Whose interests? Gaming, School Type, Social Justice and Pupils’ Post-16 Access

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Whose interests? Gaming, School Type, Social Justice and Pupils’ Post-16 Access

Nicholas Robert Marshall

A thesis submitted in partial fulfilment of the requirements of Sheffield Hallam University for the degree of Doctor of Philosophy

August 2019
Candidate Declaration

I hereby declare that:

I have not been enrolled for another award of the University, or other academic or professional organisation, whilst undertaking my research degree

I am aware of and understand the University's policy on plagiarism and certify that this thesis is my own work. The use of all published or other sources of material consulted have been properly and fully acknowledged.

The work undertaken towards the thesis has been conducted in accordance with the SHU Principles of Integrity in Research and the SHU Research Ethics Policy.

The word count of the thesis is 70036.

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<td>Doctor of Philosophy</td>
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<td>Date of Submission</td>
<td>12 August 2019</td>
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<td>Faculty</td>
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Abstract

Whose interests? Gaming, school type, social justice and pupils’ post-16 access

Access to post-16 education has critical implications for young people’s life chances. An important aspect of access to this provision is the qualification mix and attainment level that learners achieve at the end of compulsory schooling. In England, this mix usually consists of academic qualifications, GCSEs, and qualifications that are vocationally related.

Previous research has shown that schools can implement strategies that seek to maximise pupil outcomes for accountability purposes rather than meeting learners’ needs. This is defined in the literature as gaming.

The focus of this study is to ascertain if gaming by certain school types and contexts is being used to meet accountability measures and if there is a relationship with post-16 access.

After conducting a critical scoping exercise that considered the educational and political background and landscape, four research questions were devised that enabled the issue to be examined. Using a critical–realist approach, a mixed-methods study was designed to respond to the questions and address the key issue. The methods used included; a quantitative study to examine issues of qualification access and use and variable interactions, a qualitative study of nine school and college leaders across contexts, and a series of interviews with twenty-one learners undertaking post-16 programmes in a low-performing and disadvantaged location in a northern city.

The findings from the data analysed in this study are that some school types are taking decisions to game accountability measures. Also, the socio-economic context of the school and pupil prior attainment seem to be influencing factors that are related to gaming decisions. If schools are gaming, then this might influence the range of post-16 progression opportunities that pupils can access.

The conclusions from the data analysed in this study are that gaming, school-type and context are factors that might restrict access to post-16 opportunities for pupils.
Acknowledgements

I wish to acknowledge the support that I have received over the past 3 and a half years. Without the support of several people, this endeavour would not have been possible.

The support that I have received from my wife and children has been fantastic throughout. They have always been there for me and encouraged me, even when times have been hard. I want to thank them for helping me to achieve my goals.

It would be remiss of me not to mention and thank my excellent and supportive supervisory team. My Director of Studies, Sean Demack, has been an invaluable source of help and advice. Without his support and guidance there is no doubt that this project would not have been completed. Prof. Mark Boylan is a real critical friend. His advice has been so helpful, especially regarding the construction of the discourse and narrative. Prof. Colin McCaig has kept a keen eye on my line of argument and ensured that I remained focused on the key issues. You have made me think differently and taught me so much. Thank you.

My fellow research students in Unit 7 have also been there for me; supportive, helpful and ensuring that I remain grounded whilst we journey together. They know who they are. I would, however, especially like to thank Dr Chris Bailey for his help with my illustrations.

I would also like to thank all those who gave generously of their time to participate in this study, both pupils and staff. You continue to inspire me.

Thank you

Nicholas Marshall

August 2019
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1 Introduction

This chapter explains the background and rationale for the research. It clarifies what is understood by social justice, defines the concept of gaming and initially identifies and briefly examines the contextualising issues that will be considered; qualification mix and attainment, in relation to the nature of access to post-16 educational provision, school type, system structures, the accountability framework and school policies and practices. I provide the overarching research aims, objectives and research questions. I then include my personal relationship to and history with the issues to be researched, to support transparency and reflexivity. This then frames an overview of the methodology used. I conclude with a summative outline of this introductory chapter and a chapter structure of the remaining thesis, including key arguments.

Central to understanding the key issues of the study is the concept of social justice (Rawls, 1999), which, in the context of the study is understood as fair and equal access to educational opportunity, regardless of demographic characteristic; for example, ethnicity, gender or socio-economic status. As such, it fits within an understanding of access to the, arguably, quasi-meritocratic structures as they are currently constituted, rather than an approach that seeks to provide a theoretical critique of such structures (Boyles, Carusi and Attick, 2009.)

Education is seen as a key component, but not the only pre-requisite, condition for the achievement of social justice (Hursh, 2009. P152). Therefore, it could be argued that any characteristic of an individual that militates against equity or promotes inequity is seen to have a negative impact on the achievement of social justice.

When considering individual characteristics and issues of social justice, Lewis, O’Connor and Mueller (2009) identify that:

Concerns about racial inequity are central to conversations about the role of education in promoting social justice as well as in promoting more just educational outcomes and experiences. (p249)

In relation to the issues covered in this study it would seem that issues of race could be central to the conversation (Brayboy, Castagno, & Maughan, 2007). They suggest that there are dimensions that result in inequity but that race is an important dimension. It is also clear that in the English education system that there is an intersectionality between race, class and educational attainment (Gillborn and Mizra, 2000). This would add further complexity to the study and was not the focus of research.
Another key reason why the project is important is that it seeks to investigate gaming which is defined as when schools organise to prioritise the demands of the accountability frameworks, whatever they might be, rather than the needs of learners. Gaming in a school context is an idea suggested by de Wolf and Janssens (2007) that schools institute operational strategies to meet the demands of accountability frameworks, rather than considering the needs of learners. In some cases, those decisions about school policies and practices might be taken so that threshold measures or school inspection process outcomes are maximised.

The important issue here is not the nature or type of the accountability measure but rather that schools might organise their operations to meet what these measures demand, rather than meeting the educational needs of learners. A fuller discussion of the development of accountability measures is given later in this chapter (p8-p9). A discussion of the concept of gaming is examined in Chapter 2.

The study aimed to investigate if gaming by schools militates against fair and equal entry to post-16 educational opportunities. The study also sought to examine if such access was related to the school type that a learner attended, the policies of the school in relation to qualification provision, and access to types of qualifications. The reason that this might be important is that such an approach could have a direct impact on the chances of pupils gaining entry to University. Noden, Skinner and Modood (2014), in a study of black and minority ethnic pupil group access to Higher Education, concluded that the likelihood of receiving an offer for Higher Education was significantly linked to the type of school that candidates attended and their A Level subjects. They also found that candidates from lower social classes were less likely to receive offers than those who had a less disadvantaged background.

1.1 Background to the study

The background for the study was what might be seen as a dynamic and complex educational environment. In terms of a contextual understanding of the political landscape, the study was conducted under the 2010-2015 coalition government. A key element of the political conversation on education at the time of the election was, arguably, a focus on falling standards in education. Acting in respect of such a narrative was prominent in the incoming government’s rationale for radical change (Marsden, 2012; Paton, 2010) in the English education system, even though the data on international comparisons, as seen in
the analysis by Wheater, Auger, Burge and Sizmur (2014) of the Programme for International Pupil Assessment (PISA) results of 2012, might suggest otherwise:

England’s performance in mathematics, science and reading has remained stable since PISA 2006. In each survey, pupils in England have performed similarly to the OECD average in mathematics and reading and significantly better than the OECD average in science. (p. 11)

However, they did reveal that the gap in achievement between the highest and lowest achievers in the United Kingdom was higher than the average of the OECD countries that were involved in the assessment programme i.e. the English system is less meritocratic. Even in the face of no change to standards but with clear evidence of a wide and persistent attainment differential between advantaged and disadvantaged pupils, policy direction focused on the former and forgot the latter. Key policy directions adopted in an effort to alter the trajectory were structural changes to the system and revisions to school accountability measures (Department for Education (DfE), 2011a; Gove, 2012; Gibb, 2012)

The underpinning economic principle of the new government’s approach was apparently an unerring belief in the workings of the market, of which incorporated parental choice was a key element; that competition, through a diversity of providers would drive the optimal allocation of resources and result in improved provision (Gove, 2012).

As the new government came into power, there was swift action to radically change the structure of the English education system through the introduction of a diversity of new types of mainstream secondary schools; sponsored academies, converter academies, free schools, and University Technical Colleges (UTCs) (DfE, 2019c). It was envisaged that these new types of school would compete and so drive up standards as a result of the operation of a market (Gove, 2012).

Contiguous to these reforms there were also revisions to the accountability measures already in force. There was a designation of a minimum acceptable level of examination cohort performance for a school. This minimum performance level was set at 35% of pupils in a school gaining 5 A*- C GCSE passes, including English and Mathematics GCSE and equivalent qualifications, and was referred to in official parlance as the "floor standard" (Department for Education (DfE, 2011a). Also incorporated in the measure were progression criteria. Such a move was regarded as being critical to the raising of standards. Previously the measure had been set at 30%. 
At the same time, the schools’ inspectorate removed the "satisfactory" judgment from its inspection framework and replaced it with a "requires improvement" category. This seemed to signal a change from an acceptance of a satisfactory situation in a school to a position where a judgment that was less than "good" was not good enough (Ofsted, 2012). Given that a judgment of "requires improvement" meant that schools were subject to additional interventions, as opposed to the situation with a "satisfactory" judgment, it is contended that this was a tightening of the measure, as with the "floor standard" of the accountability frameworks.

The key issue here for schools was that if they failed to meet the "floor standard" or gain a good inspection outcome then they faced interventions and sanctions. These could include the restructuring of existing governance structures and school type, allied with the removal of the head teacher and other senior leaders in the school (Gibb, 2012). The accountability frameworks that now faced schools and their leaders were high stakes. Schools were incentivised to institute strategies to maximise performance outcomes. This leads to the need to understand if, and in what ways, outcomes for some pupils were adversely affected in relation to post-16 progression.

1.2 Contextualising issues

1.2.1 Access to post-16 education and pupil qualification mix, attainment and achievement

In the English education system, as presently constituted, compulsory schooling ends at the age of 16. But young people are obligated by statute to continue in education or training until the age of 18. Therefore, at 16, they are faced with several choices, which include further study at a school sixth form, Sixth-Form College, general further education college or training with an employer (DfE2019d).

An important factor in delimiting the range of those post-16 choices is the basket of qualifications they have acquired at the end of compulsory schooling. This basket may include both academic (GCSE) qualifications and those vocational qualifications that have been approved by the government as suitable for learners at this stage of education. Wolf (2011. pp. 80-81), who, in a report for the coalition government about qualifications at the end of compulsory schooling, identified that the type, range and perceived "quality" of qualifications that are gained at Key Stage 4 (15/16 years old) are key factors determining pathway choice post-16.
The structure of the system for further education is important in relation to student access. On the supply side, there are now a number of different types of post-16 providers. Some are school sixth forms that are located within schools and adopt the school’s governance structure and characteristics. In some localities, there are independently governed but publicly financed sixth-form colleges and free schools (DfE 2019d) and the independent sector, which pupils must pay to attend. The focus here will be on those that are publicly funded, although independent provision is an important (14% of pupils aged sixteen and over) (Independent Schools Council (ISC). 2019. P12) component of the market. The public-sector market could be regarded as a quasi-market (Le Grand, 1991; West and Pennell, 2002), as consumers do not have to pay for access directly.

It may also be that the nature of socio-economic inequalities is a determinant of whether a pupil can access a specific post-16 destination. The study will seek to address if the level of access is related to the context in which pupils undertake their secondary education. The measure of the level of disadvantage that will be used is the percentage of pupils in the identified secondary school who are eligible for free school meals. Related to this, arguably, is the locality issue. Do pupils choose local provision regardless of quality?

Cultural location and the attitudes and influences of parents, peers and the community might also be factors that could influence pupils’ choice of post-16 provision. Other demographic characteristics that might conceivably be related to issues of post-16 access could include race, ethnicity and gender.

1.2.2 School types

The English school system is complex with respect to mainstream secondary schools and, in the period prior to and under study, many new types of school emerged whilst more established types remained. Further complications are added by the presence of a private education sector for which fees are paid. In a peculiarly British idiosyncrasy, these private schools are known in common usage as “Public” schools. It is thought that 7% of pupils aged 5-16 and 14% of post-16 pupils are educated in such schools (ISC. 2019). These schools are not included in the study. Also excluded from consideration are the relatively low numbers (30000) (Mansell and Edwards, 2016) of children recorded as home educated.

Thus, it is clear that, in England, the majority of pupils (approx. 93% at secondary school) undertake primary and secondary education in schools that are maintained by state funds, albeit through different funding methods.
The Academies Act of 2010 (The Academies Act, 2010) paved the way for a restructuring of the school system in England. Prior to 2010, the most common type of school was the Community School. These schools were maintained and funded through local government. For the most part, these community schools had delegated funding powers in relation to expenditure. They were also required to follow the centrally determined National Curriculum.

Other school types (DfE 2019c) in existence, prior to a restructure of the system, were those with a faith dimension to their funding and governance. The main type of these schools was designated as “Voluntary-Aided”. Revenue and most capital (90%) funding being arranged through local government channels, but these schools were controlled by local governors with a controlling number being chosen by the appropriate faith organisation. “Voluntary-Controlled” schools were much less common. They were governed with a clearly discernible faith presence but were funded and maintained by the appropriate local government organisation. Both types of school were required to follow the National Curriculum.

The period also saw the rapid and continuing development of the academy model. Academy schools were funded by and accountable to central, as opposed to local, government. They also did not have to implement the National Curriculum and were granted freedoms from existing centralised mechanisms, such as agreeing pay and conditions with teacher unions. Two types of academy school were present in the system. The first type was the sponsored academy (DfE 2015b). These were schools that had been previously designated as city academies and included other schools identified as low performing or rated by the inspectorate as "inadequate". Sponsored academies had to work with new governance and organisational arrangements identified by the applicable sponsoring organisation, which were initially of a business, religious or charitable nature.

Some sponsored academies, prior to 2010, had been formed into groups or "chains" (Hutchings, Francis and de Vries, 2014; Hutchings, Francis and Kirby 2015, 2016). These groups, as with many individual academies, adopted a rationale based on values of social justice and developing rounded citizens. These chains were meant to harness collective endeavours to raise standards for all and, prior to 2010, were led by a sponsor. After 2010, a modified version of these chains began to emerge. These became known as Multi-Academy Trusts (MATs) and could now be led by outstanding schools as well as sponsors. Another key facet of policy was that these MATs could now include primary and special
schools as part of their organisation and were not limited to the incorporation of secondary schools alone.

Other developments related to the structural reform of the system were the introduction of Free Schools and University Technical Colleges (UTCs) (DfE, 2019c). Free Schools were new schools based on academy status, which acquired academy freedoms and were to be in areas where interested groups demanded them. These could be religious groups, teacher- and parent-led groups, or wherever academy MATs proposed to establish them. As with the establishment of academies, and since the Academies Act of 2010, the requirement to consult with the local authority was no longer in force.

University Technical Colleges (UTCs) were schools set up with the aim of providing technically-focused vocational education for pupils at Key Stage 4 and for post-16 educational provision. Their prime population for recruitment was pupils in years 9 and 11 in existing provision, who desired a different approach to their education.

1.2.3 The accountability framework in the English school system

The accountability framework in the English system consists of two components; the measurement of pupil outcomes, and the school inspection process. It is worthy of note, and possibly an important consideration for school leaders, that failure to meet the designated level of performance regarding either component could result in interventions and sanctions for the schools involved.

a) The measurement of school performance

In the English school system, pupil performance outcomes are measured on the results achieved in high stakes tests (Stevenson and Wood, 2014). Over the time of the study, the most important measure of school performance has been based on the percentage of the examination cohort that obtain 5 GCSE grades at A*-C (including English and Maths GCSE and equivalent qualifications). This measure included both academic (GCSE) and vocational qualifications. Up until 2014, apart from requiring C grades in Maths and English GCSE examinations, there was no restriction on the make-up of the additional 3 subjects, which could either be academic or vocational subjects.

It is also important to note that in 2014 there were major policy changes to the way in which the headline measure was calculated. Owing to the Wolf Review (2011), amid concerns over inappropriate use by schools, all vocational qualifications were allocated the
equivalent of one GCSE. Previously they had been allocated the equivalent of one, two or four GCSE passes. Also, in 2014, the first result achieved by pupils in a subject was used in a calculation of the threshold measure, as opposed to the best result (DfE, 2015b). This was in response to an identified practice utilised by some schools to maximise attainment by multiple entries over Key Stage 4 and the use of multiple exam boards.

There was also a clear statement by the Department for Education in 2011 (DfE, 2011a) that there was a minimum level of performance schools were expected to achieve. The minimum level of achievement was now referred to as the "Floor Standard" and incorporated measurements of pupil progress in English and Maths, related to pupil progress from Key Stage 2 to Key Stage 4 and expressed as below:

**Key Stage 4**

At least 35% of pupils at the end of Key Stage 4 achieving 5 or more GCSEs A*-C (or equivalents), including English and Maths GCSE; and

National average or above for % of pupils making expected progress in English (national median = 72%); and

National average or above for % of pupils at the end of KS4 making expected progress in maths (national median = 65%).

Secondary schools failing to reach all three thresholds were designated as below the floor standards for 2010.

(DfE, 2011)

By 2014, the minimum figure for GCSE performance had increased to 40% and the median reference figures had also changed to 73% for English and 73% for Maths (For Schools Education Ltd, 2019). Again, schools had to be below on all three measures to be designated as below the floor.

In making an explicit statement of the level of performance that was acceptable, no account was taken of the context of the school. It is also important to understand that the measure was based on the achievement of a threshold and disregarded grade distribution. It also took no account of pupil performance at higher levels, as long as a grade C or pass was achieved, or of any creditable pupil performance below the threshold level.
It is important to note that since the period covered in the quantitative data that there has been a shift in the grading scheme for GCSE exams and the key accountability measure.

From 2017 (OFQUAL, 2019), there has been a transition process whereby all GCSE exams are now graded on a scale from 1-9, 1 being the lowest grade and 9 being the highest. A grade 4 is required as a pass for pupils but school threshold measures are based on grade 5. All GCSE subjects were graded in this way in 2018. No changes were made to gradings for equivalent qualifications.

The key accountability measure is no longer based on a threshold of attainment – the 5 A*-C measure – but the emphasis has changed to a measure of pupil progress identified as “Progress 8” (DfE, 2019a). This is constructed for each school by quantifying, in terms, of grades of progress from KS2 to the end of compulsory schooling. It produces an aggregate mean for each school of whether pupils, at KS4, perform above or below, on a subject basis, the average grade for a similar attaining pupil at KS2. This is derived from pupil performance in 8 subjects, 5 of which are compulsorily included and are GCSE subjects (Maths, English (Literature or Language), a humanities subject, a foreign language and a science). The remaining 3 subjects can be GCSE or approved equivalent qualifications. For the purposes of calculation of the measure Maths and English are double-weighted. The incentive here is to avoid any performance below the expected level which would mean a negative element is included in the measure. So, it can be seen that there is every incentive, as with the previous measure to reduce negatives and increase positives.

There are already indications that there are concerns about the way in which Progress 8 is constructed and consideration of how it might or might not remove “gaming” strategies (defined and examined in Chapter 2) (Ing, 2018; Leckie and Goldstein, 2017; Mcgauran, 2015; Perry, 2016; Sherrington, 2019). There is also some suspicion that gaming of the accountability measures continues apace, with various organisations offering teacher professional development and inputs on how schools can maximise their performance against Progress 8” (Creative Education, 2019; Pet-xi, 2019; SAM Learning, 2019).

With regard to the accountability regime, in January the DfE published its Teacher Recruitment and Retention Strategy (DFE 2019b). The strategy makes it clear that less emphasis might be placed on the quantitative measures and that OFSTED Inspections will be the key accountability mechanism:
At the heart of this will be reforming the accountability system. In particular: We will radically simplify the system, consulting on making ‘requires improvement’ the sole trigger for an offer of support – replacing floor and coasting standards; (p7)

However, when examining the OFSTED Education Inspection Framework (OFSTED, 2019a) that is proposed for implementation from September 2019, it is clear that performance against accountability measures remains important:

learners develop detailed knowledge and skills across the curriculum and, as a result, achieve well. Where relevant, this is reflected in results from national tests and examinations which meet government expectations, or in the qualifications obtained (p11)

b) The school inspection process

The school inspection process is the responsibility of the Office for Standards in Education (OFSTED) (OFSTED, 2012) and is constructed as an independent government agency funded by the Department for Education (DfE). However, the choice of person appointed to lead the organisation is the gift of the Secretary of State for Education.

OFSTED deploy teams of inspectors into schools, who at the time of the study made judgments about school performance in several areas (OFSTED, 2012) There are four areas investigated in the case of 11-16 schools and five areas if schools have a post-16 provision. In the case of schools with only 11-16 provision, these areas are: Effectiveness of leadership and management; Quality of teaching, learning and assessment; Personal development, behaviour and welfare; and Outcomes for pupils. In the case of those schools with post-16 provisions, an additional judgment is made with regard to 16-19 Study Programmes. In both cases the inspection team deliver an overarching judgment on Overall effectiveness. This judgment is either “outstanding”, “good”, “requires improvement” or “inadequate”.

Judgments of “requires improvement” or “inadequate” are not regarded as good enough by OFSTED and trigger additional intervention processes. In the case of a "requires improvement" judgment, the consequence is likely to be additional monitoring visits by the inspectorate until the next school inspection is due. An “inadequate” judgment is slightly more nuanced and split into two sub-categories; requiring significant improvement or requiring special measures. The former means that the inspectorate has judged the
performance of the school to be inadequate but with the management and leadership capability to bring about rapid improvement.

