POLAR is compared with NS-SEC (ρ = -0.470, p< 0.001, Harrison and Hatt, 2010 p73) and when POLAR is

compared with the Index of Multiple Deprivation (IMD)[3] (ρ = - 0.515, p < 0.001, Harrison and Hatt, 2010 p75). According to Harrison and Hatt (2010, p80) these relationships are not strongly predictive. This misalignment of classification measures can lead to 'missing' communities who are suffering from other types of disadvantage.

A further issue with POLAR is the administrative area on which it is based. POLAR is calculated at the larger ward level, areas that contain on average 2,726 households (ONS, 2011) in which there can be significant variation in the socio-economic composition of communities living there (Harrison and Hatt, 2009). IMD on the other hand is calculated for much smaller areas, known as Lower Super Output Areas containing on average 672 households (ONS, 2011). In this respect, POLAR's Low Participation Neighbourhoods do not reflect neighbourhoods in any real sense of the word as the geographical area is too wide (Flowerdew *et al*., 2008). Harrison and McCaig (2015) argue that the compulsive use of POLAR by government and universities puts at risk the objectives widening participation policy is designed to support.

Finally, school level indicators are commonly used in targeting and refer to aggregated data for all individuals attending an educational institution. The HE application rate for the school is often drawn on to identify poor performing schools with a low culture of HE progression (Boliver *et al.*, 2015). This is a useful indicator to reflect a student's social capital as a child attending a poor performing school without a history of sending their students to university is unlikely to make the social links necessary to encourage their own progression to HE.

That the majority of students who attend private schools are advantaged is undeniable and research shows that this indicator claims all three components of Bourdieu's social class. First, families must have access to substantial economic capital in order to afford the fees, ruling out access for the majority. However, the benefits of a private education do not end here and Crawford and Vignoles (2014) state that graduates who attended private secondary schools achieve greater success in the employment market, earning around 7% more per year than state school students three and a half years after graduation. The literature suggests that privately educated graduates have greater levels of social and cultural capital within the field of education and are able to use their social networks to access higher paid jobs than equally qualified non privately educated peers (Bukodi and Goldthorpe, 2011a; Bukodi and Goldthorpe, 2011b; Macmillan *et al*., 2013). Thus in these cases economic capital can be exchanged for social and cultural capital (Demack *et al*., 2012). This epitomises Bourdieu's description of social capital, where social connections perpetuate the cold realities of social inequality.

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[3] The government's measure of relative levels of deprivation in 32,844 small areas or neighbourhoods, called Lower-layer Super Output Areas, in England (DCLG, 2015)

Clearly then, disparities in relation to school type do exist, with far higher proportions of Russell Group entrants having been to private school (Paton, 2013b). However, pupils from state schools do not necessarily come from low socio-economic backgrounds (Riddell *et al*., 2013). State schools include many highly selective grammar schools and a recent review of UKPIs commissioned by HEFCE found the indicator to be a blunt measure for socio-economic background (IES, 2013).

The limitations mentioned above generally reflect the deficiencies of using a single indicator as a sole proxy for socio-economic status, supporting an argument for using a number of complementary indicators that measure all forms of Bourdieu's capital. Research by Geyer *et al*., (2006) into appropriate indicators for social class in health studies also argued for this, stating that indicators reflecting experiences of education, income, and occupational class cannot be used interchangeably as they are measuring different underlying social phenomena. Supporting Professionalism in Admissions, an independent body encouraging good practice in university and college admissions also advocates the use of multiple indicators so as to identify those students most likely to suffer from disadvantage (SPA, 2016). This advice will be followed when we conduct our evaluation of the WP activities that have had most success with disadvantaged students later in this thesis. In our evaluation, Bourdieu's framework will help define disadvantage and we shall draw on a number of indicators that measure different types of capital.

Indicators for disadvantaged that will be used in the analysis presented in this thesis

The definition for disadvantage that has been used in the analysis chapters of this thesis draw heavily on Bourdieu when classifying students as being of low socio-economic background, using indicators that reflect elements of economic, social and cultural capital within the field of education.