The response is different if a school is placed into special measures. However, the inadequate judgment, whatever the nuance, carries consequences for the school. It should now be subject to termly monitoring visits by the inspectorate and judgments made about whether effective action is being taken to address the areas for improvement. In both cases, the school may well be made the subject of an "Academy Order" issued by the Secretary of State for Education (Academies Act 2010). The school could now be forced to become a sponsored academy, which would usually have new leadership, management and governance arrangements. However, brokering a new sponsor for the school is not always possible (Vaughan, 2016).

1.2.4 System structures

As things stand, there can be seen to be a dynamic, complex and multi-dimensional relationship between the government and schools, which may lead to confusion amongst the key participants, both individuals and organisations. In my opinion as a former Head teacher, revisiting the history of these relationships may cause problems with an understanding of the present situation, so it is probably better to deal with an understanding of the situation as it was.

Most schools in English mainstream secondary education have academy status (DfE, 2015b). They are effectively independent private organisations that exist to provide education to a local community. They are funded directly by the government, on a comparable basis to other schools in their locality, through the Education and Skills Funding Agency (ESFA). The relationship between the government and the organisation running the academy is effectively a contractual one. The terms of the agreement between the two parties is laid down in the "funding agreement", which is effectively a contract for the provision of education, the consideration being the provision of funding. The ESFA also deals with issues of contractual compliance by academies and the organisations running them. The same funding arrangements apply to free schools, CTCs and UTCs (ESFA, 2019).

The educational performance of academies, free schools and UTCs is monitored and reviewed through the office of the National Schools Commissioner and their network of Regional Schools Commissioners (DfE, 2019e). These Regional Schools Commissioners have responsibility and accountability for the performance of schools in their areas that are
funded by the ESFA. They have a wide range of powers to intervene in the case of underperforming schools that are funded directly by the national government, and where finance is not passported via local authority mechanisms.

In the case of ESFA funded schools, in the event of underperformance and/or financial mismanagement sanctions could include the withdrawal of devolved financial authority or, as a last resort, the termination of the contractual agreement between the government and the school proprietors (ESFA, 2019).

In the case of other schools that are funded from the public sector, Local Authorities (LAs) have responsibility and accountability for the performance and operation of these schools. These types of schools include community schools, foundation schools, and voluntary-aided and voluntary-controlled schools. All these schools are funded via LA mechanisms and usually have LA representatives on the governing body.

As has been indicated earlier, in the case of schools under LA oversight that gain an "inadequate" rating from OFSTED, the Secretary of State for Education can forcibly demand their conversion to sponsored academies. In the case of "inadequate" schools with academy status, a new sponsor can be sought.

1.2.5 School policies, practices and gaming

It is contested that the qualification mix and levels of attainment that are achieved at the end of compulsory schooling may be linked with the decisions and choices of those leading schools about policies and practices. School policies and practices, it is suspected, may be strongly related to the focus of the issue under examination and include; the application of pedagogical techniques, curriculum design and setting, and streaming methodologies.

In terms of pedagogical techniques, it may be that consideration needs to be given to the adoption of pedagogical preferences by school leaders. It appears that there are a number of models from which an approach can be selected. It could be that school leaders decide on an approach to be implemented across the school, or such choices could be left to the professional judgment of the teacher. It will be important to understand the impact of the adopted approach on both short and long-term outcomes.

Curriculum design is a key part of a school’s practice that determines the range of opportunities available to pupils and groups of pupils. Schools in the English system typically operate secondary education broken up into two stages; Key Stage 3 and Key
Stage 4. Key Stage 3 is typically a very broad-based education, whilst Key Stage 4 usually consists of "Core" subjects (English Language, Mathematics, a Science, a Modern Foreign Language and a Humanities subject) and a selection of optional subjects, which could be either academic (GCSE) or vocational. Each individual school can decide on the design of the curriculum structure it will employ to deliver these subjects. It is not a given that all pupils will have access to all the subjects that are offered (House of Commons, 2018).

Setting and streaming are methodologies in common usage in English Secondary schools (Muijs and Dunne, 2010). "Setting" is when pupils of a perceived similar level of ability, usually proxied by prior attainment, are placed into differentiated groups for subjects. "Streaming" is when pupils of ranges of ability, again proxied by prior attainment, are placed into broad curriculum bands. This may or may not have an impact on their ability to access the full breadth of the curriculum. Some lower ability pupils may not have the same access as pupils in the higher ability stream. Streaming is often used in conjunction with setting. The choice of deployment of these strategies is a result of decisions that are taken by school leaders. Although setting and streaming have long been strategies employed by schools, it may be that, given the construction of accountability measures as thresholds, this approach is well-suited to gaming performance measures.

1.3 The rationale for the research

The group focused on in the research is those Post-16 students who are in provision that will enable them to become young participants in higher education. HEFCE (2015) defines these learners as;

Pupils who entered an HE course aged 18 or 19. It also refers specifically to those who entered HE at either a UK higher education institution (HEI) or an English Further Education College (FEC). (2015, p. 8)

Summarising and extending the background discussion, leads to the following rationale for the research;

- The transition point from compulsory education to Post-16 provision may be affected by a variety of factors including;
  - social justice
  - pupil qualification mix and attainment
  - the type of school attended
○ the accountability framework
○ School policies and practices.

- The nature of access to post-16 is important for students because their opportunities for progression are impacted by the type of post-16 provision they attend and their choice of post-16 Programme (Noden, Skinner and Modood, 2014).
- Progression rates for students with vocational qualifications at post-16 are worse than for students with A Levels (HEFCE 2015).
- Students eligible for Free School Meals (FSM) (a proxy for socio-economic disadvantage) appear less likely to access post-16 provision than relatively advantaged students (those not eligible for FSM (Gorard, Siddiqui and Boliver, 2017).

1.4 The research questions

In this study, I sought to examine if there was an evidential basis for surmising whether there are structural and system issues that might influence the complexity of relationships between a learners’ choices and decisions as they finish compulsory education. It was envisaged that a further examination would then be undertaken, seeking to examine these issues through the perceptions of school and college leaders and the learners themselves.

In order to examine these issues, four research questions were developed as follows:

1. What are the patterns of institutional qualification provision and pupil access at Key Stage 4 in England from 2013-2015 and do these vary by school type and pupil demographic factors?

2. Do some school types engage in the differential use of equivalent qualifications and restrict pupil access to academic qualifications than might be expected given their context?

3. How and why do school leaders in different types of school make decisions about pupil access to qualifications, the nature of the Key Stage 4 curriculums, and how pupils are enabled to make choices about post-16 educational provision?

4. How and why do pupils in an area of social challenge make decisions about their choice of post-16 education provision?
Finally, there appears to be lack of research in this area that targets structural issues (Otero, 2007). This work aims to contribute to knowledge of these issues.

### 1.5 My positionality

In the interests of transparency and reflexivity, I feel I should declare that my interest in the area of enquiry is firmly rooted in my own professional and personal experience and political belief. It is not beyond surmise that my antecedents have shaped my approach to the research project. During my professional life I have experienced and observed practices in schools that I have considered might be unjust. In some cases, student progression could be adversely impacted by these practices. I know that they may have influenced my choice of the issue to be researched, the data chosen and the outcomes of the analysis, however, I was aware of these issues and took them into account when analysing data and formulating conclusions. These experiences have shaped my political understanding of the issues covered in the study and the findings of the research.

Being the child of white middle-class parents with a working-class heritage clearly has an impact on the way in which I view and frame social issues. Educated at a middle-ranking private school after secondary education, I progressed to sponsored degree-level study of business at a polytechnic in an age of low levels of participation. After completing the degree, my work was based in finance and, subsequently, business operations at two large multinational companies. After leaving industry, I followed a career path as a secondary school teacher, rising to the position of head teacher. I have worked in a wide variety of schools but, latterly, I have worked in socially challenging contexts where I considered inequality as systemic to existing systems and structures. These factors will undoubtedly have had an impact on my research approach and are something I would need to bear in mind when making choices about my methodological approach and method. Justifying my choice of the data to be analysed was critical to ensure the study was a valid piece of research. It was also important to recognise the dynamic that would exist between the research subjects and me during the qualitative phase of the research.

### 1.6 Overview of the methodology and research activity

The study was based largely on research that, in the case of school leaders, was centred on my personal learning network and, in the case of students, was based in an institution where I was a practitioner. These important factors were considered when developing the research method and understanding the ethical dimensions of the project. The study was
not approached with a fixed theoretical lens. The project was conceived as an empirical study. Whilst adopting a critical-realist research approach employing both quantitative and qualitative methods (Zachariadis, Scott & Barrett, 2013. P864; Iosifides, 2017), the findings would be based on what the data revealed rather than presuming a theoretical framework that might frame the analysis within a particular lens.

The methodology was developed in a way that appeared to be appropriate to fit the very different style of research questions. It was decided that a mixed-methods approach would best fit them. In the case of questions 1 and 2, it seemed that quantitative analysis would suit their investigation. The aim here was to reveal what might be regarded as data patterns and relationships that could be considered statistically significant; this aspect of the project would have primacy and provide the stimulus for the direction of the qualitative studies. Research questions 3 and 4, were conceived as dimensions of the study that would explain and illuminate the quantitative data and analysis. The textual richness of the data and the amplification it might add to the revealed quantitative patterns could only be achieved using qualitative research methods.

Regarding the quantitative aspects of the study, for research questions 1 and 2 it was decided to discern patterns by the examination and analysis of accepted authoritative data. It was decided to use data published by the Department for Education. Every year the Department for Education publishes performance data for all state-funded educational provision at primary, secondary and tertiary level. In this study the data used was drawn from the performance tables that relates to exam outcomes in 2012, 2013 and 2014 (DFE, 2013, 2014, 2015b). The data published includes a variety of structural, demographic, funding, attainment and progress data attributable to each school. In this study I used structural data to discern the type of school and demographic data, in relation to levels of disadvantage and the prior attainment of the KS4 cohort in order to provide context for the quantitative analysis for both research questions 1 and 2. Then in order to examine research question 1, data was extracted from the tables that related to the mean numbers of academic (GCSE) qualifications entered per pupil. For research question 2, there were two indicators of interest; the measured threshold performance in terms of the % of pupils attaining the threshold, with the use of equivalent qualifications and the % of pupils achieving the threshold measure without the use of equivalent qualifications. This enabled the derivation of the “performance boost” and analysis to be undertaken to illuminate research question 2. The statistical analysis was undertaken using correlational design with
further analysis based on multivariate linear regression. Analysis was further extended by the development of a visual method to understand interactions between key contextual variables.

Investigation of the third research question was based on a qualitative approach using discussions that aimed to uncover perspectives of school and college leaders with regard to some of the key issues identified by the quantitative data analysis. Critically, these would not restrict the discussions by limiting the remit to those identified issues. The aim here was to try and encompass all the main types of secondary schools, as defined by governance structure, and was dependent upon securing access to school leaders. It was also surmised that useful perspectives might be added by including college leaders responsible for admissions policy to non-school post-16 provision. In the end, school and college leaders were selected from a variety of types of provision and in different socio-economic contexts. It was never envisaged in the research design that these participants would be a representative sample, simply valid for statistical purposes. It was hoped that in their interviews that they might offer some apposite insights that shone a light on aspects of the issues identified. In the end, 9 school and college leaders participated although the original intention was to cover 15 from a wider range of settings. More detail on the method and reasoning is provided in Chapter 3.

The final research question (4) was very aimed to be much focused on the voices of learners and sought to understand the identified issues from their perspectives. Initially, it was thought that pupils attending provision in different socio-economic contexts within the same northern city would be a useful and illuminating exercise to undertake. However, due to difficulties of access to pupils in relatively advantaged socio-economic contexts, the study had to focus on pupils in post-16 provision in a context of socio-economic challenge in the identified city. Eventually 21 participants were interviewed and they were all from one post-16 location, although they had been educated pre-16 in a variety of contexts. More detail in this regard is provided in Chapters 3 and 6. Given that the study was based upon understanding issues of social justice related to access to post-16 educational provisions, such a study is substantive and adds to an understanding of these issues for pupils in a context of socio-economic challenge. Similarly, to the study focused on school and college leaders, it was never meant to suggest the sample was representative but that it was sufficient to highlight the key areas of interest that might pertain to the research questions.
Finally, both the quantitative and qualitative data was synthesised with reference to existing literature. This enabled an understanding of the key contextualising issues and how they related to each other. For example, a pattern was revealed during the statistical analysis suggesting, with some degree of strength, that there was a quantitative pattern, after controls for prior attainment, that access to academic exams was being restricted for some pupils. It further seemed that such a pattern was related to the socio-economic context and the type of school attended. The interviews with school and college leaders, with reference to the literature, were then examined to understand why such a pattern might exist. The narratives of students were then analysed to identify if such a situation had impacted on their post-16 choices and decisions. Conclusions were then drawn about the outcomes of the analysis and the relationship it might have to social justice.

1.7 Overview of the thesis

Chapter 1, the current chapter has focused on explaining the rationale and background for the study, in relation to the key determinants that might influence a learner’s choice of post-16 educational destination. The key contextualising issues that might influence the decisions and choices of learners are briefly examined. The research aims, objectives and research questions are then formulated, together with a reflexive comment on my derived positionality. A methodology for the study is described. Finally, there is a summation of the chapter and a clarification of the construction of the thesis.

In Chapter 2, the background to the study is examined in more detail. The reasoning behind such an approach is that it enables the study to be placed in a clear context that encompasses the dynamic nature of educational provision in England, along with the associated political narratives.

Of key importance in this section is to clarify and understanding of the notion of “gaming”. It then seeks to critically examine the key individual determinants that might influence a learner’s decisions and choice in relation to the furtherance of their education. Having clarified the determinants to be considered in relation to the context, it enables the next chapter to examine the issue critically.

Having clarified the nature of the background to the study and the key individual determinants of post-16 educational choices, chapter two then illuminates the key contextual issues that might influence these choices. These include; school types, systems and structures, the accountability frameworks pertaining to English schools and school
policies, practices and gaming. Using the examination of background, individual determinants and key contextualising issues, the educational landscape for the construction of the research phases can be scoped out.

With the identification of the scope of the educational landscape that might relate to the study, chapter 3 focused on methodology and methods. For convenience the research questions are presented. The rational for a critical-realist mixed-methods design is provided. Considering the research questions, the best fit for the study was seen to be one in which the quantitative study would aim to identify relevant statistical patterns that would be illuminated by the qualitative studies.

Chapter 4 reports the primary quantitative study. Initially, gaming is defined in quantitative terms as when schools use equivalent qualifications to boost performance and also restrict access to academic qualifications by more than would be expected, given their context. The first part of the chapter aims to examine if there were statistically significant patterns of the use of equivalent qualifications to boost schools’ measured performance. Subsequently, an additional statistical analysis was carried out examining the nature of the access to academic qualifications and if there were patterns that suggested differences between different types of schools. In both analyses, a correlational design and linear multi-variate regression are used to examine these issues. A new method was then developed to examine the interactions between school types and the dependent variables. It was found that there was statistical evidence to indicate a pattern suggesting a relationship between school type and the gaming of measured outcomes and access.

In order to explain the findings of chapter 4, chapter 5 examines the interviews of school and college leaders with regard to the issues identified. It found that, whilst there was no substantive evidence to support gaming by different schools, it was clear that school leaders in some disadvantaged contexts employed a variety of strategies to boost performance. These included; setting and streaming, curriculum design, the use of equivalent qualifications and interventions, including unethical behaviour, with exam groups. It was also clear from the interviews with college leaders that they thought school leaders were focused on school performance and might not have fully considered the implications for learners and their progression opportunities.

Given the findings in relation to school and college leaders, in chapter 6, the views of students were sought. The students revealed that they were fully aware of what had
happened to them, in terms of school policies and practices being constructed to meet the demands of the accountability measures, but were, by and large, unaware of the impact that such a situation could have on their progression opportunities. The context was further complicated by the consistent finding that, in relation to pupils educated in a disadvantaged context, effective careers advice and support with progression planning tended to be absent or largely superficial.

Chapter 7 synthesises the findings of the quantitative and qualitative studies. As a result, an argument is made that the findings of the study might reveal a systemic and systematic discrimination towards pupils in a disadvantaged context. To explain and frame these findings, concepts are developed that might facilitate an understanding of the issues in relation to post-16 progression and context. These are; restricted access, the vortex of disadvantage, and observations in relation to causal relationships.

Also in Chapter 7, the findings of the study, in relation to the research questions and the focus of the project, are clarified and discussed. The chapter also evaluates the ethical conduct of the study and is clear about the limitations of the project. The concluding section of the chapter and of the study proposes ways in which policymakers might operate, in order to ensure that systemic and systematic issues with regard to post-16 access are addressed. This will help to ensure that access to post-16 educational provision for disadvantaged pupils recognises a social justice argument and moves towards a process that is based upon the principles of social justice.
2 Background and key determinants of access to post-16 education

This chapter explains the background to the study and traces and critically comments on the antecedents to the existing educational environment and structures. The concept of gaming is identified in relation to the suggested gamification of education quasi-market structures. Having identified the background and explained gaming it then critically examines, with reference to the literature, the key individual determinants of access to post-16 educational provision. The chapter then scrutinises the key contextual issues examined in the study and considers how they might influence the individual determinants of access to post-16 educational provision. With an understanding of the key determinants of post-16 progression and the key contextualising issues, this then enables the development of the research questions and methodology in chapter 3.

2.1 The background

The background of the study is the dynamic and complex educational environment. Education is seen as a key facet of societal structures in industrialised nations and as fulfilling important functions, such as; the development of citizens (Guttmann, 2007. p399; Pirrie and Lowden, 2004. p522), cultural transmission (Lubeck, 1984. P220), and knowledge and skill development (Cranston et al. 2010; White, 2010. p7).

Attention is paid to these functions in the United Kingdom, as can be seen from the manifestos of the main political parties for the 2015 general election (Conservative Party, 2015; Labour Party, 2015; Liberal Democrats, 2015.). The emphases in the Conservative Party, the eventual victors, manifesto are on system structures, standards, performance, and accountability. These have been key components of the UK government’s approach to the reform of education, but all have an interrelationship with each other.

Ball (2013) constructs an idea that the provision of education and policy direction in recent times encapsulates a number of dimensions that enable the development of a proxied market mechanism; structural reform to increase competition and an accountability framework that could be regarded as a proxy for price signals. The marketisation of education is seen as a key driver for improving educational standards.

For commentators and policy makers of the late 20th and early 21st centuries, due in part to the availability of data on educational performance, the focus of the standards debate has been on measuring pupil outcomes, both domestic and international, allied to the findings of the inspection regime.
A notion of an inexorable decline in educational standards has been woven into English educational policy initiatives by British governments since 1979. The issue was previously highlighted as a matter of concern by the then Leader of the Opposition, Margaret Thatcher, in her speech to the Conservative Party conference in October 1975, in which she stated; “It’s opportunity and excellence in our State schools that are being diminished under Socialism.” (Thatcher, 1975).

This narrative was adopted by the then Prime Minister, James Callaghan, as he launched "The Great Education Debate" in 1976.

In a, contestably, radical turn, the in-coming Conservative government of 1979 identified the perceived failure of state provision as being the result of that provision not being subject to market forces. Thatcher had a disregard for state involvement in provision of services and believed that the best way to provide services was through the market mechanism (Thatcher 1980).

The clear thrust of her government was a belief in the market allocating resources much more efficiently than the state and thus improving outcomes. The initial expression was in discussion at the time around the notion of education "vouchers". Parents would use these vouchers to buy education from whichever provider they thought fit, whether a provider was in the private sector or public provision. The idea was mainly driven by Keith Joseph, her 2nd Education Secretary, but was eventually abandoned.

The Thatcher years, however, did see reform to the education system by through the Education Reform Act 1988 (Education Reform Act, 1988). This paved the way for changes to the structure of the provision of education through the introduction of new types of secondary schools, Grant Maintained Schools and City Technology Colleges (CTCs) that were now directly funded by central government. The government also established an independent examinations regulator, the Schools Examination and Assessment Council (SEAC). In 1992 further changes were made as a result of the Education (Schools) Act (Education (Schools) Act 1992) which included the establishment of the independent schools inspectorate, The Office for Standards in Education (OFSTED), and the publication of school performance tables.

In the latter part of the parliament, it introduced the idea of "Specialist Technology Colleges" as the idea of City Technology Colleges had not been a great success (Levacic and
Jenkins, 2004). This was meant for specialist centres to develop and promote excellence in their designated curriculum area, to collaborate with other local secondary and primary schools in developing provision and to respond to a national need to develop these curriculum areas. The first specialisms that were introduced were Technology and Languages. In order to apply, schools had to have good results and be able to raise £50,000 to sponsor the school. The amount did not necessarily have to be in cash but could be "in kind", including the provision of goods and services. If successful, schools would get additional annual revenue comprising of £100,000 and an additional per pupil capita uplift to their budget.

In an attempt to improve standards, the Labour government of 1997-2010 instituted a two-pronged approach, based on the structure of the secondary education system.

In the first case, it continued the previous Conservative policy of encouraging applications for "specialist status" and introduced numerous other specialisms including Sport, Mathematics and Performing Arts. The Labour government saw this as part of a more general strategy aimed at raising standards, rather than the development of academic curriculum areas, as articulated by Estelle Morris, School Standards Minister in 2000 (Local Government Chronicle, 2000b).

In 2000, Labour announced the planned establishment of a new type of secondary school, the City Academy (Local Government Chronicle, 2000a). The Academy was to be a school that replaced an existing failing school, reconstituted with new governance arrangements. They were to be established as independent schools that would be free of local authority control, have independent legal status and be funded directly by central government. They were to be "sponsored" by a business, or charitable organisation, that would bring its external expertise to bear on improving educational standards. These were arguably an innovation derived from the development and perceived success of Charter Schools in the USA and City Technology Colleges in England, as expressed by the then Education Secretary;

    City Academies will also take account of the best lessons of City Technology Colleges and Charter Schools in the United States.

    (Blunkett in Local Government Chronicle, 2000a, p. 3)
Charter Schools were initially conceived by Ray Budde (1988) and subsequently promoted by Albert Shankar, President of the American Federation of Teachers (Bankston et al., 2013). Budde's paper suggests that groups of teachers would be contracted to run schools, being financed by school boards (a local government organisation), and the contractual obligation would incorporate a three to five-year plan.

These reforms would be based on the application of business methods

From the establishment of the first three academies in 2002, by the time the Labour government was defeated in the 2010 general election, some 200 secondary academies had been established (Mansell, 2016).

As a result of the general election in 2010, a coalition government was formed by the Conservative Party and the Liberal Democrats. This government accepted and adopted the narrative of a failing school system, in which standards were in decline (Paton, 2010; Marsden, 2012) and the new government was acting rapidly to solve the problem.

Key aspects of the policies adopted by the coalition government to tackle falling standards included continued structural changes to the education system and changes to the accountability framework, both of which are considered and examined later on in the chapter. This follows the policy direction that had already been accepted by previous governments of both complexions, which can be seen to have its genesis in the Education Reform Act 1988 and identifies marketisation as a remedy for a failing school system.

In the English context, there was no clear evidence of the efficacy of any structural market interventions in improving standards (Rutt and Styles, 2013; Worth, 2014, 2015).

Yet, a measured response after surveying the wider literature would concede that, in terms of measured pupil outcomes, the academic evidence is mixed with regard to this issue (Callahan et al., 2002; Hill, 2005; Chingos and West, 2013; West, 2015). This conflicted evidence is illustrated by two studies from Ash (2013) and Miron and Applegate (2009), which come to very different conclusions.

There is also wider international evidence provided by Waslander et al. (2010), who cover a multiplicity of dimensions related to the marketisation of education. A key conclusion was that the effects of policies directed at increasing parental choice and school competition are small. It was also found, in relation to pupil performance on tests, that:
if effects are found they are small, although increasing test scores are found more often than decreasing test scores. (p. 64)

Interestingly, they also reported that increasing performance was found more often in reading than in mathematics.

Given a body of research, regarding the issue, it may well be worth considering, in the case of structural reform of the system, if there have been any improvements brought about as a result of policy enactment.

2.2. The determinants of post-16 education

A key element of the study was considering the nature and accessibility of progression routes for pupils as they complete their compulsory education. In the English education system, such progression routes can be classified as; entry to school sixth form (at a pupil’s current school or at another school); entry to a sixth form college; accessing a further education college; starting an apprenticeship; beginning employment or not becoming engaged in education, employment or training. If young people are not engaged in a positive destination, they are designated as NEET (not in education, employment or training).

It is important to realise that, what has generally been classified in the literature as sixth-form provision (Crawford, Meschi and Vignoles, 2011) - school sixth forms and sixth form colleges - is differentiated from general further education provision.

In the case of school sixth forms, provision at level 3 (A Level or equivalent qualifications) appears to be largely based on the provision specifically of A Level academic qualifications with some minority level 3 vocational qualifications, such as BTEC/Edexcel diploma or similar. This situation is also one that pertains to some colleges. Further Education colleges tend to have a bias in provision towards vocational and occupational specific qualifications, whereas, in the case of sixth form colleges, the provision is more mixed. Some sixth form colleges have most students studying for A Levels, whereas others, such as the sixth form college in the northern city in later discussions, has most students studying for vocational qualifications and is a sort of halfway house between an FE college and traditional school sixth form or sixth form college provision.
The range of destinations open to pupils in the locus of the discussion include access to school sixth form provision (mainly A Level-based, limited vocational options at level 3), sixth form college provision (vocational options at level 1, 2 and 3 = \( \frac{2}{3} \) of provision, and A Level academic qualifications = \( \frac{1}{3} \) of provision) and a further education college (wider-ranging occupational, vocational and academic provision at levels 1, 2, and 3. The general FE College also offers HE access courses and foundation degrees).

In a study that develops mathematical models of determinants of post-16 choices, Crawford, Meschi and Vignoles (2011) found that the following factors were important:

Achievement at the end of Key Stage 4

- Socio-economic background
- Locality
- The level of socio-economic disadvantage (proxied by the % of pupils in a school eligible for free school meals or who have been "looked after").

Gorard (2010) identifies the nature of schooling as an important determinant of a learner’s participation in post-compulsory education. However, he makes it clear that other factors, such as ethnicity, gender and family background, influence these decisions. The argument is made that success or failure to achieve at school determines a propensity or not for individuals to engage in post-compulsory education.

2.2.1 Qualifications and access to post-16 education

The qualifications that pupils achieve at the end of Key Stage 4, the GCSE or level 2 stages, are a primary sorting criterion that determines the range of possible opportunities and institutions young people can access. Such an assertion is supported in the report on vocational qualifications by Wolf (2011). In her report, she identified that the type range and perceived "quality" of qualifications that are gained at Key Stage 4 (15/16) are key factors determining pathway choice post-16. A typical candidate for progression would have a range of qualifications that could consist of GCSEs only or a mix of GCSE and vocational qualifications. The accessibility of particular courses and institutions is considered earlier in the study (p. 1) and is clearly dependent upon the mix and level of qualifications that a pupil achieves at Key Stage 4. Hence, educational attainment can be seen as a key determinant of progression and the nature of that progression (Raffe et al., 2001; Croll, 2008; Homer et al., 2014).
Given this situation, if the findings of Smith and Gorard (2007), Pustjens (2004) and Croll (2008) are credible, then post-16 institutions have significant issues to overcome in terms of playing a part in improving rates of participation in education amongst young people. Croll suggests that it is in the early years of secondary schools that opinions are formed about whether to remain in education beyond 16 and that this is closely related to levels of educational attainment. These opinions may well be a result of the experience of setting and streaming in secondary education, which is largely determined by performance in primary school and highly negatively correlated with levels of social disadvantage (Putwain, 2008.; Baker and Johnston, 2010.).

Such a situation is one that can be closely related to existing practice. For example, in one northern city in 2014, admission arrangements for entry to schools post-16 were promulgated in the document in Appendix 2. Here, the clear statement was made that access to the 11-18 schools in the city was dependent upon the achievement of 5A*-C grades at GCSE and that, in the case of some specific subjects, a minimum grade at GCSE may be required. Therefore, some subjects that learners have achieved, such as vocational qualifications, may not in fact be considered in determining access to these destinations, even though they may have the ability, potential and motivation to succeed in the programmes offered by these institutions.

In fact, on closer examination, it was established that vocational qualifications could be used for access to high-performing school provision, but only if there was a direct progression route. A good example can be seen in the case of two schools in the same northern city. If a pupil at school A wanted to enter to study BTEC Level 3 Performing Arts then a BTEC Level 2 qualification in Performing Arts would be acceptable for entry, but only if it was achieved at a Merit grade, whereas a C grade in GCSE Dance would be sufficient. This indicates, as a Merit in the qualification framework is equivalent to a B at GCSE, that there exists a differential tariff for entry for pupils who take vocational as opposed to academic subjects. It is also noticeable, in the case of A Level Physical Education, that applicants for entry must have a B in GCSE Science, leading to the exclusion of pupils who studied vocational Science, as well as a level 2 BTEC equivalent.

It seems that what might need to be considered is that given the relationship between socio-economic status and high stakes testing(Putwain, 2008.; Baker and Johnston, 2010.; Thompson and Allen, 2012) ,resulting in lower levels of attainment by disadvantaged
pupils, that some regard might be paid to context when Post-16 admission decisions are taken.

In the northern city, the highest performing post-16 provisions are at 11-18 schools (DFE, 2015b). These schools are mainly focused on the provision of academic qualifications at level 3. If a learner wishes to pursue diverse vocational choices then the only option is to access these qualifications at North City College, which is a general further education college, or Greenfield Sixth Form College, which offers both academic and vocational courses. Provision at both these centres is not "high performing", in terms of either attainment or achievement.

2.2.2 Locality and access to post-16 education

Given the location of "low-performing" and "high-performing" provision, it may well be that locality is a factor in need of consideration. Dickerson and McIntosh (2013) find that distance to the post-16 provision is not significant in the case of high attaining pupils as they are more likely to travel to access provision. Although, in the case of pupils with:

a mid-level of prior attainment (4–6 good GCSEs), or in terms of coming from a relatively socioeconomically disadvantaged background, we consistently find that distance to nearest institution can affect the decision to partake in post-compulsory education. (p. 755)

As pupils from ethnic minorities are more likely to be relatively disadvantaged, given intersections of race and socio-economic status, then a conclusion can be drawn that diversity may be similarly impacted by the distance to the nearest institution that offers post-16 education. The issue of preference for local provision may well distort the efficient operation of the market, if it is intended to help to resolve inequality.

2.2.3 Market structures and access to post-16 education

Given the quasi-market structure for post-16 provision, it can be observed that the process of demand and supply operates with the price of admission being specified in the nature and level of qualifications achieved by pupils at the end of Key Stage 4, in a similar way to how the UCAS tariff operates as a price indicator for entry to higher education. Those institutions in higher demand regulate demand and supply by requiring pupils to have
gained certain types of qualifications and with certain grades. Other institutions may only be able to recruit lower attaining pupils. This is a process that effectively replicates streaming and may well result in similar non-optimal outcomes for society. Market analysis also assumes stasis in all the variables apart from entry requirements, _ceteris paribus_ (Gwartney, Stroup, Sobel and Macpherson, 2003. p16), and so could also be seen as structurally embedding existing economic and consequent societal inequalities.

Problems also arise because of the imperfections that may exist in the market; for example, pupils in some school settings may not have access to the mix of qualifications for progression to those high demand institutions. Once again, disadvantaged pupils may be subject to a nexus of factors that reinforce their disadvantage. The market may also be imperfect if prospective pupils display reluctance or face barriers, such as diminished access to public transport, in leaving their own locality to access post-16 provision.

2.2.4 Socio-economic inequality and access to post-16 education

In a review of the literature on the barriers to progression to post-16 education, Gorard and Smith (2007) identify a number of barriers that might impact on a young person's participation in post-16 education. They surmise that the educational progression of a young person and their participation in further and, subsequently, higher education is predetermed largely by the persistent socioeconomic inequalities between groups that exist from early life. Therefore, the role of institutions in widening participation is also only seen as marginal, implying that the solution is not to implement a widening participation programme but that the key impact may be the remediation of early life inequality.

They did not find that the characteristics of the school attended by a pupil affected the decision to remain in full-time education (Table 10, p. 40) but did find that the characteristics of a school had a statistically significant relationship to the choice of post-16 provision (Table 11, p. 41). These findings would seem to support the conclusions of Foskett, Dyke and Maringe (2008). It should be noted in the case of these studies that the analysis was undertaken before the real emergence of the diversity of provision established under the coalition government of 2010-2015. As a result of their initiatives, the system landscape became much more complex, with a plethora of new school structures; Sponsored Academies, Converter Academies, Free Schools, and Studio Schools, in addition to the ones that existed prior to 2010. They also found that pupils from socio-economically relatively poor areas were "then 14.4 percentage points more likely to choose FE" (p. 43).
These findings seem to support, at least in part, the earlier work of Gorard and Smith, in that they identify socioeconomic context as important, but they only consider it at the point of transition, rather than in a longitudinal context that reflects an individual's life course.

In relation to the issue of socio-economic disadvantage, a recent work by Morris, Dorling and Davey Smith (2016) found that social inequalities are still influential and impactful on the educational achievement of young people.

Further support for a contention that socioeconomic context is important in the choice of post-16 provision, or even a decision not to engage in post-compulsory education and training, is provided in the work of Archer and Yamashita (2003). The pupils are also clear that it is their experience of school and education that is having an impact on the decisions they make about life trajectories after school. Specific reference in the discussion is linked to the relationship between the accountability framework of inspection and the use of measured pupil outcomes and the nature of the educational experience for pupils. The relationship is not seen as positive. Such circumstances appear more likely to be encountered in schools in disadvantaged contexts given that they are more likely to be found inadequate, as opposed to those schools with advantaged contexts (Hutchinson, 2016).

Gorard, Siddiqui and Boliver (2017), as noted above, provides a similar but different finding, identifying that 31% of pupils eligible for free school meals enter post-16 education, as opposed to 56% of those pupils who are not eligible pupils. This finding is important, since Gorard also identifies that progression rates to higher education for those pupils who do enter post-16 education is around 80% for both types of pupils. Therefore, the study assumes an importance, attempting, as it does, to investigate the barriers that disadvantaged pupils face as they seek to make progression choices and decisions around their transition to post-16 education. The suggestion is that a key to improving participation is located around the compulsory education/post-16 interface; arguably critical in the case of young participants.

Similarly, Reay (2016) critiques the way in which working class children are being disadvantaged, by the way in which the neo-liberal delivery of education is framed:

This is because, despite our ‘comprehensive system’, they are still disproportionately attending schools seen to be second rate, and such schools are
often pressurised into focusing on raising test scores at the expense of providing a broad and enriching curriculum.

So, the cruelties of education which afflict all children are compounded for those who are the most disadvantaged. (p. 327)

A report for the Sutton Trust by Cullinane et al. (2017) reveals that the top performing 500 comprehensives have an intake that is skewed against admitting pupils with a disadvantaged background (proxied by FSM). They also reveal that this is not just a phenomenon based on the use of catchment areas. A significant number of these schools admit a lower proportion of pupils with disadvantaged backgrounds than would be expected, given the context of their catchment areas.

2.2.5 Ethnicity, gender, identity and access to post-16 education

It is also important to consider the nature of the relationship that may exist between race/ethnicity and access to post-16 education. There is a complexity here in that there is also an established link in the academic literature between race/ethnicity and class/socioeconomic status (Gans, 2005; House and Williams, 2000; Costello, Keeler and Angold, 2001).

Bhattachrya Ison and Blair (2003) identified that minority ethnic pupils had a higher proportion of 16-year olds in post-16 education, but Black African pupils were the least likely to be studying A Levels than any other group. It was also discovered that the groups with the highest proportion of young people with no qualifications and, hence, unable to access post-16 education were of Pakistani and Bangladeshi cultural heritages. It was also clear that pupils from most ethnicities, other than white (excluding those with a Chinese and Indian heritage), were more likely to be from a disadvantaged background than white British pupils. Ethnicity is also identified by Gorard and Smith (2007) as a factor.

Tomlinson (1998) considered the issue of ethnic minorities and concluded that the inequalities experienced by ethnic minority communities in respect to education do:

.... not necessarily accrue from ethnic or race-specific policies, they are the result of an absence of reference to minorities or minority issues as the legislation which created the education market passed through parliament. (p. 220)
They do, however, arise because of the way that ethnic communities and pupils are located in relation to socio-economic power and the way in which these communities are located within the urban space. She also identified that ethnic minority pupils are disadvantaged because they have to carry “market burdens” (p. 220), in that ethnic minority pupils are not perceived as desirable, as they attend “failing” schools and schools that are under-resourced. Dickerson and McIntosh (2013) also found that distance to the post-16 provision was not significant in the case of high attaining pupils and that they were more likely to travel to access provision. However, in the case of pupils not having:

a mid-level of prior attainment (4–6 good GCSEs), or in terms of coming from a relatively socioeconomically disadvantaged background, we consistently find that distance to nearest institution can affect the decision to partake in post-compulsory education. (p. 755)

As pupils from ethnic minorities are more likely to be relatively disadvantaged, the conclusion can be drawn that they would be similarly impacted by the distance to the nearest institution that offers post-16 education.

It is clear though that the key issue, as regards ethnic diversity and post-16 education, is not the participation rate, but the type of qualifications being studied by ethnic minority pupils. For, as Bhattacharyya, Ison and Blair report (2003), most ethnic minority groups have a favourable participation rate in post-16 education (Table 4, p. 24). This is quite a critical point, given the established relationship between ethnicity and socio-economic disadvantage previously discussed. When a view is taken, however, of the qualifications being studied by pupils from ethnic minorities, an interesting picture starts to come into view. In the first instance, when considering issues of what levels of qualifications are being studied by pupils from different ethnic groups, there is a complex picture. Triangulation, therefore, needs to take place with data that relates to the nature of qualifications that are being studied. Connor et al. (2004) suggested that:

Minority ethnic young people are equally as likely as White people to gain entry qualifications to go to university by age 19 (which contrasts with the situation at 16, at GCSE level), but the type of highest qualification held and their schooling post-16 varies significantly (sections 2.3 to 2.5). Overall, minority ethnic degree entrants have lower entry qualifications on average, fewer take the traditional ‘A’
level route, and are more likely to come into HE from FE colleges, than White entrants. (p. xv)

Yet, within the overall findings, there are degrees of difference between ethnic groups. The most likely group of pupils to hold vocational qualifications on entry are pupils with a Black ethnicity and, within that grouping, Black Caribbean pupils are the most likely in regard to this dimension. The study also concluded that, among minority ethnic groups, Pakistani and Bangladeshi pupils were likely to have lower grades at A Level than Indian or Chinese pupils (p. xv).

There are clearly implications for entry to university and educational progression. As indicated earlier, a recent HEFCE (2015, p. 2) study indicated that students with vocational qualifications had lower HE entry and success rates than those with traditional qualifications. It might also be surmised that in a competitive university environment, certainly in terms of institution and degree choice, those students with lower A Level grades would be studying in lower as opposed to higher tariff institutions. Weekes-Bernard (2010) found exactly such a distribution in the case of some minority ethnic groups, especially those that contain students of a Black, Pakistani or Bangladeshi heritage (Figure 2, p. 7).

The suggestion is clear, if pupils from ethnic minorities, as a result of inbuilt systemic inequities, can only gain access to post-16 institutions where the emphasis is on vocational qualifications and low performing "A" Level provision, then their ability to access high tariff, competitive universities has been systematically restricted.

In terms of gender, Archer, Hassall and Hollingsworth (2007) identified a group of working-class girls who had disengaged from the process of learning. The reason this is important is that any exclusion from the educational process can carry several consequences for an individual, including, but not limited to, economic disadvantage, social exclusion and both short and long-term health impacts. In the case of young women, they quote Kenway (2003) who states:

... leaving school early is almost always more problematic for girls [who] [...] find it more difficult to access paid work than their male peers and [...] tend to be significantly overrepresented in the 'out of the labour market' figures. (p. ix)

(Kenway, 2003 in Archer, Hassall and Hollingsworth, 2007. P166)
It is this differential impact of withdrawal from the education process that is important, in terms of identifying the impact on women.

An examination of gender equity is considered by Reay (2010), who claims that such inequalities, albeit manifesting in the pre-teen and teen years, may be effectively constructed in primary school. Here, the peer discourses reveal more positive educational attributes for girls than boys, who are still seen as the more desirable gender.

What is different, however, is the situation pertaining to the genders as they progress into their post-16 educational destination from Key Stage 4. It is established that girls on average achieve better GCSE or equivalent results than boys (DfE, 2015, p. 6). The implications of such a situation, in terms of post-16 progress, are recognised by Francis et al. (2003), who found that girls were more likely to select A Levels as their post-16 route of choice. Boys, on the other hand, were more likely to choose vocational qualifications (p. 434). Given previous discussions and the consequences for entry to higher education of studying for vocational rather than academic qualifications, it is perhaps no surprise that Allen, Parameshwaran and Thomson (2016) found that the proportion of girls (44%) attending higher education was higher than for boys (36%).

Other key factors that, it seems, may impact young people’s decision to remain in education after the compulsory phase is completed, might be the influence of parents and peers.

Tomas and Webber (2009) analysed the influence of parents and peer groups and found that, parents were significant in influencing the decision of pupils to remain in education. They found that the degree of influence and differentiated distributional effect across the genders was related to parental background. In the case of boys, whether both parents had stayed in education was significant, whereas, in the case of girls, the finding related to the mother (p. 132). A similar finding was revealed by Blondal, Field and Girouard (2002) in a report for the OECD (Figure 10, p. 44), although the paper by Webber and Thomas reveals more complexity than is initially apparent.

Peer group effects are also seen as important in influencing a pupil’s decision to continue in education (Thomas and Webber, 2001, 2009). In the 2001 study, they looked at the participation in post-compulsory education in Bradford, a city located in the north of England that has a high degree of cultural diversity and is also economically challenged. It was found that in the case of boys and their decision to transition from compulsory to post-
compulsory education, the influence of the peer group was significant. If a young person’s peer group had a predilection to make a positive decision to remain in education, then they were more likely to make a similar decision. However, in the case of a peer group that had negative attitudes to continuing in education, then the young person in question was also likely to follow that route. In the case of girls, the influence of the peer group was not significant, but the influence of academic ability was important.

However, Brooks (2007) might contest the importance of peers. She conducted a study of 11 young people during their post-16 education and as they were engaging in the transition process to higher education. Her paper reports that young people did not consider the influence of friends important in relation to educational trajectory. The pupils studied were clearly able to differentiate between academic and non-academic aspects of their life and, whilst friends were important in a social context, they were not in relation to academic endeavour and progression. Both these findings are important but clearly differ in one key regard, in relation to the post-16 transition point. The Webber and Thomas paper (2001) is a finding relating to ex ante, the decision to progress, whilst the paper by Brooks is post ante that decision. It may well be that as adolescents develop and progress, the influence of peer group on individuals’ decisions becomes less significant.