As the HEAT dataset on which we base the analysis for RQ1 and RQ2 consists of students who participated in outreach up to twelve years ago, data making up the indicators used must have already been collected at the time of outreach delivery, or be available retrospectively through linking to other administrative datasets. For this reason, the alignment of indicators for socio-economic disadvantage with all components of Bourdieu's capitals is not perfect, as we must rely on the data that are available for the outreach participant cohort. Furthermore, unlike educational and economic capital, which tend to be more tangible in nature, social and cultural capital are complex concepts that are difficult to quantify (Dika and Singh, 2002). As a result there are a number of factors that may influence progression to HE that fall within the concepts of social or cultural capital but that cannot be included in the HEAT classification due to a lack of appropriate data indicators. For example, Demack *et al.* (2012) use indicators such as reading for pleasure and playing a musical instrument as proxies for

cultural capital, but these are not available for out sample of outreach participants. In addition, due to a lack of robust indicators to measure social and cultural capital separately, the two concepts are synthesised within the definition for disadvantage used in the analysis presented here. This is not a new idea and sociocultural theory has long been used to understand the influence of social class on education and learning (Vygotsky, 1997).

The definition is as follows. Students have been classified as 'disadvantaged' if they meet at least one of the following proxies for economic capital: eligible for FSM or they live in an area classified as within the top 40% most deprived areas according to IDACI or IMD. In addition students must meet at least one of the following proxies for social or cultural capital: live in an area classified as belonging to POLAR quintiles 1 or 2 (amongst the 40% lowest HE progression rates within the country), no parental experience of HE (First Generation HE) or come from a school with a low culture of HE applications (schools with the 40% lowest HE application rates). Due to its unrefined nature, state school participation will not be used as a proxy for disadvantage.

Appendix 3.2

A copy of the consent form interview participants were asked to read and sign before starting the interview is provided below.

Research Project Title: What approaches through outreach are universities taking to raise attainment in schools, as a precursor to widening access to higher education?

Research Investigator: Anna Anthony

Research Participant:

Thank you for agreeing to be interviewed as part of the above research project. Ethical procedures for academic research undertaken from UK institutions require that interviewees explicitly agree to being interviewed. Interviewees also need to be very clear as to how the information contained in their interview will be used. This consent form is necessary for us to ensure that you understand the purpose of your involvement and that you agree to the conditions of your participation.

The interview will take no more than one hour. We don't anticipate that there are any risks associated with your participation, but you have the right to stop the interview or withdraw from the research at any time. Please read the information below and sign to confirm that you approve the following:

- I voluntarily agree to participate in this research study.

- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.

- I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.

- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.

- I understand that I will not benefit directly from participating in this research.

- I agree to my interview being audio-recorded. This will only be accessed by the researcher and will be destroyed after transcription which take place within two weeks of the interview.

- I understand that all information I provide for this study will be treated confidentially.

- I understand that in any report on the results of this research my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.

- I understand that disguised extracts from my interview may be quoted in: a PhD thesis, conference presentation, published papers etc.

- I understand that a transcript of my interview in which all identifying information has been removed will be retained for two years from the date of the successful PhD exam result.

- I understand that under freedom of information legalisation I am entitled to access the information I have provided at any time while it is in storage as specified above.

- I understand that I am free to contact the researcher at any time to seek further clarification and information.

Signature of research participant

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Signature of participant   Date

Appendix 3.3

The following provides the eight interview questions posed to the 30 widening participation managers for Research Question 3b.

1) Please can you tell me your Job title, the length of time in this job and your previous roles?

2) Please can you tell me a bit more about your WP team? How many staff do you have working under you?
   a. Who deals with outreach and who deals with recruitment?
   b. Within outreach, universities are now being asked to raise attainment. Who deals with that?

3) I have done some analysis of universities' 2017/18 Access Agreements and summarised the activities that universities are delivering to raise attainment. See typology in Figure 1 (Appendix 3.3).
   a. Does this cover what you are currently delivering?
   b. Focusing on outreach, could you tell me about the most important attainment raising activity you are currently delivering? Where would it sit on the typology?
   c. How did you decide on doing this activity?
   d. Can you tell me a bit more about what happens on the activity?
      i. What are the specific aims?
      ii. Who designed the activity?
      iii. Who delivers the activity?
      iv. How many hours of contact and what frequency?
      v. What is the year group of the participants?
      vi. What is the prior attainment of the participants?
      vii. Is it targeted at individuals or whole classes?
      viii. How do you target individuals or schools?
      ix. How long have you been delivering this activity for?

4) Has the new push from OFFA/OfS to raise attainment in schools required you to redesign your outreach offer? What proportion are you aligning with attainment raising?