Young people with disabilities and special needs face a complex process of transition from the compulsory to post-compulsory phase of education and the complexity of the process should not be underestimated. Despite anti-discriminatory legislation and statutory codes of practice (Equality Act, 2010), young people with disabilities and special needs still find difficulty in plotting suitable routes into post-16 education (OFSTED, 2011). It may also be indicative of the lack of priority given by policy makers to a national dataset; at least I could not ascertain that one exists, tracking the progress of learners with special needs and/or disabilities through education. The consideration of these learners was not a focus of the study but there is literature that examines in detail the problems that such young people face (Raghavan, Pawson and Small, 2013; Macintyre, 2014; Hatton and Glover, 2015).

2.2.6 Labour markets, support, aspiration and access to post-16 education

In considering the determinants of post-16 education, the nature and strength of local and national labour markets might also have a role to play in an individual’s progression decisions. Using data from the Youth Cohort Studies, Rice (1999) found support for a hypothesis that local deficiencies in the demand for labour lead to an upturn in demand for
post-compulsory education. However, importantly, it was also reported; "What this study has shown is that it is young males with weaker GCSE qualifications who are most influenced by labour market conditions when deciding whether or not to undertake further education" (p. 305). The implication is that those who attain the lowest levels at school are the least likely to access further education for perceived short-term gain. Yet, this is the group that would most benefit from accessing education to present themselves for more long-term opportunities.

A policy that, was designed specifically to encourage the most disadvantaged pupils to stay in education beyond school leaving age, was the introduction of the Education Maintenance Allowance (EMA). EMA was a payment made to young people from low-income families who decided to stay in education beyond the school leaving age (Machin and Vignoles, 2006). The allowance was a very successful intervention and Machin and Vignoles cite a study by Dearden et al. (2004), who found that it was a factor in encouraging pupils to choose education over work or inactivity. In 2011, the coalition government removed the allowance and believed that this as justified from evidence that suggested that it was poor value for money (Department for Education, 2011b).

The critical reading is not the fact about the 90 per cent but about the remaining 10 per cent who would, by implication, have been in alternative destinations, such as work or economic inactivity. The evidence is problematic in that it only considers the views of those students that remain in post-16 education. A better approach would have been to follow a whole cohort through the transition process so that all dimensions of the issue could be investigated.

It is also important to review the evidence that changes to the structure and operation of a marketised system, allied to new forms of school and post-16 institutional governance, might have had an effect on an individual pupil’s choice of post-16 education.

When considering this issue in relation to post-16 institutions, it could be seen as critical, given the earlier identification of post-16 routes that might be related to social class (Ball, Macrae and Maguire, 1999). There is also an issue that may be related to the way in which the secondary education system is structured and whether progression rates to specified post-16 destinations vary across institutions; i.e. are pupils leaving sponsored academies gaining access to the same range of destinations as similar pupils from, say, converter academies? Research by Foskett, Dyke and Maringe (2008) found that there were four
factors related to school that affected the decision of a young person to remain in education: whether the school has educational provision for a sixth form; the way in which the school is led, organised and the nature of its ethos and embedded values; whether the catchment area of the school is socially disadvantaged or not; and the way in which careers education is organised and delivered (p. 56). Within their discussion, it is clear that the nature of the institution itself, as defined by ethos, values and leadership, can have a very important influence on the decision of an individual pupil to stay on in post-16 education.

In the light of the cited research, it is clear that it is not a simple binary that determines whether a pupil chooses to progress to post-16 education or not. The whole decision that faces an individual is much more complex and nuanced and is influenced by a convergence and nexus of factors.

2.3 Gamification, gaming and the key contextualising issues
2.3.1 Gamification and gaming

One of the core ideas that has underpinned the investigations in this study is the idea of “Gaming” and how such a conceptualisation relates to the way education provision is structured and regulated in England.

The idea of “Gaming” derives from Game theory. Game Theory is a mathematical concept that has been applied to business strategy and economics (Carmichael, 2005: Rosenthal, 2011). In its application, game-theory suggests the strategies that business organisations should take to maximise their positionality when faced with imperfect information about the behaviour of other competitors. It models, in these circumstances, their decision-making strategies and interactions.

The reasons that these conceptualisations might be appropriate to the English education system are that it can be understood as a “quasi-market” (Le Grand, 1991; Solomon and Lewin, 2016. P228; West and Pennell, 2002). If the education system is a “quasi-market” it seems entirely rational to suggest that schools might engage in competitive strategies to enhance their market positionality (Bowe, Ball and Gewirtz, 1994: Woods, Bagley and Glatter, 1998; Lupton, 2011; Forsberg, 2018) and one of the ways that these strategies can be examined is through the application of game theory. The reason why this is important is the fact that school performance against performance benchmarks might attract more pupils and the subsequent increase in resource allocation (DFE, 2019f) and also that a
failure to perform might lead to sanctions for governors and school leaders (Academies Act 2010). Therefore, it could be argued that school leaders are being entirely rational in taking decisions that enhance market position.

Perhaps the best way to examine this model is to apply it to the decisions taken by school leaders. For example, consider a situation where two schools, A and B are competing to attract more pupils from an available pool of 40 extra pupils. School A is a secondary school that, in terms of pupil attainment is perceived to perform less well than School B. In School A school leaders know that by taking a decision to alter their Year 11 curriculum and ensure all their pupils take vocational qualifications they can improve their measured performance and that this may make the school attractive to parents and pupils, leading to increased admissions. This situation is represented in the following matrix:

<table>
<thead>
<tr>
<th>School A</th>
<th>School B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Vocational Qualifications</td>
<td>+20, +20</td>
</tr>
<tr>
<td>Do not use Vocational Qualifications</td>
<td>0, +40</td>
</tr>
</tbody>
</table>

The results of the interactions for School A, in terms of increased numbers of admissions are shown in red and for School B in green. In examining the model, it can be surmised that a rational strategy for leaders in School A to pursue is the use of vocational qualifications as they face an increase in admissions whatever decision is taken by leaders in School B. However, should they fail to improve performance by not using vocational qualifications then they are worse off in relation to School B, whatever decision in this regard is taken by leaders in School B.

The decision to use vocational qualifications and enter all pupils for them is could therefore be argued to be an extremely rational and logical one for the leaders of School A if they wish to improve measured performance and as one result, benefit from increased pupil admissions. However, an ethical dilemma occurs though if some pupil’s best interests are not served by entering them for vocational qualifications. This situation is discussed and analysed in Chapter 4. As performance measures have changed since this analysis it might
be that other strategies to enhance performance have been developed. A good example of this is the recent debate around “Off-rolling” (Hutchinson & Crenna-Jennings. 2019; OFSTED, 2019b; Roberts, 2019)

The process then of devising, evaluating and implementation of these strategies could be seen as gaming the system. Gaming could, therefore, arguably be seen as the “intended strategic behaviours” (de Wolf and Jannsens, 2007. P7) that are applied by organisations to maximise their performance. These strategies could then be defined in terms of the implementation of policies, procedures and practices that are designed to maximise performance against accountability measures.

If this conjecture is accepted then “gaming” can be seen as performative actions that might be taken by school leaders in an attempt to ensure that pupil outcomes meet the needs of accountability performance measures rather than designing these to meet the learning needs of individual pupils. Performativity is the idea that organisations operate in a way that maximises outcomes in terms of performance frameworks and that other elements of their operations are subservient (Lyotard 1984; Locke 2015). In the case of a business organisation this framework could conceivably be focused on the maximisation of the profit measure, whereas in an education situation it could be focused on measures of attainment or progress by pupils in a school or responses to school inspections.

The notion of these performative actions as a “game” is revealed by the perception of a Head of English in Perryman et al. (2011, p188) ‘they might not like it but they’re not going to argue with it because they know the reality of the game now’. The comment of the practitioner is set in a wider context of a study in which it is revealed that school policy levers are applied by school leaders in order to maximise reported performance outcomes. Such measures could be characterised as a “performative” response (Lyotard. 1984; Locke 2015)

Whilst this study is focused on gaming in secondary school contexts, there is literature that supports a contention is gaming, characterised by performative responses to policy, is also experienced in primary schools (Hardy and Lewis, 2017; Keddie, 2017; Braun and Maguire, 2018) and in further education. Boocock (2014) explains the situation in a further education college where the staff are engaged by senior management in performative (gaming) activities designed to improve success rates. It also appears that the higher education sector is not immune to developing performative responses in response to accountability regimes (Cowen, 1996 Lynch 2015)
Taylor (2016) investigates the impact of accountability measures and the performative responses by schools. Her paper sits within a body of literature in this area (Ball, 2000, 2013; Ozga, 2013; Lambert et al, 2015; Winter, 2017). She identifies a number of strategies that were implemented in order to meet the demands of the accountability measures and that might be iterated dependent upon the construction of those measures. These strategies included; focusing on borderline pupils, setting to maximise outcomes against accountability measures, entry for “easier” assessments and early and multiple entry. Such activities, in the context of this study, are understood as “gaming”.

It is also apparent that some schools and teachers implement gaming strategies that are against the rules laid down by examining organisations (BTEC, 2014) i.e. they are cheating. Meadows (2015) identifies measures such as; giving students writing frames to use in their controlled assessment, teachers giving students hints during controlled assessment, providing wording of sections of coursework to students and opening exam papers before the specified time so that revision can be focused on exam topics.

When considering the issue of performative responses by school leaders to accountability measures it is important to understand the tensions that leaders might face. In a recent paper Keddie (2017) builds on the work of Ball (2003), Blackmore (2004) and Rayner (2014). She examines the tensions that exist for school leaders as a result the way in which accountability is structured and measured outcomes are valued. The school leaders revealed that they organise their work and schools in such a way as to meet the needs of the accountability regime, be that OFSTED (Perryman, 2009) or, in relation to this study, measured outcomes.

Further, it was clear that there was impact on these leaders and the way they approached leading their schools and their professional identities but they felt they had no option but to be performative in their strategic decisions. Tseng(2015) in a wide-ranging study supports this view and suggests that we can identify the way that Headteachers now operate as performative professionals, with an emphasis on leadership and management of an organisation and the achievement of measured outcomes rather than concentrating on education. The way in which they now manage schools is defined as:

a bundle of managerialist practices in terms of measurement, comparison, judgement and monitoring, all of which are aimed to maximise school performance and learning outcomes (P490)
It is also important to consider the ethical dimensions of the performative responses that might be implemented by school leaders. Ethics in general and professional ethics specifically, is a large field with many different stances, and here I focus on scholarship that has addressed the issue of ethics in relation to the focus of the research.

The Association of School and College leaders (ASCL) (2018) has formulated a number of principles for ethical school leadership that are relatively uncontentious. One key dimension of ethical leadership in education is defined by the ASCL as:

1 **Selflessness**  School and college leaders should act solely in the interest of children and young people." (p5)

And a core value to be incorporated into the ethical leadership of education is:

**d) Justice:** leaders should be fair and work for the good of all children. Leaders should work fairly, for the good of children from all backgrounds. They should seek to enable all young people to lead useful, happy and fulfilling lives." (p5)

In regard to this study, which focuses on curriculum structures, qualification access and interventions it could be contended that even strategies that might be considered as being within the rules, for example, focusing on borderline pupils at the expense of other pupils, would be detrimental to some other students (Taylor, 2016). Therefore, they would not meet this test of ethical behaviour.

Ingram, Elliott, Morin, Randhawa & Brown (2018) extend Taylor’s work and consider the ethical tensions and dilemmas that face school leaders when deciding upon exam entry policy. Should the entry policy be directed at the needs of learners or at maximisation of school performance outcomes? Applying the tests of selflessness and justice, such a policy, even though allowed by regulation, might be considered unethical.

A consideration of the use of assessment metrics and the impact that they might have on fairness and equity is discussed by Flórez Petour, Rozas Assael, Gysling & Olave Astorga (2018). They argue that the use of assessment metrics and performative responses militate against outcomes for education that are related to social justice.
One interpretation of the above discussion is that "gaming" - performative responses by schools to meet accountability demands – are likely to be considered to be unethical. Such an interpretation would contest that this is because they are likely to contravene the principle of selflessness, the core value of justice and the principles of beneficence and non-malfeasance.

An alternative interpretation might see such a view as simplistic and contestable by school leaders. They might not see their decisions as being unethical but as reflecting the reality of an increasingly complex system. Taylor (2016) reported that some school leaders see the implementation of these strategies as helping to "maximise their students' life chances" (p636). Such views are echoed in recent work by Ingram et al (2018) where some school leaders indicated that these strategies were used for the benefit of their students. These leaders did not recognise themselves as "playing the system"(p552), rather this was something that other schools did. It may be that these school leaders' beliefs are accurate - that the interests of the schools and students do align. However, evidence that I report in this thesis suggests this is might not always be the case.

Support for the school leaders' views might be constructed from a recent study of exam entry data by Burgess and Thomson (2019). They suggest that the response of some schools to changes in the role of vocational qualifications and accountability measures (Wolf, 2011, DFE, 2017a) has led to students taking fewer qualifications overall and lower numbers of vocational qualification specifically. These changes have led to a drop in level 2 attainment for lower attaining pupils. These results indicate that attempts to take one aspect of “gaming” out of the system may have had a negative effect on pupils. However, in the absence of the counterfactual the evidence from Burgess and Thomson is open to a variety of interpretations.

In summary, it could be suggested that consideration of gaming in a school context should cover a number of areas; the actions that schools take to maximise measured outcomes, the ethical dimensions of such strategies, the rationale of school leaders and college leaders and the effect such actions might have on learners.
2.3.2 School types, systems and structures

The notion of a marketised education system to deliver improved standards is one that has had traction with politicians and policy makers over the last 40 years. The origins of these policies can be found in the approach taken by the Thatcher/Major UK governments of the late 20th century. They have been further refined and implemented by successive UK governments of all political complexions. A critical point of consideration in evaluating the narrative is to understand what is meant by “improved standards”. In general, this is understood as increases in the measured outcomes of exam performance of schools and pupils, triangulated with the more complex nature of judgments about schools that are a result of the inspection process.

This idea is examined by Ball (2013), who postulated that the provision of education and policy direction encapsulates a number of dimensions that have enabled the development of a proxied market mechanism. Structural reform of the education system in England has been based on proxied competitive structures and a notion of parental choice of school. Marketisation is a trend that has been replicated and, arguably, embraced more wholeheartedly in the United States.

In England, the supply side of the market structure has seen a number of changes over the past few years, mainly characterised by a narrative that emphasises an increase in the diversity of providers and a notion of competition amongst them to attract pupils. The demand side of the mechanism is based on a revealed principle of parents choosing the secondary school that their children attend. Proponents of the market system would maintain that the equating of demand and supply will lead to the optimal allocation of limited resources and the raising of school standards, which can be seen as a direct read across from the micro-economic construct of a perfectly competitive market.

In fact, the prime raison d’etre of a marketised system is to ensure that scarce resources are allocated in an optimal fashion with a maximisation of outcomes for consumers of goods or services (Rutherford, 2013. P369). This outcome, however, is based on a conditionality of ceteris paribus which accepts that, at a given point, the framework within which the market operates is static. Ceteris paribus is a critical assumption about market theory that those who advocate marketisation of the education system usually forget.

Market theory assumes that there is equilibrium in other dimensions of the market, such as the ability of parties to gain access and resources to express a preference. Inter alia, those
who are disenfranchised remain so and the market is structurally constrained in the way in which it allocates resources. This is a situation, which may well be at odds with any notion of a public service obligation for education.

Other problems for proponents of a marketised system would be that it takes no account of other factors that may affect the efficient operation of the market; the local nature of access and participation, contextual factors, the local hierarchy of providers, and the inelastic nature of both the demand for and supply of education.

In the context of this study, it must also be understood that the provision of post-16 education is now also largely determined within a proxied market structure. Funding follows the pupil and, therefore, considerable efforts are made by post-16 providers to attract pupils for their provision. Maguire, Ball and Macrae (1999) identified that market forces were in operation and also, importantly, identified different progression routes that may be related to social class.

An implicit criticism of the way in which the proxied market for education operates in the English system can be seen in the work of Allen, Burgess and Mayo (2012). They contend that the market for schools is driven around reputation and formal performance measures, i.e. the inspection reports provided by the Office for Standards in Education (OFSTED), and the metrics that are published annually by the Department for Education (DfE). They contend that the market incentivises the recruitment of more able pupils, not on the basis of financial imperative but on the indirect benefits that accrue; schools with a high proportion of able pupils will achieve higher outcomes. The career concerns of head teachers mean that they derive value from being associated with "successful" schools and that more able pupils enable more effective teacher input.

Clearly, then, there is a direct implicit criticism of the proxied market for education. For, if those beneficial effects accrue to schools with more able pupils, then those with less able pupils exist in a much more problematic and complex space. This would also seem to suggest that the distributional effects of a proxied market embed rather than reduce social and educational inequality.

The coalition government of 2010 to 2015 continued with the process of marketisation of the education system, in accordance with a political view rather than rational consideration of the international evidence. Waslander, Pater and van der Weide (2010) carried out an analysis and review of the international evidence in respect of market mechanisms in
education. The conclusion was that international research indicates that the effects of reform in education towards a marketised system are small. Specific imperfections that they found in the proxied market for education were; these markets are essentially local in nature, contextual factors are important, a local hierarchy of providers is based on the characteristics of the pupil population, and the relative inelasticity of both supply and demand (pp. 64-65).

In England, a school’s admissions are usually based on a geographical delineation of the area from which it is primarily able to recruit and within which pupils domiciled gain priority of access to the associated school. This is the case for most schools; however, pupils with SEN or who hold an Education and Health Care plan (EHCP) or have been in care usually have an enhanced priority status for admissions. The situation with regards to admissions is granted further complexity by the presence of faith schools, with admission based on religious faith and/or practice, and University Technical Colleges and numerous variations on the theme of selection at 11. A mechanism based on geography means that, for most pupils in England, access to schools that are perceived favourably, and that are usually in high demand, is based upon their families possessing enough economic capital to locate into the school’s designated catchment area (Leech and Campos, 2003; Gibbons and Machin, 2006, 2008; Davidoff and Leigh, 2008).

The implication is that inequalities in access are reinforced by the way in which schools’ admissions are constructed and the mechanism of the proxied education market (Cookson and Persell, 1985; Thrupp and Lupton, 2006; Jenkins, Micklewright and Schnepf, 2008). Recent press articles have highlighted concerns arising about the way in which admissions are decided, now that a more market-driven education system exists in England (Cantle, 2016; Dathan, 2016; Massey, 2016; Millar, 2016, 2017, 2016c; Pells, 2016; Tickle, 2016).

In England, studies of school performance that consider the different types of schools in the system and whether they have led to improvement have been largely inconclusive about any improved performance of the system because of structural change (Rutt and Styles, 2013; Worth, 2014, 2015).

One of the key features emerging within the school system, as a result of the marketised systems, is the growth of academy "chains" that sponsor academies. Over the past three years, the Sutton Trust has commissioned a report on the performance of academy chains
(Hutchings, Francis and Devries, 2014, Hutchings, Francis and Kirby, 2015, 2016) that sponsor academies. The 2016 report found that:

- The chains in their analysis had lower OFSTED inspection grades than the national average.
- In terms of the "floor standards", academies in the study were twice as likely to be below the floor standard as other types of publicly-funded schools.
- These academies performed well for disadvantaged pupils when their intakes were relatively affluent but not so when the intake was more disadvantaged.

But perhaps more importantly, given the initial rational for the establishment of these types of schools (p. 6):

The proportion of chains in our analysis group performing above the mainstream average for their disadvantaged pupils has fallen year on year from 2013 to 2015.

So, by the measures of improving failing schools, raising standards and providing improved education for the most disadvantaged, an interpretation of the impact of academies and structural reform programme is inconclusive, whilst some commentators might say that it has failed to meet its objectives.

However, the introduction of these new school types continues to attract a critique. As in the case of "Free Schools", for example, (Gilbert, 2012; Syal and Adams, 2013), some of these schools were to be located in areas where a surplus of school places already existed, rather than locations in areas of need, and were expensive to establish. Some of these schools failed to open for a variety of reasons, such as the lack of suitable accommodation or failure to attract enough pupils (Abrams, 2012).

In the case of UTCs, the establishment of these schools has proved controversial and their success in recruiting pupils has been mixed (Long and Bolton, 2016; Kettlewell, Bernardinelli, Hillary, Sumner). In the 2015 general election, all three main political parties indicated general agreement with a policy direction of encouraging a plurality of school types (Conservative Party, 2015; Labour Party, 2015; Liberal Democrat Party, 2015).

The establishment of these new types of school can be seen as being located within a continuing reform of education, based on market-driven solutions (Ball, 2013) and the
belief by successive governments that structural solutions to reform the market are a key component that will lead to the raising of standards.

The approach was outlined in the White Paper, Education Excellence Everywhere (DfE, 2016a), that legislation would be passed to ensure that every school would be an academy, or in the process of conversion, by 2020.

However, in the Green Paper, "Schools that work for everyone" (DfE, 2016b), a further shift in policy was signalled. There was a rolling back of the policy of forcing schools to become academies; instead, emphasis was placed on increasing the number of selective schools and faith schools in the system and increasing parental choice. Such a shift in approach may be significant, in that further restrictions on access may now be enacted at the stage of admission to secondary school, which may have implications for access to post-16 education.

2.3.3 The accountability framework in the English school system

The accountability framework in force that relates to English secondary schools is complex, diverse and dynamic. West et al. (2011) distinguish between accountabilities for different audiences thus:

> It is important to distinguish internal accountability (e.g. management structures within a school) and external accountability (how a school is held to account by external stakeholders).