5) National research shows that GCSEs are critical to future HE progression. Specifically, if students achieve 5 good GCSEs, the social gap in HE progression nearly disappears. It is logical then to

work with students before they take their GCSEs who are not expected to achieve this level – aka C/D borderline students. Are you doing this type of attainment raising?

a. If yes, roughly what proportion of activity is delivered to these students? Where does this type of outreach fit on the diagram?

b. If no, why not?

c. If you took away all other types of outreach and focused only on this target group, would that cause any problems for you and your institution?

6) HEAT data seems to suggest that outreach can raise attainment (see Fig 2), do you think so?

7) Have you encountered any challenges with raising attainment in schools?

8) Finally, do you think raising attainment in schools should be within the responsibilities of university outreach teams?

Figure 1 (Appendix 3.3) Source: Compiled from 2018/19 Access Agreements (Anna Anthony, 2017)

Informed by the NERUPI Framework (Hayton and Bengry-Howell, 2016)

Level A	Level B	Level C	Level D
Delivered to students (outreach)			Non-student (strategic relationships)
Social and Cultural Capital *Attainment raised as a by-product of aspirations being raised*	**Skills Capital** *Attainment raised through development of soft skills*	**Intellectual or Scientific Capital** *Attainment raised through teaching of the national curriculum*	*Attainment raised through school governance*

Information and Guidance (IAG) and HE Awareness

Including:
Open days
Finance talks
HE talks
Careers talks
Campus visits

HE Subject Tasters

Including:
Spend a day in a lab
Introduction to HE subjects (not linked to the school curriculum)

Pastoral Mentoring

Including:
Personal support from student ambassadors

Study Skills

Including:
Revision techniques
Academic writing skills
Library access and skills

Attitudes to Learning

Including:
Growth mindset
Meta-cognition
Self-regulation
"Learning to learn"

Academic Tutoring

Including:
One to one or small group tutoring on specific areas of the curriculum

Revision Classes and Booster Sessions

Including:
Revision sessions
Homework club
A level enhancement days
Tend to be larger groups

Project Work (may be additional to the core curriculum)

Including:
Super-curricula projects that may have an assessed academic element
Support with the EPQ
Music and drama clubs
Reading schemes

Governors in Schools   **School Sponsorship**

Including:
School governor programmes
Sponsorship of academies, free schools or university technical colleges (UTCs)

Attainment raised through improving teachers' CPD

Training Teachers

Often drawing on University's Education department

Figure 2 (Appendix 3.3)

Appendix

Appendix 3.4

Data Privacy Information for Participants in Education Outreach Activities

What is the HEAT Service and what does it do?
Led by the University of Kent, the Higher Education Access Tracker (HEAT) Service enables its members to monitor and evaluate the effectiveness of their education outreach activities.

If you are reading this information you are very likely to have taken part in outreach activities with universities, colleges or charitable organisations whose aims are to support your choices about going into higher education (view the list of current HEAT members)

http://heat.ac.uk/what-is-heat/#CurrentHeatMembers

http://heatnew.wpengine.com/members/

Why is data stored about you?
In accordance with the Data Protection Act 1998, the HEAT Service (the Data Processor) is permitted to store and process student data on behalf of our members (the Data Controllers) because the data is used for research in the public interest. HEAT members use your data to find out if their outreach activities are effective. For example:
- Do outreach participants go on to higher education?
- Are outreach participants more likely to go on to higher education than those who do not participate
- What can schools, colleges, universities and charities do to improve their outreach work?

What data is stored?
When you apply for, or take part in, education outreach activities, the providers ask for and keep your:
- Full name
- Date of birth
- Home postcode
- School or college name
- Gender

Some providers may also keep information on your ethnicity and any disability you might have.

How is your data stored and processed?
The Universities regulator requires providers to evaluate the effect of outreach on student outcomes. The HEAT database ensures that our members can store your details in a secure system that it can only be accessed by the member organisation(s) that have worked with you. For research and evaluation purposes, members may also share your data with HEAT researchers and the following bodies:
- Higher Education Funding Council for England
- The Department for Education
- England Skills Funding Agency
- The Higher Education Statistics Agency
- UCAS

Your data will never be used for marketing purposes, shared, sold or seen by anyone else. The

HEAT Service processes data solely for the monitoring and evaluation purposes described above. Data is NOT linked to or used for any decision making process which might directly affect individual students. Results are presented in aggregate form without disclosing any specific details of individual students.

For how long will your data be kept?

If you are under 21 years old at the time of first outreach activity:

- Your data will be retained for 15 years after graduation or until 30 years of age (whichever comes first)

If you are over 21 years old at the time of first outreach activity:
- Your data will be retained for 15 years after graduation, or for 10 years after your first outreach activity (whichever comes first)

After this time, data will be anonymised in bulk at the beginning of the next academic year. This retention policy will be reviewed each year to ensure it remains fit for purpose and compliant with relevant legislation (see the HEAT Service Privacy Notice)

Link to file on WordPress Media Library

Your rights: who to contact about your rights, to make an enquiry or complain if you are unhappy

Under Data Protection law, you have the right to object to the storing and use of your data or request to have your data removed from the HEAT database.

Enquiries about your rights, Freedom of Information and Subject Access Requests, can be made to the HEAT Service in the first instance by contacting the HEAT Helpdesk which will be able to signpost you to the HEAT member who is the Data Controller for your data.

mailto: support@heat.ac.uk

The University of Kent is registered with the Information Commissioner's Office (ICO) Data Protection Register (Number Z6847902). Data Protection enquiries pertaining to the University of Kent can be made by emailing datapro@kent.ac.uk

For further information about Data Protection; advice and guidance on your right to privacy; or to make a complaint, you should contact the **Information Commissioner's Office (ICO)** - the regulatory body for UK Data Protection**:**

Information Commissioner's Office
Website**:** www.ico.org.uk   Telephone helpline: **0303 123 1113**

Appendix 4.1

Table A3 provides the percentage of students each of the 42 HEAT member universities have

contributed to the total sample population on which the analysis presented in this chapter is based.

Table A3: Summary of HEAT member HEIs' contribution to the total sample population

HEAT Member University	% of total HEAT sample population
University 1	13.84%
University 2	13.00%
University 3	9.38%
University 4	9.14%
University 5	7.04%
University 6	6.26%
University 7	3.50%
University 8	3.05%
University 9	2.96%
University 10	2.68%
University 11	2.66%
University 12	2.66%
University 13	2.55%
University 14	2.46%
University 15	2.41%
University 16	2.07%
University 17	2.06%
University 18	1.99%
University 19	1.70%
University 20	1.40%
University 21	0.93%
University 22	0.86%
University 23	0.82%
University 24	0.75%
University 25	0.65%
University 26	0.46%
University 27	0.44%
University 28	0.38%
University 29	0.32%
University 30	0.29%
University 31	0.28%
University 32	0.25%
University 33	0.22%
University 34	0.16%
University 35	0.14%
University 36	0.12%
University 37	0.07%
University 38	0.04%
University 39	0.01%
University 40	0.01%
University 41	0.01%
University 42	0.01%
Total	**100%**

Appendix 5.1

The following two tables show the attainment results for students who were included when repeated attempts were made at matching the treatment population with the comparator population, as described in Section 5.5.2. Table A4 shows the proportion of students from treatment and comparison groups who achieved five GCSEs at A*-C including English and Maths and Table A5 shows each groups' average capped point score of the 'best eight' GCSEs.

Table A4: Achieved 5 GCSEs at A*-C incl English and Maths – Versions two to seven

Group	Version 2		Version 3		Version 4		Version 5		Version 6		Version 7	
	N	% achieved	N	% achieved	N	% achieved	N	% achieved	N	% achieved	N	% achieved
Treatment	391	51%	250	52%	178	49%	137	47%	111	53%	87	48%
Comparison	391	39%	250	38%	178	38%	137	39%	111	39%	87	37%
Difference		*12%*		*14%*		*12%*		*8%*		*14%*		*11%*

Table A5: Average capped point score of the 'best eight' GCSEs – Versions two to seven

Group	Version 2		Version 3		Version 4		Version 5		Version 6		Version 7	
	N	Av. Score	N	Av. Score	N	Av. Score	N	Av. Score	N	Av. Score	N	Av. Score
Treatment	391	237	250	273	178	300	137	312	111	316	87	323
Comparison	391	220	250	254	178	276	137	289	111	297	87	293
Difference		*17*		*18*		*24*		*23*		*19*		*30*

Appendix 6.1

In Appendix 6.1 we examine the frequency of activity type delivery amongst Specialist HEIs. In line with the analysis presented in Chapter 6 the data source relates to institutional Access Agreements (AA) for the academic year 2018/19.