(West et al., 2011, p. 45)

They also clearly present a typology of different accountabilities that might exist within a school: Professional; Hierarchical; Market; Contractual; Legal; Network; and Participative (pp. 47-48). A detailed account of the development of school performance measures is also included, so, for economy of expression, additional commentary will not be undertaken. The key headline measures of school performance in force at the time of the study, and pointers as to the future direction of those measures, will be the ones considered (these are explained in Chapter 1).

It is also important to gain an understanding of how accountability frameworks are derived. Given that the accountability frameworks in the English education system are high-stakes, i.e. failure to achieve at the set standards may carry consequences and
sanctions. It is reasonable to expect school leaders to implement practices and policies that ensure their schools meet the measures.

a) The measurement of school performance

The Conservative governments of 1979-1997 saw the public release of information relating to the performance of school pupils as an important factor in strengthening the accountability of schools. In 1992, the Education (Schools) Act legislated for the release of school performance information.

In the earliest league tables, performance at the end of Key Stage 4 was reported but success rates in academic and vocational qualifications were published as separate items. There was no notion that academic and vocational qualifications were "equivalent", rather they were recognised as different, but each had value.

The qualifications that are considered to be equivalent to GCSE examinations tend to be vocational compared with the more academic focus of GSCE-style exams. There are also major methodological differences in the way in which performance is assessed, when looking at GCSEs and equivalent qualifications. GCSE exams are, in the main, apart from a limited range of practical subjects, assessed by means of a written exam and what are termed "Controlled Assessments". These controlled assessments are designed to be conducted under exam conditions with pupils independently completing assessment tasks set by their teachers. These are then moderated internally and subject to external verification by a sampling methodology. The critical point here though is that the bulk of the assessment determining a pupil’s result is derived from externally set and marked examination papers.

Assessments for vocational qualifications, at the time of the study, were set and assessed internally by the teachers of the course. There was a quality assurance framework, which included internal and external sampling of work to maintain standards, meaning that, over the course of such a programme, each pupil might only have their work externally sampled once, if at all. These assessment tasks were based upon the individual units of study and there was no requirement for an assessment that looked at a candidate’s ability to synthesise what they had learnt and produce evidence outside of a classroom setting.
As can be seen, not only are these two types of qualification different in focus, they are also fundamentally different in the way they are assessed. However, for the purpose of accountability, these qualifications are regarded as being equivalent to each other.

As suggested by Stevenson and Wood (2014), the measurement of school performance in England is predicated on a "high-stakes" testing regime. This view seems to fit with the definition provided by Amrien and Berliner (2002) of high-stakes testing as:

...tests from which results are used to make significant educational decisions about schools, teachers, administrators, and pupils. High-stakes testing policies have consequences for schools, for teachers, and for pupils. (p. 1)

What is critical to an understanding of the high-stakes nature of accountability frameworks, is the situation that schools have found themselves in, as the government has issued warning notices to academies that do not meet the standard. This means that if they do not improve, their contractual relationship with the government could be terminated. Other sanctions could include the sponsor’s replacement with another sponsoring organisation, the removal of the governing body and the replacement of senior staff in the school.

So, the measurement of pupil outcomes and the way in which measures are constructed have clear implications for schools, in terms of both accountability and consequences.

This thesis is particularly focused on the headline measure of 5 A*-C GCSE passes (including English and Maths GCSE and equivalent qualifications) and the relationship to a measure that is calculated without the inclusion of equivalent qualifications. The GCSE examination was originally designed for all pupils to access, and in some schools that remains by far the dominant type of examination, yet in others there is much more reliance on vocational qualifications. Such an observation is apparent, even when schools have similar contextual factors, both in terms of the prior attainment of the exam cohort and socio-economic disadvantage. This could be very important if the qualifications gained at the end of Key Stage 4 are important for post-16 progression. It could mean that if pupils in a disadvantaged socio-economic context and/or attending certain types of schools with curriculum structures that favour vocational qualifications and restrict access to academic qualifications, then their access to post-16 educational provision could be restricted.
There is much debate about the efficacy of high-stakes testing in raising standards and, whilst important, it is not the key issue in relation to England. Here we have high-stakes tests; they are a key component of the accountability framework and act as a price signal in the marketised system. Failure by schools to achieve certain levels of performance with regard to these tests carries the possibility of interventions by regulatory and governmental bodies. In regard to the English system, critical examination will concentrate on the efficacy of high-stakes tests as part of the accountability frameworks.

Lee (2008), in carrying out a meta-analysis of studies that seek to assess the usefulness of these tests in regard to accountability frameworks, found that high stakes had a modestly positive effect. However, there were important methodological issues with the studies he analysed and with the limitations of his own study. He did, however, flag one significant distributive effect of high-stakes testing; it had “no significant effect on narrowing the racial achievement gap” (pp. 628-629).

The paper reaches the conclusion that no judgment can be made on the efficacy of an external accountability measure based on tests from the evidence thus far because the studies covered in his work have "limitations, uncertainties and inconsistencies in many findings” (p. 608).

In the English system, understanding is further complicated by the introduction of the "floor standard" and a grading process based upon a conceptualisation of "comparable outcomes" (OFQUAL, 2014). This is a process by which the performance of a GCSE cohort is referenced to its performance at the end of primary school. The problem with adopting this approach is that it can fail to reveal any real improvement in pupil performance, given that it is referenced to prior performance. An important failing of the process is recognised by Glenys Stacey (2012), at the time the chief examinations regulator, in a letter to the Secretary of State for Education (p. 20); “one consequence of this approach is that it can make it harder for any genuine increases in the performance of pupils to be reflected in the results.”

There is literature, mainly from the United States, establishing that there are significant problems with the use of high-stakes testing as an accountability measure (Duffrin, 2000; Haney, 2002; Kohn, 2000; Au and Gourd, 2013; Ydesen, 2014).

However, perhaps one of the most serious critiques of the use of high-stakes testing as a component of accountability regimes can be seen from the position statement of the
American Educational Research Association (AERA, 2000). Their statement sets out a list of conditions, which, the association argues, need to be met if high-stakes tests are to have any validity as a component of an accountability regime.

A contrasting view of the efficacy of high-stakes testing is offered in a Policy Brief from the New York State Education Department (2004), in which they reviewed academic evidence and found generally positive effects in four main areas; pupil academic achievement, pupil attitudes and motivation, dropout rates, and teacher behaviour. This was achieved mainly by identifying methodological flaws in research that did not fit with the clear political direction of the report, namely, to justify the introduction of high-stakes tests in New York State.

Cizek (2001) supports the above view and asserts that any negative consequences of high-stakes testing are outweighed by the benefits of such a system. Of interest are the claims he makes in regard to improvements in pupil learning (p. 25) and the positive distributive effects of high-stakes testing with special regard to pupils with additional learning needs (p. 23).

Given the focus of this study on the access for learners of all backgrounds and within all learning contexts to post-compulsory education, the impacts of a high-stakes driven accountability regime and the consequent distributive effects will need to be considered.

An examination of the distributive effects that can occur as the result of a high-stakes testing regime is provided by Schrag (2004). He maintains that where such a testing regime is prevalent, those pupils who are most in need of help and support miss out, as resources in schools are concentrated on those pupils on the pass/fail borderline. He also notes that these are often black pupils.

But there are also other aspects of the distributive effect of high-stakes testing that require examination. Baker and Johnson (2010) concluded that socioeconomic status has a major impact on pupil performance in high-stakes testing. They contend that pupils with a low socioeconomic status perform less well on high-stakes tests because of their contextual location. Reflection is needed, therefore, to decide whether the raw scores or percentages from high-stakes tests should be used to make judgments about schools and individual pupils, and whether such judgments are either ethical and/or equitable.
In summary then, the research evidence appears to suggest that accountability based on
high-stakes testing, such as in England, is flawed. There is no robust evidence that the
process of high-stakes testing has an efficacy in improving educational outcomes. It seems
clear that another consequence of this measure is that it could provide a rationale for
schools to pursue a curriculum offering for pupils that maximises and prioritises school
measured performance outcomes. Manipulation of the curriculum in such a way might well
have an effect on pupil access to post-16 education, given the discussion of determinants
of that access.

b) Inspection as a component of accountability

The other key component of the accountability framework for schools in England is the
school inspection process. The prevalent discourse adopted by the school’s inspectorate in
England, the Office for Standards in Education (OFSTED), is that it has had a major impact
on improving the quality of schools. In the latest annual report of Her Majesty’s Chief
Inspector of Education, Children’s Services and Skills (OFSTED, 2016), it is stated:

The proportion of good and outstanding maintained secondary schools has
increased again this year, with more than 420,000 more pupils in good and
outstanding secondary schools than in 2010. (p. 53)

So, at least part of the implied narrative is that the inspection regime and process has had
an impact on secondary school improvement. A study that examines how the mechanism
of improvement as a result of inspection might work is provided by Jones and Tymms
(2014).

These statements and constructs of impact remain problematic, due to the fact that
OFSTED are not only the initial arbiters of the quality of a school, but also the sole
organisation judging whether that school has improved or not. There is a clear conflict of
interest here; if the inspection to judge whether a school has improved is negative, then
OFSTED has had no impact on improvement, and vice versa in the case of a positive re-
inspection.

Since September 2015, inspection is now carried out by School Inspectors directly
employed by OFSTED. Prior to September 2015 (OFSTED, 2014b), most inspections of
schools in England were carried out by Inspection Service Providers (ISPs). These were
private sector providers who carried out school inspections for OFSTED on a sub-contract
basis. It is important to note that, as a result, significant numbers of accredited inspectors were removed from the register of inspectors.

During the time period within which OFSTED were contracting these ISPs and using sub-contracted inspectors not directly employed by OFSTED, a number of concerns emerged. These included; conflicts of interest, the quality of the inspection judgments made, and the quality, background and competence of the contracted inspectors, for example as reported by Duell and Bains, 2013; Cotswold Journal, 2013; Editor O.W.W, 2013; Wright, 2013; Adams, 2014; Dale, 2014; Harris, 2014; Royston Crow, 2014; Spenborough Guardian, 2014; Wakefield Express, 2014; Warrington Guardian, 2014; Herts and Essex Observer Group, 2015; Press Association, 2015; and Wellman, 2015.

In fact, in some cases, schools contested their inspection judgments with the inspectorate and, in some extreme cases, resorted to the law to contest inspection outcomes (Woodhouse, 1998; Daily Mail, 2000; Baty, 2003; Hayes, 2005a, 2005b; Halifax, 2006; Staham, 2009; Hindle, 2011; Bury Free Press, 2009; Dryden, 2013; Royston Crow, 2013, 2014; Whitwam, 2013; Fry, 2015; Duncan, 2017).

So, in placing this study in the context of the applicable inspection regime, there existed a model of inspection based on third-party private contractors, disquiet about the quality of the individuals making judgments and the Inspection Framework and School Inspection Handbooks that were implemented from January 2012.

With respect to the Inspection Framework and School Inspection Handbook, Richards (2012) contended that both of these documents contained problematic elements, which called into question the integrity and validity of the judgments that were being made. He also argued that schools in the most challenging of circumstances were most likely to be reported as not providing a good education. One of the key issues he identified was that the major vehicle used by schools to transmit knowledge, skills and understanding - the curriculum - is not inspected in any detail.

It could also be argued that the notion of the quality of a school, as codified in the Inspection Framework and School Inspection Handbook, reflects the presumptions, beliefs and policy narrative of the inspectorate. In the case of the 2012 Framework, a revision to the School Inspection Handbook (OFSTED, 2014a) took place in August 2014, which included the following section about the judgment of attainment:
pupils’ attainment in relation to national standards (where available) and compared with all schools, based on data over the last three years where applicable, noting any evidence of performance significantly above or below national averages; trends of improvement or decline.

A study that relates OFSTED judgments to a school’s level of disadvantage was recently carried out by Hutchinson (2016) for the Education Policy Institute. It found that successful inspection outcomes had a relationship pattern with disadvantage (as proxied by the percentage of pupils in school eligible for Free School Meals or who had been "looked after").

Another key area of judgment, which informs the inspection, refers to the quality of teaching. This judgment was largely based upon lesson observations undertaken by inspectors and the data on the quality of teaching that is provided by the school from any internal observation exercises. There is recent literature on the efficacy of different observational methodologies used to assess teaching quality (Casabianca et al., 2013; Mashburn et al., 2014; Waldegrave and Simons, 2014). In relation to the inspection regimes and given the importance of the judgment around the quality of teaching, it seems important to consider if such judgments can be validated on the basis of accuracy.

The problem is alluded to by Lacey (2012) in a letter to the Times Educational Supplement, in which he comments:

> Unless, of course, the criteria for judging the quality of teaching are related to orthodoxy rather than to effectiveness.

Matthews et al. (1998) would refute that conclusion and find that the quality of inspection judgments and correlation between different inspectors can be regarded as valid and accurate. On closer inspection of the data, though, problems can be identified:

> The extent to which the data in the study are representative of the national picture is of course problematic in view of the way the sample was constructed. If we assume the sample is representative only of the more confident and experienced inspectors, the results reported here suggest that OFSTED’s Framework and related advice provide an effective means by which such inspectors can judge teaching with considerable reliability. (p. 186)
One of the key aspects of this research is "more confident and experienced inspectors" being sampled and not a representative sample of the whole population of the inspection workforce and is therefore likely to positively skew the data.

Other problems related to the way in which OFSTED inspects teaching are revealed by Barton (2011) in an article written for the Times Educational Supplement. His prime concern was that judgments of pupil progress in lessons were being made on the basis of 20-minute lesson observations and implied that this may be leading to teachers teaching to the requirements of the inspection framework that takes no account of wider contextual matters.

So far, then, it is clear that two of the main foundations of the OFSTED inspection framework, judgments on pupil outcomes and the quality of teaching, may be flawed in design and execution.

Given these conclusions, there must still be questions about the nature and efficacy of the inspection regime and the impact it has on the operations of schools. In her study of an English inner-city comprehensive, Perryman (2006, 2009, 2010) identified the whole process as flawed. She reflects that inspection does not represent the reality of a school but is rather a performance that is put on for the benefit of the inspection team. Her finding seems to be reflected beyond the bounds of the study. There are many press reports of the tactics that are used by schools to try and mislead inspection teams, for example, Clark, 2005; Chadwick, 2010; Kershaw, 2010; Paton, 2010; Williams, 2010; Huddersfield Daily Examiner, 2012; Radnedge, 2012; Stewart, 2012; Barrett, 2015; Cockerell, 2012; Elvin, 2015; Mackley, 2015. In her study, Perryman locates the changes to the school’s operations in response to inspection pressures as being located within a notion of performativity (Lyotard, 1984; Locke, 2015).

A performatory response is where organisations and individuals operate to meet the needs of performance frameworks. It was initially explained by Lyotard (1984) and follows from a Foucauldian analysis that is further developed by Locke (2015). Such a lens would seem to provide a reason for the existence of gaming.

Further doubt has been cast on the efficacy of inspections bringing about school improvement by Gaertner, Wurster and Pant (2014). In a survey of the literature, they contended that there is little international evidence to establish a link between school inspection and improvement. In fact, their conclusion seems to be more generous than that.
drawn by Rosenthal (2004). He demonstrated, using a quantitative methodology, that there was an adverse short-term effect on school performance after an inspection had taken place. He further concluded that the long-term benefits of inspection on school performance were not discernible. This would seem to agree with the findings of a recent study by Hutchinson (2016, Op. Cit.) for the Education Policy Institute, which found that over half of schools had retained or improved their OFSTED rating despite declining levels of performance.

More positive findings were reported by Altrichter and Kemethofer (2015), who identified that inspection frameworks do have benefits in terms of system improvement. They identified that school leaders, who are subject to an inspection regime incorporating the dimension of accountability are; "more attentive to the quality expectations communicated by inspections, more sensitive to stakeholders’ reactions to inspection results, and more active with respect to improvement activities" (p.32).

These are all identified as positives, but they also identify the unintended consequences of the operation of such a regime. They found significant responses to the accountability pressures of inspection, including discouraging the development of new teaching strategies, and; “narrowing the curriculum and instructional strategies” (p. 45). Interestingly, the idea of narrowing of the curriculum is also identified as a performance response to the pressures of high-stakes testing in a previous element of the discussion.

Matthews and Sammons (2004) identified positives in an evaluation of the relationship between the process of inspection and school improvement. These benefits are expressed thus:

The most positive effect of inspection was felt to be that it provided an objective, external view and a focus for the school’s development. Schools report such benefits as:

- school evaluation, providing an independent view of the school’s strengths and weaknesses
- a boost to the school’s morale in endorsing good and innovative practice
- helping managers to decide on priorities for change
- assisting the drive to raise standards. (p. 50)
Ehren and Vischer (2008) found that there were positives for schools and school leaders as a result of the process. They identified that it is the evaluation of the areas for school improvement and the associated development of a dialogue for action that enables a school to utilise the process to improve what it does.

In all these studies, there was no convincing explanation of any causal mechanism that links inspection and improvement. Jones and Tymms (2014) identified the way in which OFSTED sees the inspection process as leading to school improvement. They identified a number of positives from the inspection process but concluded that:

At the moment there is a lack of evidence from strong research designs to assess the impact of inspections and the assumption that there is a causal link between inspections and school improvement cannot be clearly supported from the literature. (p. 328)

2.3.4 School policies, practices and gaming

As noted above, failure to achieve the standards demanded by the accountability frameworks can have significant consequences for schools, their leaders and governance structures. This thesis will attempt to show that a result of accountability pressures is that schools may adopt policies and practices that seek to maximise outcomes in terms of the accountability measures, ie. gaming.

Schools have, of course, always striven to maximise outcomes for the learners in their care. They seek to achieve these outcomes by attempting to ensure that pupils are exposed to good teaching and learning practices, delivered through the vehicle of the curriculum. The issue here, in relation to the focus of the study, is to understand if strategies that relate to school policies and practices are adopted to maximise outputs against accountability frameworks or to ensure that learners are able to have the widest choice of options, given their characteristics, to progress.

Bearing in mind the sanctions that could apply if schools fail to achieve against the panoptic measurement of performance, Perryman et al. (2011) considered the ways in which schools organise themselves to meet the demands of the accountability frameworks. They considered strategies that schools have implemented to improve pupil performance in their English and Mathematics GCSE examinations. Because English and Mathematics GCSE passes were, from 2008-2015, an identified key component of the critical measure of
school performance, so the percentage in a school gaining 5 A*-C passes at GCSE (or equivalent qualifications), including passes in English and Mathematics GCSE, became of the utmost importance. Failure by a pupil to achieve a grade C pass in both subjects would have an adverse impact on the overall school judgment. In common with other measures of performance, the paper identified the strategies being implemented to raise achievement against the key threshold. They identified that:

So important are the league tables that certain schools developed inventive, even dubious strategies and techniques to boost their performance in these tables (p. 180).

Berliner (2011) provided a wider perspective by scoping the situation both in the United States and in England. He suggested that in both contexts wider learning goals and a richness of educational experience was being denied school children, as schools became wholly focused on preparation for high-stakes testing. His work was based on primary schools but there is anecdotal literature that would seem to support an assertion that the same is happening in English secondary schools (Annetts, 2016; Carrington, 2016; Ellis, 2016; Hurst, 2016; Ratcliffe, 2016; Thorpe, 2016a, 2016b). In truth, this is a brief snapshot of the many commentaries in a similar vein and perhaps indicates real concern about the narrowing education effect of a curriculum directed at achieving measured performance outcomes.

Policies and practices that might be used to maximise outcomes could include; setting and streaming methodologies, curriculum design and qualification access, and exam policies and procedures. These will be discussed in turn.

a) Setting and streaming methodologies

Setting is a common practice (Muijs and Dunne, 2010; Whetter, 2010;OECD, 2013a) across schools in the United Kingdom. Although there are no clear national figures available for the proportion of lessons that are set, Dracup (2014) refers to OFSTED data for inspections conducted during the academic year 2009/10, in which it was identified that 71% of Mathematics lessons observed in secondary schools were subject to some form of ability setting or streaming. The figures for English and Science were 58% and 62% respectively.
It may be that a reason for the continuation of setting is now related to maximising outcomes against accountability measures, rather than equitably meeting the needs of all learners but even in this respect such an assertion is not supported by the evidence.

It is difficult to ascertain why policy makers persist in supporting setting and streaming given the research evidence. The dominant body of literature suggests that there are clear doubts, evidenced in the literature about efficacy and the distributive effects of implementing setting and streaming.

In terms of efficacy, the Organisation for Economic Cooperation and Development (OECD, 2013) make the following point;

Pupils in schools where no ability grouping is practiced also scored eight points higher in mathematics in 2012 compared to their counterparts in 2003, while pupils in schools where ability grouping is practiced in some or all classes had lower scores in PISA 2012 than their counterparts in PISA 2003. (p. 193)

Such a view is supported by studies carried out by Steenbergen-Hu, Makel and Olsezewski-Kubilius (2016) and Betts and Shkolnik (2000).

There are also concerns about setting and the way it impacts on pupils who are placed in lower sets. Whilst setting is found to have beneficial effects, in terms of progress for higher attaining pupils, the same is not true for lower attaining pupils. Such a finding is identified by Slavin (1990). When contextual variables; "ability levels, socioeconomic status and other control variables" (p. 474) are considered, then there is a significant improvement in achievement for those in higher ability groups and significant detriment to those pupils in lower ability sets. Such a finding is supported by Gregory (1984), Kulikand and Kulik (1987), and Ireson and Hallam (2009). It is also interesting to note the recent work of Francis et al. (2017), in which the lack of pupil movement between sets suggests that once allocated to a set the pupils tend to stay put.