Table A5 shows the counts and percentages of the 32 specialist institutions that made reference to each type of activity in our typology. Percentages in Table A5 reflect the proportion of specialist HEIs making at least one reference to an activity of each type; and so if an HEI described five activities belonging to the same type, this was counted only once. We then show the proportion of HEIs that are intending to develop each type of activity for delivery in the future.

Chart A1 compares the data for specialist HEIs to examine whether there are any differences in the type of activities currently being delivered by the two groups of HEIs. Chart A2 then compares the types of activity that both groups are intending on delivering in the future.

Table A5: Percentage of the 32 specialist HEIs who referenced each type of activity in their 2018/19 AA

Attainment-raising activity	Level in Typology	HEIs describing activity in their AA		HEI intending on delivering in future	
		N	%	N	%
IAG or HE Talks	Level A	12	38%	2	6%
HE Subject Tasters	Level A	9	28%	5	16%
Pastoral Mentoring	Level A	5	16%	3	9%
Study Skills	Level B	5	16%	2	6%
Attitudes to Learning	Level B	1	3%	0	0%
Academic Tutoring	Level C	4	13%	4	13%
Revision Classes or Subject Boosters	Level C	4	13%	4	13%
Project Work	Level C	15	47%	2	6%
Training Teachers	Level D	7	22%	2	6%
Governors in Schools	Level D	3	9%	0	0%
School Sponsorship	Level D	3	9%	1	3%

Chart A4: Comparison of the proportion of specialist and non-specialist HEIs referencing types of activity in their 2018/19 AA as currently being delivered
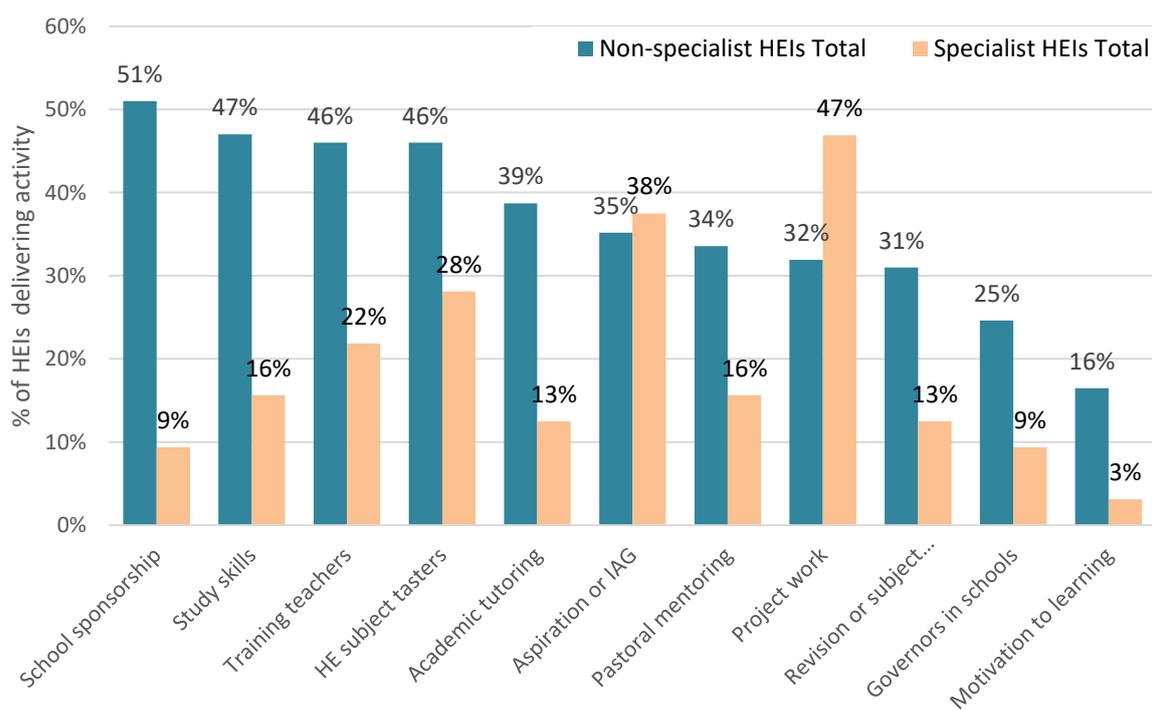
Chart A5: Comparison of the proportion of specialist and non-specialist HEIs referencing types of activity in their 2018/19 AA as intending to deliver in the future
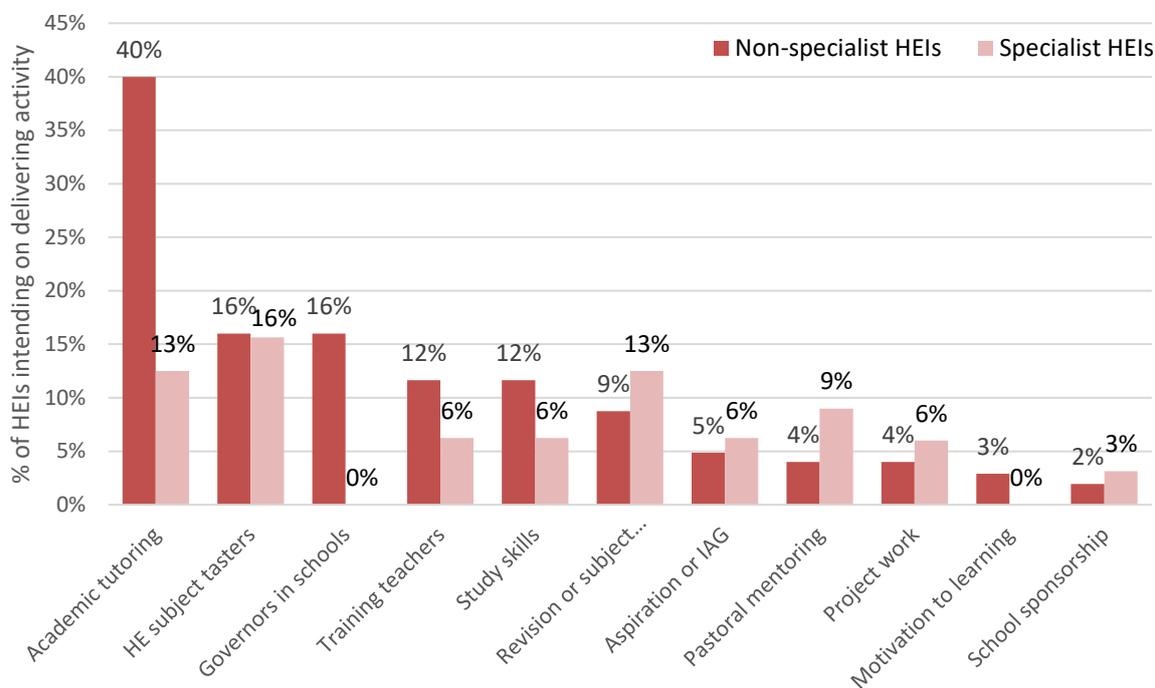
Addressing Chart A4, it is immediately clear that specialist HEIs are drawing on different approaches in their efforts to raise attainment in schools when compared with non-specialist HEIs. A far smaller proportion of specialist HEIs are currently sponsoring a school, 9% compared with 51% of non-specialist HEIs. School sponsorship was often explained in AA as being inappropriate for small specialist HEIs who do not have the resources or expertise to sponsor a school. Rather, specialist HEIs are more likely to deliver outreach activities that support attainment in their respective subject areas. The most frequent activity delivered by specialist HEIs to raise attainment has been classified under the Project Work category. Such activities include music, arts and drama clubs delivered after school or at the weekend where students are helped develop a portfolio. It is, however, often unclear how well the learning aims of these clubs have been aligned with national curriculum content for these subjects.

Chart A5 shows that the activities specialist HEIs are planning on developing and delivering in the future to raise attainment in schools also differ from those proposed by non-specialist HEIs. There is not such an emphasis on delivering Academic Tutoring styles of outreach activity, although this is still one of the most frequent mentioned, it has only been referenced by 13% of specialist HEIs.

Appendix

This comparison has been interesting, not least to show the difference between the two groups of HEIs. The attainment-raising work delivered by specialist HEIs is likely to focus on raising attainment in particular subjects – anything from the Arts to music to veterinary education – it will therefore take a different form to that delivered by non-specialist HEIs which have capacity to raise attainment in a broader spectrum of subjects. Due to these differences, specialist HEIs are removed from later parts of this analysis, where we speak to widening participation practitioner managers.