Given that the main predictor of set allocation in secondary school is prior attainment in primary school (Muijs and Dunne, 2010.), factors that have a negative contextual impact on that attainment appear to be reinforced through the mechanism. Such factors include; social disadvantage ( Gross, 2008; Law, Mcbean and Rush, 2011; Kiernan and Mensah, 2011), ethnicity (Gilborn and Mizra, 2000; Hamnett et al., 2007), and gender (DFES, 2007; Golsteyn and Schils, 2014).
In summary, the evidence in relation to differentiating pedagogy by attainment would seem to indicate that:

1. The independent evidence is that grouping pupils by ability leads to lower mean outcomes for all pupils. However, those pupils allocated to higher sets have differentially better outcomes.

2. Pupils in lower sets have differentially restricted access to the diversity of curriculum opportunities compared with those in higher sets.

3. Pupils with a lower socioeconomic status, gender or ethnicity may have educational disadvantage reinforced by the common practice of setting

However, I would argue that there is rationality, for the school, in adopting such an approach, because the key accountability measure, at the time of the study, was based upon achievement of a threshold. Given such a construction, schools’ rational aim is to maximise cohort attainment in relation to that threshold, since that is the key judgment of performance. It could further be claimed that a result might be a differential allocation of resources to those pupils whose performance might influence the threshold outcome, rather than those whose outcome will not.

*b) Curriculum design, qualification access and the use of equivalent qualifications*

Miller et al. (2010) postulated a curriculum design in which they denoted "curriculum factors" as being part of that construction. They also implied, on a full reading of the study, that for these "curriculum factors":

... an emphasis on outcomes as the determinant of curriculum-making practices is misleading and potentially damaging. (p. 241)

Some schools seem to be structuring the curriculum to maximise measured outcomes, streaming pupils as they choose their options at Key Stage 4, usually referred to as "Guided Pathways" or "Guided Options". Examples of this type of information and guidance can be seen in appendices 1a and 1b. If allocation to these pathways is dependent upon prior set allocation, then it might be contended that the contextual disadvantage of that allocation is reinforced. In some cases, the trajectory towards Key Stage 4 appears pre-determined by the result of Key Stage 2 SATs tests (Appendix 5).
McNally (2015) extended this understanding, suggesting that in structuring an operational response to the accountability frameworks;

They might teach only what is on the test and ignore broader aspects of education. They might encourage pupils to take ‘easy courses’ rather than courses that would stretch them. (p. 62)

Wilson et al. (2006) support the above view and suggested that curriculum strategy was being used by some of the participants they surveyed, by introducing vocational courses, which are identified as easier to pass than academic courses;

.. we started last year, we introduced a GNVQ course which is a double award and we deliberately targeted that at middle of the road pupils, those pupils who might get four A to C passes or who might get six A to C passes if we put them on this course. (Comprehensive Girls, p. 163)

They also suggested that such strategies were designed, at least in part, to maximise the performance of the school rather than for the benefit of pupils. This is a theme that was also apparent in Wolf (2011):

the system of performance indicators which is currently being used to measure schools’ performance at the end of Key Stage 4, has resulted in an enormous rise in the number of ‘vocational’ awards taken by young people. The speed with which numbers have grown, and the absence of any other explanation, make it clear that the reason has been to promote schools’ league table performance: evidence to the Review confirms this. (p. 80)

Because of this finding, Wolf made recommendations to the then Secretary of State for Education, which resulted in changes to the way in which performance measures were calculated. These recommendations were designed to encourage a move away from the inappropriate use of vocational qualifications and a refocusing on the needs of each individual learner.

c) Examination policies and procedures

There is also a suspicion that schools are using even more extreme policies and practices to ensure that they meet the demands of the accountability framework. A recent report by Nye (2017) for Education Datalab seems to suggest that some schools in England are
managing pupils out of examination cohorts and thus enabling performance against benchmarks to be improved at the expense of these hidden learners. Although they do not name individual schools, the group of schools where this practice appears to be most prevalent are sponsored academies.

In the English context, one of the responses of individual teachers to the pressures that accountability exerts appears to have been to engage in cheating (Williams, 2001; Lepkowska, 2002; Clark, 2006; Taylor, 2006; Birbalsingh, 2011; Furness, 2012; Lang, 2013; Paton, 2013; Armstrong, 2014; Cassidy, 2015; Editor 2015). These issues are reflected in official statistics. In December 2016 OFQUAL, the exams regulator for England, reported that there had been a 48% reported increase in the number of penalties in the 2016 exam series when compared with the previous year (OFQUAL, 2016). It is also worthy of note that the penalties imposed on institutions had fallen by 41%.

If accountability is based on measured outcomes in a school context, then it follows that a curriculum based on pursuing those measured outcomes could also mean that the needs of learners become subordinate to the need to maximise outcomes.

2.4 Conclusions

2.4.1 Background and determinants of access to post-16 education

Having gained an understanding of the background to the study and the determinants of access to post-16 education, a number of factors become clearer.

The structure of secondary education system in England has been in a period of constant change for a number of years. However, in the context of this study, the move towards academy status and the development of new school types (Free Schools and UTCs) was the key direction of structural reform.

However, there are wider issues at stake here, rather than just the examination of performance measures, in determining whether structural reform has delivered what it promised, in terms of improving the education system.

This is an argument that has been articulated well by Stephen Ball (2013) and Diane Ravitch. For example, Ravitch (2013) examined several dimensions by which the success of an education system is measured; achievement and attainment, graduation rates from high school, and the quality of teaching. She suggested that:
The way forward requires that education policy be shaped by evidence and by the knowledge and wisdom of educators, not by a business plan shaped by free-market ideologues and entrepreneurs. (p. 324)

Her argument was that an education system based on market-type structures fails to meet the democratic public service obligation of education by failing to provide equality of access and opportunity for all citizens. Instead, a market system perpetuates existing inequalities.

Wider philosophical issues are also considered by Heilbronn (2016), who concluded that there are significant dangers in respect of education, which can emerge through structural reform based on a marketised, privatised and fragmented system. These she identifies as being apparent in three main areas;

- Equity
- Democracy and Associated Living
- Public Resources.

She asserted that if all these dangers emerge then the fundamental purpose of education as a key factor in ensuring social cohesion is placed under threat.

It is clear that a major influence on the structure of education is the move towards a marketised system. However, the solution implemented is based on the construction of the market without addressing existing inequalities, the identification of the benefits of a market is based on an ideal, given stasis in relation to context and the fixing of inequalities in the structure, ceteris paribus (all other things being equal). In fact, I believe that re-structuring the education system in favour of a marketised system is not appropriate and the prolonged and continuing political imposition of a marketised education system pose fundamental problems of equity in provision. The education system does exist within an economic environment, yet, critically, the output of an education system is not reducible to a measured economic output but also includes societal and individual dimensions.

There is the added dimension of how slim the evidence is that marketised structural change has resulted in any school improvement; even in terms of (market-friendly) measured pupil outcomes, evidence is inconclusive. Taking a closer look at the performance of those schools that are serving intakes with relatively high levels of social
disadvantage, the findings are even less favourable. In relation to the study, this conclusion is important given that a prime determinant of access to high performing post-16 provisions is the level of attainment achieved by pupils in the last year of compulsory schooling.

In broader terms, there is also a school of thought that a re-structuring of the education system, based on a proxied market model, may also lead to strategies being implemented by schools that respond to market signals rather than the needs of learners. Within a dynamic background of change to the system it is important to also consider the determinants of learner access to post-16 education.

It is clear, as already stated, that a key determinant relating to progression to post-16 provision is educational attainment at Key Stage 4. Attainment is important both in terms of qualification mix and levels of achievement in specific qualifications. The problem here for pupils from a disadvantaged background is that the way their secondary education was structured may mean that they may not have the requisite qualification mix or level of attainment to access high-performing post-16 destinations, which are usually based on the achievement of academic (GCSE) rather than vocational qualifications. The implication for the individual learner is that access to the destination may not be restricted de jure but is de facto, because they may have had restricted access to GCSE qualifications at secondary school.

Access to opportunities is further complicated by the proliferation of institutions that now operate in a proxied market structure for post-compulsory education.

The problem for pupils from a disadvantaged background is that they appear to be even more disadvantaged, given that top performing comprehensive schools seem to differentially select more advantaged pupils. The result of systemic, and possibly systematic, discrimination is that disadvantaged pupils appear to be disproportionately represented in schools that are always under pressure to raise performance. Research suggests that these schools often implement achievement-raising strategies that simply reinforce disadvantage and may not provide the requisite breadth of qualification access that would enable emancipatory post-16 progression.

With regard to ethnicity, there is also a concern that minority ethnic pupils must bear the burden of inequities that the market may impose. There is a suggestion that this could be related to the fact that, from a market perspective, pupils from some minority ethnic
groups are not seen as desirable. However, there could also be an interaction between ethnicity and socioeconomic status.

There may also be a difference in the type of qualifications studied post-16 and their relation to issues of access to higher education and subsequent success at degree level. It is known that, the holders of vocational qualifications at level 3 are less likely to gain offers, more likely to enter lower tariff institutions and less likely to gain high degree classifications as a result.

In terms of gender, the situation is more complex. Girls are proportionately more likely to transition to post-16 educational destinations but, if girls do not progress in this way, face more barriers in terms of career establishment and progression.

Peer group effects and parental influence are also important factors that young people consider when they make the decision to continue in education. In the case of peer groups, the evidence does seem to indicate that ex ante, the decision to progress, is related to the peer group context. Parental socioeconomic status and background are also seen to play an important role in the decision of whether to pursue education or seek alternative pathways. Working-class parents are more likely to support a decision to exit education at the end of compulsory schooling.

The demand for youth labour in local markets can also act as an incentive or disincentive for a young person to continue in education. Working class pupils with a weaker level of attainment, although they could accrue long term benefits from continuing with their education, are discouraged from doing so if they can obtain short-term economic benefit.

Taking the background and contemporary environment of the English system into account, the next section of the chapter will seek to critically examine the key contextualising variables that might be related to the learner determinants of access to post-16 educational opportunities. These variables will include; school types, systems and structures, the accountability framework in the English school system, issues of gaming, and school policies and practices.

2.4.2 Gamification, gaming and key contextualising issues

This is a study that is attempting to illuminate the nature of the progression process for pupils as they transition from compulsory to post-compulsory education. It has a focus and
interest on the barriers that may or may not face pupils from disadvantaged contexts in seeking equity of access to post-16 destinations.

The transition process is identified as taking place within an education system that is constrained by the structure of that system, the demands of the accountability regime that is in place and the policies and practices that are adopted by schools to ensure that they achieve the demands of the accountability frameworks. There exists complexity around the interaction of these issues, which may never be fully understood. It is also clear that there are aspects that can be examined, such as systems, structures and the response of actors through the construction of appropriate research methods and instruments.

It appears appropriate to review and summarise the existing research evidence in relation to key contextualising issues, insofar as they could be contended to pertain to the transition from compulsory to post-compulsory education.

The accountability frameworks that exist in the English education system are based on a neo-liberal narrative that emphasises the autonomy of individual schools. Yet the existing framework is constructed around tightly defined definitions of performance. These are based on the measured pupil outcomes of high-stakes testing and an inspection process that appears to value the same outcomes and militates against the likelihood of favourable outcomes for schools in a disadvantaged context. There is also research, which calls into question the efficacy of an accountability regime based on high-stakes testing and/or inspection.

It is suggested that the responses that schools develop to meet the demands of the external accountability regime is to “game” the system, maximising measured outcomes rather than meeting the needs of learners.

There is a body of literature that considers the impacts of both components of the accountability frameworks on what schools’ practices and procedures and how that might have consequences for learners. These impacts are also greater on pupils and schools located within a disadvantaged context, which may well have implications for progression access.

The policies, practices and procedures that might be manipulated to maximise measured outcomes rather than pupil need could include; setting and/or streaming, manipulation of
curriculum design and interventions with regard to external examinations, which might include unethical or prohibited activities.

Setting and streaming methodologies might include an easy path is chosen for pupils to achieve measured success, rather than a curriculum that meets learner's needs. Given that access to post-16 destinations is dependent not only upon the number of qualifications obtained, the level of pupil achievement, but also the nature of those qualifications, academic or vocational. Therefore, curriculum decisions about learner access to qualifications are of critical importance to learner choice of and access to post-16 progression pathways.

In relation to curriculum structure schools might construct “guided” Key Stage 4 pathways model which could deny choice and equity to some pupils. For example, those pupils who are not placed in top sets or streams may not be able to access the full range of academic subjects. They may have a constrained choice because the school has determined that they will gain better measured outcomes on vocational rather than academic programmes, notwithstanding an individual's learning or progression needs or ability to succeed. Given the importance of setting and streaming in relation to post-16 progression, it will need to be addressed to inform the research questions.

Finally, there is emerging evidence that there is some manipulation around the arrangements for external assessments at the end of compulsory education. These range from those that are permitted by the regulations, e.g. extra classes for borderline pupils and those that are not such as teacher intervention in “controlled conditions”.

There is also an impact on educational equity, in that these negative impacts appear to be focused on pupils in a disadvantaged context. These impacts might have an effect on the ability of pupils to access a full range of post-16 opportunities. If the situation is more pronounced, in the case of pupils that are disadvantaged, it is surmised that this barrier is related to the accountability measures. Thus, it can be recognised as a systemic impediment to post-16 progression pathways for pupils located in a disadvantaged context.

A policy that is based on setting and streaming adds to social disadvantage. In contexts of social disadvantage pupils tend to attain less well. If this is the case at the end of primary school, then setting and streaming on entry to secondary school will effectively, or at least in part, reinforce and add a multiplier to that disadvantage. It is also known that pupils at the end of secondary school, if they are in lower sets or streams, tend to make
differentially less progress than their contemporaries in higher sets. So, again, social disadvantage is systematically multiplied by the application of these policies.

Given the importance of the qualification mix and attainment levels in terms of post-16 destinations, these curriculum strategies arguably have an impact on post-16 progression. If these strategies are identified as being related to accountability frameworks, then there may be an argument that these frameworks have some sort of causal relationship with the nature of learner access to post-16 provision.

Having examined these issues, Chapter 3 identifies the research questions, evaluates the different options in relation to a research approach, and develops a research method that enables the research questions to be answered.
3 Research aims & objectives, research approach & methodology

This chapter considers and formulates the research questions that will seek to illuminate the key focus of the study, after which it constructs the study that is to be undertaken and methods used that will enable the questions to be answered. It gives a justification for these decisions and the sequence in which the research questions will be addressed. Included is a detailed account of the methods that were used to research both the quantitative and qualitative studies.

3.1 Addressing the research questions

The research questions for this study are:

1. What are the patterns of institutional qualification provision and pupil access at Key Stage 4 in England from 2013-2015 and do these vary by school type and pupil demographic factors?

2. Do some school types engage in the differential use of equivalent qualifications and restrict pupil access to academic qualifications than might be expected given their context?

3. How and why do school leaders in different types of school make decisions about pupil access to qualifications, the nature of the Key Stage 4 curriculums and how pupils are enabled to make choices about post-16 education?

4. How and why do pupils in an area of social challenge in a northern city make decisions about their choice of post-16 education provisions and is this any different from pupils in a more affluent area of the city?

In relation to questions 1 and 2, a quantitative approach was adopted to examine patterns of institutional qualification provision and pupils' access to qualifications related to school type and demography. A correlational approach was used to examine patterns between school type, demographic factors and the nature of qualification provision, both in terms of access and outcomes. Bivariate descriptive analyses preceded multivariate linear regression analyses. These analyses helped to establish if, after statistically controlling for prior attainment and demographic factors, some types of school gained a disproportionate boost for their performance measure through the use of GCSE 'equivalent' KS4 qualifications compared with other types of schools. These structure-level analyses were undertaken for
all schools in England across three academic years (2013 to 2015). The use of GCSE 'equivalent' KS4 qualifications can be seen as one strategy to increase measured pupil outcomes. Evidence of differential use of GCSE 'equivalent' KS4 qualifications by different school types is an illustration of strategies more centred on boosting measured outcomes, rather than meeting the needs of learners.

For question 3, published material was examined that details the nature of the Key Stage 4 curriculum and policies pertaining to post-16 admissions. Consideration was then given to the discourse that is revealed during conversations with school leaders. The aim here was to access school leaders who operate in a variety of school types, in a variety of contexts and at various levels in school leadership structures. The qualitative research was then examined, and an attempt was made to triangulate components of the adopted discourses with previous research evidence and the findings of the quantitative research.

Finally, in relation to question 4, the voice of learners was sought. For reasons of access, this element of the research was located so that participants were accessible. As a result, a northern city was chosen with learners in varying contexts of disadvantage. The learner’s voice was sought from those pupils in a disadvantaged context given the focus of the study.

3.2 Methodology

3.2.1 The theoretical framework

When considering the theoretical framework for the study, it was important to realise the centrality of the individual pupil and the influences bearing on them as they made their decision about post-16 studies. Appendix 6 is a conceptual map that was developed, placing the pupil at the centre and attempting to conceptualise the relation and complexity of key influences on their decision. It is clear from the conceptual map that there were complexities of influence, dimension and the impact of the influences. This informed the selection of the research paradigm as one that best fitted the complex reality of the events under study. The map also indicated the nature of the data, either qualitative or quantitative or both, that could potentially have been collected.

3.2.2 Consideration of research approaches

Several approaches were considered as a lens through which to frame the study.
a) Positivist

A positivist paradigm could have been adopted to frame the study. This would involve major assumptions (Riley, 2007, paraphrasing Steinmetz et al., 2005 and Steinmetz, 2005)

And

1. That occurrence of events is based upon scientific laws of cause and effect.
2. That the only things that exist are those that can be observed.
3. That the activity of social science has no impact on the reality that is described.

A traditional view of the positivist paradigm is that it would reject any claims that were not made based on direct sensory experience or scientific measurement (Hammersley, 2013). The advantage of utilising this approach is that the quantitative data available in relation to the study could be examined using statistical techniques. However, it would seem to miss out investigating the richness of the data and complexities of the events being studied. For example, in the conceptual map it would be almost impossible to study the relationship between curriculum access at KS4 and educational outcomes because there is clearly not a simple cause and effect relationship, but one that is mediated through a number of other influences, such as the wider cultural context of the individual, the impact of government regulation and any level of socio-economic disadvantage. In the social sciences, there is not the degree of certainty that exists within the natural sciences. Therefore, given the nature of the conceptual map and the data, this did not seem an appropriate approach.

b) Interpretivist

Another option would have been to adopt an interpretivist paradigm. The assumption would be that there is a fundamental difference between the events studied by scientists and those studied by social scientists (Hammersley, 2013). In an interpretivist paradigm, events are created by human actors who interpret them in relation to their own experiences, understanding of their place in the world and their cultural locus, and social structures are constructed because of their understanding of meaning. It also encompasses hermeneutics, which is the study of text, language and discourse, and these are critical to the interpretations that humans make of their world. However, applying an interpretivist approach would cause methodological issues in understanding patterns that may become apparent in the data. It would also mean that the research questions posed as the rationale
for the study could not be fully addressed because the focus would be on the individual actors and their interpretations. It would mean that given the scope of the study to be covered, key aspects of influences on the individual would not enable discovery and analysis of the numerical data.

c) Realist

A realist approach is one that seemed to fit, as patterns can be identified on the conceptual map that might be revealed from the quantitative data. The reality of these patterns can then be used to examine what is experienced and thought by the actors that impact the outcomes of events. However, it should be borne in mind that the construction of the map is derived from the researcher’s notion of the topic to be studied. Therefore, care needs to be taken when reflecting upon the findings of the study and the way in which the data is analysed.

An approach to the way in which a realist paradigm might view the nature of the study is modelled by Sayer (1992, p. 109). In his model, objects are those things that exist, like social, economic and human organisations that possess a structure and agency, which are composed of components also possessing agency, and which are subsets of the initial object. This would imply that there is a high degree of complexity and difficulty in the study, since each object at each level has causal powers, the ability to effect change, and also liabilities, which is the degree to which objects are susceptible to influence by the causal powers of other objects. Conditions, as identified in the diagram, are the internal and external factors that affect the operation and efficacy of the causal mechanism. Finally, events are the outcomes of mechanisms that can be observed.

If these notions are translated into this study, then the following description of each of the key components can be applied;

1. Object - could be defined as the secondary system of education in England that has a specific structure consisting of a variety of different entities; schools, central government, local government, Regional Schools Commissioners, political parties, and so on. However, it is important to recognise that these entities can operate as objects as well and often have highly complex and multi-dimensional structures.

2. Causal Powers and Liabilities - in context, these powers relate to the ability that any object may have to influence and bring about change, whereas liabilities refer to the
influence on change within an object or entity that other objects or entities may have (Easton, 2010). In the context of this study, a school may be able to cause change in a pupil's course of study but may be influenced by the accountability regime that is framed by the government.

3. Conditions - these are both the internal relationships and forces in the structures of an object and the external pressures that surround it. In the case of Sayer’s model, this can be seen as the strengths demonstrated by the existing structure of secondary education and the external pressures arising from the dominant political and economic understanding.
Figure 1: Sayer’s model of causal explanation (Sayer, 1992, p. 109)

Object $X$, having structure $S$ (necessarily possessing causal powers ($p$) and liabilities ($l$)) under specific conditions ($c$) will:
- $c_1$: not be activated, hence producing no change — $e_1$
- $c_2$: produce change of type $e_2$
- $c_3$: produce change of type $e_3$, etc.

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Figure 2: The structure of causal explanation
4. Events - the outcomes that arise from interactions between objects via the causal mechanisms that exist.

d) Critical Realist

Sayer’s model is not solely realist, in that it does not just deal with what is seen but understands there are things that exist that are real but cannot be seen. It implicitly incorporates Bhaskar’s (Bhaskar, 1979, paraphrased by Jones, Bradbury and Le Boutillier, 2011, p. 157) understanding that causality can not only be based on observation of what happens but also on whether the mechanism of happening can be seen.

What is interesting about this argument is that Bhaskar sees strengths in a positivist approach, in terms of the sharing of methodology (Jones et al., 2011) between natural and social scientists, and so does not completely reject the positivist paradigm but rather suggests that the language of observation and theory should not be separated.

Bhaskar (1979, p. 38 in Jones et al., 2011, p. 159) summarises his argument about social structures not being the same as natural structures for the following reasons;

1. Social structures, unlike natural structures, do not exist independently of the activities they govern.

2. Social structures, unlike natural structures, do not exist independently of the agents’ conceptions of what there are doing in their activity.

3. Social structures, unlike natural structures, may not always exist or remain in the same state.

It can also be seen, from examination of the second point, that Bhaskar does not reject the importance of meaning being attached to social phenomena. This would imply that the approach advocated by him, referred to as critical realism, accepts the importance of hermeneutics (Sayer, 2000, p. 17). The key facet of an approach adopted in critical realism is that it is based on a double hermeneutic, incorporating ""verstehen" or interpretative understanding". This is because researchers do not only operate within a community of study but also operate in the field of those they study. It indicates that there is two-way feedback and dialogue and transference of meaning that is not just incorporated in language, text or actions and is also not capable of being reduced by the researcher's
analysis. The indication is that there are dimensions of hermeneutics that cannot be revealed by research but remain hidden.

Another important facet of Bhaskar's approach is identified by Jones et al. (2011, p. 159), that agency is related to the psychology of the individual, rather than the interaction of agency and structure.

The reason why this is called critical realism is because Bhaskar (1979, in Sayer, 2000, p. 156) states that, where research identifies practices that cause misconceptions and suffering, possibly a notion of social inequality, it can have an emancipatory impact. It provides a critique of those practices and can suggest remedies that reduce their impact.

The underpinning philosophy of a critical approach derives from a Marxist approach to the study of society, in terms of the emancipatory destination. Marxism postulates a dialectic that is based upon capital, whereas Bhaskar proposes an understanding based on reason and intention (Jones et al, 2011.).

Looking at the tenets of critical realism, in that it incorporates what is observable and also what is not, would seem to suggest support for the notion that a research methodology is developed that incorporates analysis of both these facets of critical realism. Gorski (2013) reinforces the validity and usefulness of adopting a critical realist paradigm for studies in the social sciences, as it provides an extension and development of existing and understood knowledge. Of particular note is the notion that the social sciences are not "value-neutral" (p. 669) and cannot be, as there is a pre-supposition that their study reflects a commitment to improving human wellbeing.

So, to be clear, critical realism is a methodological paradigm that enables the construction of a methodology to enable the research questions to be investigated. The ontological position of critical realism is that society is a "stratified open system of emergent entities" (Edwards, O'Mahoney and Vincent, 2014, p. 7). This means that no part of society can be studied in isolation from the world in which it exists. It is also comprised of entities; these are objects that have the ability to effect and affect change within social structures and can become more or less important in that structure over time. By adopting this paradigm and a linking methodology, no claim will be made as to truth; rather, the hope is to reveal that which has not been revealed thus far and to provide a critique that may contribute to the emancipatory debate. The epistemology will be constructed thorough an analysis of the
research data, bearing in mind the range of epistemological differences that may exist as expressed by participants in the study and the researcher.

Adopting a critical realist perspective does not, in itself, pre-suppose an established view of that which is to be studied (O’Mahoney and Vincent, 2014) but is seeking out the complexity of social structures, the causal mechanisms that might exist and some that will be revealed. There is no critical realist world view as such, rather it suggests an approach that could be adopted across a diversity of philosophical viewpoints and deals with deep conceptual thought.

3.3 Theoretical underpinnings of the research approach; the why and how
3.3.1 The theoretical framework

Examining the conceptual map, a number of influences were seen that relate to an individual pupil’s choice of post-16 destination. Some of these referred to social structures within which pupils were located and others related to characteristics of that individual pupil. It was somewhat of a problem to try and make coherent sense of these concepts and organise them in such a way that they could be investigated. It is also understood that the construction of these concepts, their relationship to the area of study, and the strength of that relationship, is defined in terms of the location and characteristics of the researcher. The importance of researcher reflexivity is thus established.

a) Why an empirical study?

One of the key types of empirical study is one based on:

- the collection and analysis of **primary data** based on direct observation or experiences in the ‘field’. There are a variety of study types that can be employed when conducting an empirical study, including:

  **Descriptive or observational studies, that…**

1. Provide data on what is going on

2. Emphasise features of a new condition/phenomenon, or

3. Describe the current status of existing condition/phenomenon

4. Can highlight associations between variables, but cannot establish causality
5. Can suggest hypotheses which can be tested in analytical studies

6. Examples: case report, case series, cross-sectional study (prevalence study)

(eLesson 2, 2018, p. 1)

The proposed study was designed to fit the definition of an empirical approach, in that it provided data on what was going on in regard to the focus of the study and attempted to highlight associations between variables. It analysed data on the basis of what was observed and revealed and not on the basis of any identified theoretical lens. It is hoped that such an approach enabled the derivation of an epistemology based on the findings of the study.

b) Why mixed methods?

As identified by Miles et al (2013, p. 43) a mixed methods approach aims:

(a) to provide analytic texture to your work, (b) to compensate for the deficiencies of one genre with the strengths of another, and (c) to modify or strengthen the analytic findings when the results of each genre support, corroborate, or contradict each other.

The quantitative research analysis was seen as most important as it established statistically significant patterns that were observable and quantifiable. It is of course important to understand that there may well have been researcher bias in the choice of data to be analysed and the way in which it was analysed. In the realist paradigm, the observation of these patterns suggests that there are causal mechanisms at work, even though it may not be possible to see those mechanisms. It is also clear that some theorists will adopt a position that causality cannot exist between social structures. However, I would argue from a realist perspective that, if a real pattern is established statistically and observed, there is some mechanism at work in the interrelationships between objects and events. Though, because all variables cannot be rigorously and tightly controlled, claims cannot be made about causality as a result of the quantitative study (Cresswell, 2014, p. 380).

In the design of the study the quantitative research was seen of prime importance in that it attempted to highlight structural patterns. However, what the quantitative data does not reveal is the complexity of the interrelationship between objects and events, in terms of levels, dimensions and textual depth. The complexity of these interrelationships is best
revealed using qualitative research because that process can; "give insight into the meanings that individuals and groups attach to experiences, social processes, practices and events" (Edwards and Holland, 2013, p. 90). Qualitative research was integral to the research design in that it enabled the quantitative patterns to be explained through the interview responses from individuals.

Edwards and Holland identified that hermeneutics are important in the analysis of qualitative data without explicitly using the term, but we must understand that this means notice also needs to be taken of the wider data available in an interview, apart from just that which is spoken. In a realist investigation, the researcher needs to take account also of Sayer's (2000) identification of the double hermeneutic, as identified and discussed earlier.

The analysis by Miles et al. (2013) of a mixed methods approach would seem to indicate that it fits the research questions well. This approach also offers an opportunity to examine a "complex" picture of social phenomena" (Greene and Caracelli, 1997, p.7 in Creswell, 2014, p. 565). A notion of examining complexity is important as the complex nature of the research study is clearly identifiable by looking at the initial conceptual map in Appendix 6.

Therefore, it is clear that the critical realist paradigm supported by a mixed methods approach to the study seemed to be most appropriate. It enabled a wide range of data to be considered, analysed and interpreted, whilst attempting to ensure that the richness of the data was not unnecessarily reduced by the process.

3.4 Development of the methodology

To select the data that was manageable and would appear relevant to the research questions, the following areas were identified from the conceptual map:

- the use of vocational qualifications to boost school performance against external threshold measures;
- the structure of curriculum provision that is available in schools to learners at Key Stage 4;
- the influences on school leaders and their perspectives on the transitions process from Key Stage 4 to post-16, the importance of external accountability measures on decisions they made;
- the influences on individual pupils as they made decisions about the transition from Key Stage 4 to post-16 education.
The next stage was to establish the linkages between these areas of the investigation to see how they might contribute to an understanding of the research questions (Figure 2).

It can be seen that there is a relationship hypothesised between the curriculum provisions available for learners to access at Key Stage 4, and educational outcomes and the individuals' choice of and access to post-16 institutions and courses. There is also a relationship between the decisions taken by school leaders that have a hypothesised relationship, characterised by differing degrees of complexity with Key Stage 4 curriculum provisions, Key Stage 4 outcomes and the choice and access that individual pupils have to post-16 institutions and courses.
Figure 2 Research process and data linkage
In order to examine these relationships and patterns in a viable but rigorous study methodology, sources were considered that might give breadth, depth, richness and texture to the data that was to be collected, analysed and interpreted within the research paradigm. Having considered the availability of data, ease of collection and possible richness, whilst minimising the reduction of data, both quantitative and qualitative data were accessed. Initially, it was thought that the use of the survey method might be useful in gathering data, but the idea was dropped at the planning stage due to issues of access and reliability.

The study was designed so that quantitative method had dominance over the qualitative method in that the qualitative work was carried out in order to explain the revealed quantitative patterns. There was a clear explanatory design and one that also sought to triangulate the patterns identified in the quantitative study with the qualitative findings. However, in order to establish coherence, reliability and validity, and to start to tell the story, it was important to establish the method by which the data collection, analysis and interpretation was to take place.

Given the research questions and hypothesised linkages between the areas of study and the data available, it seemed that the research naturally broke down into 3 separate areas of study, with possible types of data sources identified as follows;

1. Key Stage 4 curriculum provision and educational outcomes at school level - quantitative data
2. The perspectives of school leaders - qualitative data
3. The perspectives, opportunities and choices that individual pupils take - qualitative data

So, three distinct areas were studied that enabled the research questions to be investigated and any research framework design needed to recognise this and the nature of the data that was available to be researched. This then enabled the research method for each area to be designed. However, in seeking to establish a method with rigour, and that fit the critical realist paradigm, it was important to consider the hypotheses relating to the linkages between each area and exactly what the research was seeking to examine.

Area 1, identified above, was examined through a study that adopted a correlational research design (Cresswell, 2014). This approach used investigated patterns of access to
types of qualifications and the educational outcomes, at a structural level, that are achieved by learners within the identified contexts. The first part of the study involved an exploratory analysis of national data sets and published secondary data that may illuminate the first research question.

The use of qualitative studies for the explanatory phase of the study seemed an appropriate and apposite mechanism that fit the critical realist research paradigm (Easton, 2010), as they enabled observations of reality, explanations of the mechanisms that exist within social structures and a critical appraisal of the evidence.

The second study was an examination of the perspectives and decisions taken by school leaders in different types of educational provision, in relation to preparing pupils for exams within an increasingly complex accountability regime. This was designed to examine the findings of the initial quantitative study and explain the findings through the discourse adopted by school leaders. The aim here was to encompass all types of school, as defined by governance structure, and was dependent upon securing access to school leaders. The intention was for these participants to be school leaders located in a northern city, but there was a realisation as the study progressed that this would not always be possible, so, in terms of contingency, access was sought to school leaders in schools that were located in a broadly similar context.

Finally, a third study, which again adopted a qualitative approach, was located in a northern city. This sought to investigate the motives, behaviours and constraints influencing individual pupils’ experiences when attempting to access post-16 provision.

This method, when combined with the realist approach of Sayers (1992), appeared to fit what Cresswell (2014) classifies as an "Exploratory -Sequential Design", in which the qualitative phase of the research seeks to amplify and explain the results of the explanatory quantitative studies. In order to demonstrate a coherence of thinking, I have further developed this to incorporate the ideas suggested by Sayers' model of causal mechanisms, as shown in Figure 3.
Figure 3 Developed research methodology, incorporating the research process (Figure 2) and Sayer’s realist model

Exploration
- Definition of Objects
- Identification of Events
- Reflexivity of Researcher
- Theoretical and “Grey” Literature Review
- Notion of Restricted Access

Exploration

Explanation
- Explanation of Causal Mechanisms

Analysis of Evidence
1. What is the pattern, at a structural level, of qualification provision in secondary education in England?  
2. How and why do school leaders make decisions about qualification provision?  
3. How and why do learners make choices about their destination for post 16?

Findings and Conclusions

Key
- Quants data
- Interview
- Survey
- Published data
3.5 Research Ethics

The project was designed, in order to answer the research questions, as comprising of three studies, one quantitative study and two qualitative studies. The quantitative study would have primacy and the qualitative studies would support that work and to provide richer data that might illuminate the quantitative analysis.

After the project had been designed the next step was to consider how to approach the studies in an ethical manner.

Research ethics were an important consideration in the planning stage of the study. Approval was sought and granted by the Ethics committee of the Faculty of Development and Society, Sheffield Hallam University. The ethics approval letter can be seen in Appendix 1. In the design and planning of this study attention was paid to ensure that it was complaint with the guiding principles of the ethics policy of Sheffield Hallam University (2019). These are:

- Beneficence - 'doing positive good'
- Non-Malfeasance - 'doing no harm'
- Integrity
- Informed Consent
- Confidentiality/Anonymity/Impartiality

In the case of the quantitative study, secondary publicly available published data was used as the basis for analysis. This was considered to be ethical (Tripathy, 2013). In using and analysing this data, the guidelines of the American Statistical Association were followed (ASA, 2018).

In the qualitative studies these principles were implemented in the design of each research activity and acted as a touchstone for review and reflection as the study progressed. All interviews in the studies were conducted under that approval and participants could request removal of their data from the study up until the point of publication.

Subsequent to ethics approval, various methods were considered as mechanisms of gaining access to research participants for the study of school and college leaders. These included approaches by e-mail, telephone and informal meetings. Unfortunately, participants were
not forthcoming. It was therefore decided that an insider approach that drew on the researcher’s existing contacts might be more successful.

In the case of the student study, the participants were drawn from the institution in which the researcher was working. This means that both of these studies would be considered as insider research.

There is support in the literature that identifies the validity of an insider approach to research. Taylor (2011) provides a detailed discussion of the areas that need to be considered when interviews are conducted with participants with whom the researcher has bonds of friendship, as in this case. Mercer (2007) and Hanson (2013) also deal in detail with these issues but make clear statements about the advantages of insider research, specifically in educational settings: “often enjoy freer access, stronger rapport and a deeper, more readily-available frame of shared reference with which to interpret the data they collect” (Mercer, 2007. P13). She also identifies the disadvantages of insider research contending: “with their own pre-conceptions, and those their informants have formed about them as a result of their shared history. “It is also clear that the concerns that might be raised can be mitigated with careful planning and an understanding of the issues and a reflexive approach by the researcher.

In the study of school and college leaders cases extension of the sample of participants was on a “snowball sampling” basis. Given the difficulties encountered when recruiting participants, possibly due to the high stakes involved and marketised environment, it seemed that this was an appropriate method to use (Cohen and Arieli, 2011; Handcock and Gile, 2011; Tenhouten, 2017). In using this method, it was also felt useful to try and identify some of the methodological problems that might be encountered. Heckathorn (2011) identifies and comments on some of these problems but it was felt that recognition and consideration of these factors would enable the process and analysis of data to become more robust.

It was also recognised that during the discussions with school and college leaders there might be the disclosure of potentially criminal behaviour or actions that contravened the rules of external regulators. This is clearly a difficult area (Finch, 2001) but it seems clear that there is a prime duty of confidentiality even given the disclosure of potentially criminal activity and that the interests of the participant are paramount. An ethical dilemma would occur for the researcher if direct harm to another human being was disclosed or there was
a safeguarding issue. If the researcher was faced with such a dilemma then advice would be sought from the research ethics department of the university. It was however felt that, in the case of potentially criminal or unethical behaviour that related to a breach of protocols and or statute, information would be kept confidential so that the participant would not suffer harm.

There are clearly ethical issues related to the use of in-depth interviewing (Allmark et al., 2009). McConnell-Henry et al. (2010) also identify a number of issues relating to ethical behaviour that will need to be borne in mind when interviewing people that are known to the researcher; establishing trust and rapport, role conflict, self-disclosure, unexpected responses, data generation vs therapeutic intervention, keeping secrets and pre-existing knowledge. Unluer (2012) suggests that many issues can be overcome by taking preventative measures such as making clear to participants that in the meeting your role is that of researcher, the assumption that you, because you are an insider, may know more than you actually do and confronting and recognising your own bias (pp7-9). Before each interview I ensured that participants knew my role as researcher and during the interviews, and as the study developed constantly reflected on my own positionality in relation to the data disclosed.

It was also realised that in the study of school and college leaders that there might be tensions and conflicts as they were asked to reveal working practices and intervention strategies. It was envisaged that revealing these tensions and commenting upon them might be at odds with the aims of the governance structure that they were accountable to and also what they regarded as their professional responsibility (Cranston, 2013; Liljenberg, 2015.). However, recent work by Keddie (2017) addresses this topic but does not seem to indicate that there were any particular problems in participants commenting openly on these matters. Rather it was felt, given the anonymity that was a key element of the ethical approach that the interview process could be regarded as empowering for the participant (Wellington, 2015. P139) and could give them a safe platform for their unedited views to be heard. Additional safeguards were provided because participants were given the opportunity for their data to be withdrawn from the study at any time up to publication.

With regard to the student study as young people were involved, ethical concerns were identified as very important and needed addressing before it was deemed appropriate for the process to begin. The researcher already held a portable enhanced disclosure from the Disclosure and Barring Service.
Kirk (2007, p152) suggests that there are three areas of ethical considerations that need to be considered when dealing with young people; power relations, informed consent and confidentiality.

Due attention was given to reciprocity as a response to the way in which power relations were constructed between interviewer and interviewee (Eder and Fingerson, 2002, p. 185). As part of the process, self-disclosure was used to give a sense of equality of value and was utilised in the interview. The strategy was aimed to reduce the impact of the existing power dynamic between the researcher and the participants. It was envisaged that the interviewer would, as far as possible, locate the discussion within the discourse of the interviewees. Briggs (1986) identifies this as an important component of creating a natural context for the elicitation of data.

In respect of the requirement for informed consent a two-stage approval for the protocol was sought. In the first instance, this was from the Principal of the Sixth Form College within which the identified respondents were being educated. Secondly, as these pupils were all over 16, it was felt that they were able to give their own informed consent to the process. They were further informed that if at any stage they wished to terminate their involvement they could do so.

Confidentiality was not promised because issues of safeguarding might arise and also in some cases students were interviewed together, when they requested it. Anonymity was promised, so that participants could not subsequently be identified. In some cases, pupils requested that they be accompanied, and were always interviewed in a location they had identified and with attention to safeguarding issues.

Another potential issue that could have arisen was the fact that the study was taking place in the institution in which the researcher served as a teacher and had previous relationships with the participants. Participants were invited by the researcher to take part and also, in the course of the research suggested other potential participants that might be willing to take part in the study. This research could have the advantage in that respondents already responded to the interviewer as someone that they trusted and liked. However, in these cases the researcher would need to adopt a critical eye and be careful in the phrasing of the questions so that respondents formed their responses in terms of their own reality and not in terms of any reality that they perceived the researcher was seeking to uncover. In order to overcome this issue, participants were reminded that the interview
was about their voice and not that of the interviewer. The interviewer also decided that positive affirmation of the pupil voice was important, and their responses were affirmed, whatever view they took of their own reality.

3.6 Research methods for each study
3.6.1. Research method for study 1

In the investigation, gaming was defined in terms of two dimensions; access and outcomes. Outcomes were considered in terms of the level of performance boost that is given to mean school level outcomes. Access was measured by the amount of GCSE-only examinations that were taken by pupils at the end of Key Stage 4. Gaming was considered to have occurred if the access or outcome measures for schools were at a statistically significantly different level than would have been expected after controlling for the mean school level of KS2 attainment by the exam cohort and the level of socio-economic disadvantage in a school. Given that the analyses drew on data for the population of secondary schools 2012 to 2014, the use of statistical significance here is not for scientific generalisation purposes. Instead, statistical significance was used alongside model coefficients to help identify types of schools with relatively high/low scores on the ‘performance boost' and 'access to GCSE qualifications' outcome variables. The outcome measure that was used in these analyses was the performance boost in relation to the key threshold measurement in the performance tables achieved by schools engaging in the differential use of equivalent qualifications. This can be expressed mathematically as follows;

Equation 1: The differential use of equivalent qualifications

\[
\begin{align*}
Y_G &= \text{School performance measure based solely on GCSE qualifications} \\
Y_{Eq} &= \text{School performance measure based on GCSE and equivalent qualifications} \\
Y_{Eq} &\geq Y_G \\
Y_{Diff} &= Y_{Eq} - Y_G \\
&= \text{average “boost” to measured performance provided by equivalent qualifications}
\end{align*}
\]

For the purposes of these analyses, "gaming" of outcome measures was defined as occurring when, after controlling for school-level pupil deprivation (proxied by the % of pupils in receipt of Free School Meals or classified as “looked after”) and the mean school-
level pupil prior attainment of the year 11 cohort, there remained a statistically significantly different performance boost to schools’ measured outcomes by the differential use of equivalent qualifications.

To compare issues of access to academic qualifications, the dependent variable that was chosen was the mean number of GCSE examinations entered, not necessarily achieved, by pupils in an identified school.

For the purposes of these analyses, "gaming" of the access measure was defined as occurring when, after controlling for school-level pupil deprivation (proxied by the % of pupils in receipt of Free School Meals or classified as “looked after”) and the mean school-level pupil prior attainment of the year 11 cohort, there remained a statistically significantly difference in the mean number of GCSE only examinations sat by pupils.

It is important to establish that there were key differences in the methodology employed to construct the school performance tables related to the 2012 and 2013 cohorts of pupils, as opposed to the 2014 cohort. The tables that relate to the 2014 cohort were the first produced by the DFE that incorporated policy changes arising from the Wolf Review (2011). These revisions meant that, from the 2014 cohort, only a pupil's first attempt at an examination would count in the school-level performance measures. However, for the purposes of progression the pupil could count the best pass in a subject. Also implemented at the same time was a measure that reduced the value of vocational or equivalent qualifications, in relation to the value of GCSE qualifications. In 2012 and 2013, vocational qualifications were regarded as having an equivalent value, in relation to GCSE exams of 1, 2 or 4 GCSEs. This was largely based upon notions of breadth and depth of the qualification, enumerated in terms of Guided Learning Hours (GLH) required to cover all the elements of the qualification specification or syllabus. Implementation of the revisions recommended by Wolf meant that from the 2014 cohort onwards, all equivalent or vocational qualifications would only count, for performance measurement purposes, as being equivalent to only one GCSE pass. An additional revision stated that only two of these equivalent qualifications could be included in the key performance measure - 5A*CEME - for the purposes of accountability.

A key dimension to the analysis was to consider the nature of the structural movement within the English education system. Over the period covered in the analysis, there was the emergence of a variety of different types of schools and the way in which they were
governed. The investigation sought to assess whether some types of schools appeared to restrict access for learners to GCSE-only exams, compared to other types of schools. For example, was the access for learners to GCSE-only qualifications more restricted in community schools, as opposed to voluntary-aided schools? It also investigated if there was any pattern in the way some types of schools engaged in the differential use of equivalent qualifications to boost performance measurements. An example here is comparing the differential usage of equivalent qualifications by sponsored academy schools with that of community schools.

To assess whether there was a pattern of gaming apparent within English secondary schools, it was important to look at both outcome and access measures because schools engaged in gaming may or may not have been doing this by restricting access to academic (GCSE) qualifications. For example, a school might have been providing the access to GCSEs that might be expected for a given level of attainment and deprivation and might have been bringing in additional non-GCSE qualifications for (among other reasons) strategic purposes, such as boosting school level performance against the key threshold measure.

Explanatory contextual independent variables were then operationalised that related to the prior attainment of the schools’ examination cohort, the level of socio-economic disadvantage experienced by the school and the type of school.

The prior attainment variable was operationalised by utilising the mean Key Stage 2 SATs score of the Key Stage 4 examination cohort. It should be noted that account was not taken of the distribution of prior attainment scores within schools.

To operationalise this contextual factor, the mean school-level percentage of pupils in receipt of free school meals or classified as looked after was used (FSMCLA) (DFE, 2015b). This measure was considered appropriate, as it is a widely accepted proxy for the socio-economic context of a school. However, there are methodological considerations to be considered, as the figure relates to the whole school and not just the cohort of pupils who had outcomes reported at the end of compulsory schooling. The operationalised variable does not account for the distribution of inequality or concentrations of privilege within the school. It is understood that using this measure is imperfect but enables the operational investigation of the variable and is supported by various studies (Gorard, 2012; Illie, Sutherland and Vignoles, 2017).
The study was concerned with mainstream secondary schools in England and Wales that are publicly funded, either through local authorities or from central government. Cases considered were for the schools that declared KS4 results in each of the years of the study and was based upon their school type, as identified in the DfE Performance Tables for each of the years. Schools that did not declare KS4 results were not considered in the analysis.

The aim of the analyses was to examine how pupil deprivation and attainment are associated with the two outcomes (performance boost and access to GCSEs). Following this an examination of evidence that might pertain to any systematic differences (in the two outcomes) that are found across different types of schools once statistical controls are applied for pupil deprivation and attainment.

In order to achieve these outcomes and reveal these patterns, I undertook a number of statistical analyses. These analyses used IBM Statistical Program for Social Sciences version 23 (SPSS). They sought to explore evidence of systematic patterns that might indicate schools were engaged in gaming. Data that related to both measured outcomes and pupil access to qualifications were analysed over three academic years. As a first step, I will provide clarity about the variables included in the study that have been identified and operationalised.

Once an initial univariate analysis had been completed, a bivariate analysis was undertaken, which, as a first step, examined any correlation between the two outcome variables. A high level of correlation seemed to support that there was an argument to suggest patterns of performance boost were supported by the restriction of access to academic qualifications and the differential use of equivalent qualifications. To make this assertion reference was made, in the case of variables that revealed a parametric distribution, to the Pearson co-efficient. In the case of variables that were non-parametrically distributed, the Spearman rank measure was used; a condition applied to the rest of the analysis.

The independent (or explanatory) variables were introduced with a clear statement about why they have been included in the analysis and how they have been operationalised. Subsequently, a bivariate analysis of the relationship between these contextual variables was undertaken.

First, the two independent scale variables, were screened for multicollinearity.
Second, the analyses sought to establish if there was any correlation between the scale dependent variables and scale independent variables.

Third, the analyses of the two scale-dependent and scale-independent variables were examined across different types of school.

Then multiple linear regression models were constructed. This provided an estimate of how much variation in the dependent variable was statistically accounted by variations in prior attainment, pupil deprivation and type of school. For school type, community schools were used as a reference group, as they were the most common type of school, prior to 2012, when the analyses began. It is also the type of school the coalition government identified as being responsible for falling standards (Paton, 2010; O’Grady, 2010; Rees-Mogg, 2010).

The regression equations that were developed were as follows:

Equation 2 (the performance boost outcome)

\[ Y_{\text{Diff}}_i = \beta_0 + \beta_1 \text{DIS}_i + \beta_2 \text{KS2}_i + \beta_3 \cdots \gamma \text{[SchoolType]}_i + \epsilon_i \]

Where, as stated in Equation 1, the outcome is \( Y_{\text{Diff}}_i = Y_{\text{Eq}}_i - Y_{\text{Gl}}_i \). This can be defined as the average ‘boost’ to measured performance, provided by the use of qualifications deemed to be equivalent to GCSEs for school ‘i’. This could relate to a number of measured performance outcomes but, in this instance, the focus is on the widely used %5+ A*-C grades including Mathematics and English measure.

Equation 3 (access to GCSEs)

\[ Y_{\text{Gl}}_i = \beta_0 + \beta_1 \text{DIS}_i + \beta_2 \text{KS2}_i + \beta_3 \cdots \gamma \text{[SchoolType]}_i + \epsilon_i \]

Where \( Y_{\text{Gl}}_i \) is the mean number of GCSEs a pupil takes within school ‘i’.

For both equations 2 and 3:

\( \text{DIS}_i \) is the percentage of disadvantaged pupils for school ‘i’ and and \( \beta_1 \) is the model coefficient for this variable.

\( \text{KS2}_i \) is the mean KS2 points score for the KS4 cohort in school ‘i’ and \( \beta_2 \) is the model coefficient for this variable.
\( [\text{SchoolType}] \) represents a series of binary dummy variables used to identify whether schools are one of five types; sponsored academies, converter academies, Foundation, Voluntary Aided, or another type of school. \( \beta_3 \) to \( \beta_7 \) are the coefficients for these five binary dummy variables. Community Schools are not identified within the five dummy variables because these schools will be used as a reference with which the other five types of schools are compared.

\( \beta_0 \) is the constant term for the model and represents the mean predicted \( Y_{diff} \) or \( Y_{GI} \) for the reference group (community schools), once all other variables are set to zero.

It was then sought to establish, using Multiple Analysis of Variance, how predicted values of the dependent variables, using the constructed linear regression model, compared with the actual figures reported for each school. This helped to illuminate any statistically significant variances.

Interaction analysis was then undertaken to try to establish if there was any statistical basis to assert if these key variables had a moderating effect on the GCSE access practices of schools, i.e. could the level of school performance boost or access by pupils offered by different types of schools be explained by the contextual interaction of pupils’ prior attainment at Key Stage 2 and the level of socio-economic disadvantage?

The first conjecture was that the interaction of the school level of disadvantage and the prior attainment of the cohort at KS2 might well have an impact on the extent to which schools engaged in the differential use of equivalent qualifications.

In order to examine the interaction further, models were constructed for each of the 3 years being analysed. Equations were developed to include the Disadvantage*KS2 attainment interaction term.

In all three models, there were issues around multicollinearity when the interaction term was used but not when the direct correlation between FSM and KS2 prior attainment was considered. It was interesting, however, to note that there had not been a problem of any significance in this respect when the final main effects models were examined.

The second interaction that was examined was that between school type (as defined by governance structure) and school level of disadvantage. This would help to explain if there was any argument that the difference in the magnitude and direction of the differential use
of equivalent qualifications was related to the disadvantaged context of the groups of schools being analysed. The types of school that were considered for further analysis were those where there was an observed significant difference in the outcome variable, when the independent variable was the scale variable in the model.

The results of including the interaction terms within the models resulted in a breach of multicollinearity conditions, so no meaningful examination could be undertaken. In these cases, the VIFs for the models exceeded a magnitude of 10.

When carrying out a similar analysis using pupil prior attainment as the moderator, the conditions of multicollinearity (Field, 2013) were also breached, so no meaningful inference could be drawn.

This presented a methodological problem. There is clear evidence that access and performance boost outcomes are influenced by both prior KS2 attainment and pupil deprivation. There is also clear evidence that KS2 attainment and pupil deprivation are strongly correlated. However, multicollinearity precludes a valid examination of how the KS2 attainment and pupil deprivation variables are statistically entwined using interaction terms within regression models. Rather than concluding the analyses here, alternative descriptive statistical methods were adopted to help shine a light on the interaction between KS2 attainment and pupil deprivation, in relation to the access and performance boost outcomes.

In order to overcome the problem, an alternative approach was devised to examine the issue. First, using the original scale data, a 3D scatterplot was created for each year under analysis. This helped to see more clearly where particular types of schools were located in relation to the models.

KS2 attainment and %FSM were then categorised according to the median value of the variable for each of the three academic years. Specifically, if they were above the median they were classified as "high" and if they had a value at or below the median they were classified as "low". The categorised KS2 and FSM variables were then brought together to identify four distinct groups of schools.

Then the mean performance boost to measured outcomes and GCSE access for each type of school was analysed, in relation to the categorisation of the contextual variables.
Analysis was then undertaken over the three years of the study that examined the level of gaming, in relation to the interaction of the contextual factors and the type of school.

In an attempt to ascertain if school type was an element in the decision by schools to engage in the differential use of equivalent qualifications to boost measured pupil outcomes, analysis by school type was considered. The quadrant of the binary analysis of the contextual variables was held and then patterns of access and outcomes identified by school type. This was achieved by separating the schools into groups based on their FSMCLA, with those schools above the mean being classified as high and those below the mean as low using the “binning” routine in SPSS. A similar exercise was undertaken in relation of the KS2APS. These groups were then bought together as follows:

1. LowKS2APS/LowFSM
2. HiKS2APS/LowFSM
3. LowKS2APS/HiFSM
4. HiKS2APS/HiFSM

The dependent outcome and access variables were then examined for each of the groups to visually identify if there might be a suggestion of an interaction between school type and the outcome and access variables that might be independent of school context. The SPSS syntax for sorting into groups is shown at Appendix 12.

The statistical analyses in this chapter examined the types of qualifications offered to learners in different schools over three academic years (2011/12, 2012/13 and 2013/14). The analyses took account of pupil deprivation and prior attainment. It should be noted that the presented analyses were conducted using school-level data that is easily accessed via the DfE archived School Performance Table Website (DfE, 2015b). Behind these school-level statistics will be variations at the pupil level.

There are clearly issues with the use of secondary data for modelling. For example, of direct relevance in the case of this study is the fact that school type is only considered in relation to, respectively, one access and outcome measure. Also, no account is taken of the length of time a school has been classified as a particular type; the type of school is considered only at the point of result declaration. This meant that, when interpreting the data, care
needed to be applied in considering the impact of schools changing type over the time period of the investigation.

Whilst I acknowledge that multilevel analyses including data both at school and at the pupil levels would be more comprehensive, it was not undertaken here for two related reasons: First, whilst school-level data is easily and quickly accessed online, obtaining pupil-level data requires a lengthy application period with no guarantees that the data would eventually be provided. Given the time limitations of doctoral study, analysis of school-level data was the most practical. Furthermore, these secondary data analyses enabled patterns to be revealed that relate to the structure of the English education system, which is a key focus of the investigation. They are also part of a mixed-methods approach that includes two other research strands. These analyses were used to support follow-on analyses of data from school leader interviews, a pupil survey and pupil interviews. The simpler and quicker analysis at the school-level also effectively fulfilled this purpose, without the use of too much resource. Whilst I plan to revisit these analyses as part of a multilevel investigation following the doctorate, for my thesis, all statistical analyses were at the school-level.

3.6.2. Research method for study 2

The relationship between the policy and accountability frameworks and what their effects are in schools could be conceptualised as highly complex, with little clarity about the transmission mechanisms. The quantitative study established patterns of access to qualifications and the impact on outcome measure. Therefore, it is arguable that there is concern about how decisions relating to access and outcomes are taken in schools and colleges. In the locus of the study, consideration was given to how these patterns might be related to the admissions protocols of schools and colleges as they recruit pupils into their post-16 provision.

The aim of the third research question was to investigate the decisions, thoughts and perspectives of school and college leaders as they navigated the interface between policy direction, accountability measures and school operations. This was important because it could be that decisions, such as curriculum structure and qualification access, may be related to the opportunities that are available to pupils for post-16 progression.

The interview method was considered to be the most appropriate approach to be used. Such an approach could be considered as phenomenological in the way in which it seeks to
record, examine and analyse the data provided by respondents. The interview seems an appropriate research technique, as it enables explanations of the mechanisms that exist within social structures and a critical appraisal of the evidence.

In the initial phase of seeking participants letters were sent to 13 school and college leaders in the Northern city where the research was based. This included all the secondary schools in the city as well as the further education and sixth-form colleges. Only 4 participants responded as willing to participate. This included two schools, both of which were community schools with post-16 provision, the sixth-form college and the further education college. Subsequently, after an initial meeting the further education college withdrew from participation. No reasons were given. Participants from this group are identified in the table as participants C, E and F. It should also be made clear that participant C was also known professionally to the researcher.

However, the potentially sensitive nature of the study may have led to a reluctance by invitees to participate in the research project. However, in analysing the data and considering the results of the research no inference was drawn from the reluctance to participate.

It was felt that 4 participants were not enough to collect a richness of data that might illuminate the research question so two alternative methods were used to identify further possible participants. In the case of participants, A, B, H and I were known to the researcher as part of their professional network. These participants were all approached by the researcher and all agreed to take part. None of those potential participants approached who were part of the researcher’s professional network refused to participate although it was made clear that participation was entirely at their own discretion.

For these groups of participants that were previously known to the researcher it was realised that there might be issues arising because of the researchers previous relationship with these individuals. Such research would be considered “insider research” and the issues raised by Mercer (2007), Taylor (2011) and Hanson (2013) were borne in mind during analysis and interpretation of the data.

Participants D and G were suggested by other professional contacts and then approached by the researcher. They were the only two participants in this category and they were not previously known to the researcher.
It was of concern to the researcher, that although these participants would have valid perceptions and even though the research design was not structured to access a representative sample, there might be a chance of analysing skewed or biased data. However, there is support in the literature for such an approach (Cohen and Arieli, 2011; Handcock and Gile, 2011; Tenhouten 2017) provided that the concerns raised by Heckathorn (2011) were adequately dealt with. These issues were dealt with when devising the method and are dealt with earlier in this chapter.

The eventual participants in the study were drawn from a variety of contexts. Details of these participants can be found in the table below.

Table 3.1 Participants in the study of school and college leaders.

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Gender</th>
<th>Role</th>
<th>Type of School</th>
<th>Location</th>
<th>Age Range</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>M</td>
<td>Principal</td>
<td>Sponsored Academy</td>
<td>Northern City</td>
<td>11-19</td>
<td>Disadvantaged</td>
</tr>
<tr>
<td>B</td>
<td>F</td>
<td>Headteacher</td>
<td>Community School</td>
<td>Midlands City</td>
<td>11-16</td>
<td>Disadvantaged</td>
</tr>
<tr>
<td>C</td>
<td>F</td>
<td>Principal</td>
<td>Sixth Form College</td>
<td>Northern City</td>
<td>16-19+</td>
<td>Disadvantaged</td>
</tr>
<tr>
<td>D</td>
<td>M</td>
<td>Headteacher</td>
<td>Converter Academy</td>
<td>Northern City</td>
<td>11-19</td>
<td>Disadvantaged</td>
</tr>
<tr>
<td>E</td>
<td>F</td>
<td>Head of Sixth Form</td>
<td>Community School</td>
<td>Northern City</td>
<td>11-19</td>
<td>Advantage</td>
</tr>
<tr>
<td>F</td>
<td>F</td>
<td>Director of Sixth Form</td>
<td>Community School</td>
<td>Northern City</td>
<td>11-19</td>
<td>Advantage</td>
</tr>
<tr>
<td>G</td>
<td>M</td>
<td>Head of Sixth Form (Faith)</td>
<td>Converter Academy</td>
<td>Northern Town</td>
<td>11-19</td>
<td>Advantage</td>
</tr>
<tr>
<td>H</td>
<td>F</td>
<td>Assistant Principal</td>
<td>Sixth Form College</td>
<td>Northern City</td>
<td>16-19+</td>
<td>Disadvantaged</td>
</tr>
<tr>
<td>I</td>
<td>M</td>
<td>Associate Principal</td>
<td>Sixth Form College</td>
<td>Northern City</td>
<td>16-19+</td>
<td>Disadvantaged</td>
</tr>
</tbody>
</table>

There were 9 participants in this study. They included; 4 Headteachers/Principals all of whom led schools or colleges in a context of socio-economic challenge, 3 people in charge of post-16 admissions to high-performing schools in relatively advantage contexts and two college leaders who operated in a disadvantaged context.

The interviews were constructed on a semi-structured basis and evolving basis (Newby, 2014. P356) with initial themes related to patterns that had been identified in the quantitative analysis. The interviews also sought to examine decisions that school and college leaders took about school policies and procedures and the impact that these might have on learner’s outcomes and progression opportunities.
The interview technique allowed an in-depth exploration of the issues facing schools and colleges, in regard to school operations and post-16 provision, as well as any identified causal relationship between policy, accountability frameworks and school operations. It meant that elements of the relationship between cause (the how and why of what happens) and effect (the events in the story) could be explored.

In the study, it was accepted that the observed phenomena are real, but that observation in itself does not explain causality.

The choice of interview subject was based upon an examination of demographic data and ease of access to the subject. This resulted in a range of respondents holding different leadership roles in a variety of different settings. The design of the research was not attempting to be representative, but simply to give voice to a diversity of understandings of reality.

The way in which the interviews were to be conducted was considered carefully. The major problematic issue here was the existing relationships, in most cases, between the interviewer and interviewee and the common location in a field of endeavour. There were two dimensions to this issue. As interviewer, I also had considerable experience and expertise in the field, being an ex-Head teacher and Head of post-16 education in a large comprehensive school. Throughout the interviews and analysis, I had to understand my own preconceptions and values and how this might be revealed in the questioning.

In these interviews, this was the largely successful approach adopted. The evidence supports this view, as can be seen from a study of the transcript. The interviewees often sought the support of the interviewer, using the term "you know" and other similar epithets. These provided colour and seemed to indicate the authenticity of the narrative. The interviewer only sought to clarify and suggest the direction of exploration so that the research question could be investigated. The interviews were initially semi-structured but some unforeseen directions developed in the light of the discussion between interviewer and interviewee (Warren, 2002). These directions may not have been replicated in each individual interview but were regarded as valid since the approach was not to develop a representative sample but rather to collect experiential accounts from individual participants. Such an approached fitted well with the research design.

The validity and unique perspective than can be offered to researchers by using the interview technique is discussed by Edwards and Holland (2013, Op. Cit.). One of these
unique characteristics is: "placing policy changes in the context of peoples' lived experiences" (p. 90). This is a dimension that goes right to the heart of the study and helps to establish the validity of the technique chosen.

A transcript of the interview was made and coded using open inductive coding (Miles et al. 2013). Themes and codes were developed as the analysis of the narrative took place. In order to help analyse and understand the data, NVivo 10 and 11 software was used. The interviews were semi-structured, with an underlying notion of flexibility, drawing on the focus of the research questions and the issues that arose in the literature review, the quantitative study and preceding interviews.

The interviews were then read, annotated and coded using open inductive coding (Berg, in Lune, 2012; Hammersley, 2013). This meant that themes and codes would arise from the narrative and discourse, rather than being derived from a developing theoretical base. However, it is likely that such coding may have been influenced by the positionality of the researcher and the scoping exercise that developed the conceptual map. In order to help analyse and understand the data, use was made of NVivo 10 and 11 software. An example of an annotated transcript can be seen in Appendix 7. Whilst in Appendix 8 there is an example of the data that related to the node that collected the data related to GCSE exams and vocational qualifications. The same analytical process was applied in Study 3. The codes and coding structure that appeared can be seen in Appendix 9.

The narratives were then critically evaluated within the identified research design in order to develop themes and a commentary that understands them in relation to the quantitative study and the central themes of the investigation.

3.6.3. Research method for study 3

Clearly, individual pupils are subject to the decisions that are made by school and college leaders. Such leadership decisions would encompass; the curriculum that they study, their access to a particular qualification mix, and how they are prepared for the transition to post-compulsory education.

The aim of the study was to triangulate both the previous studies, in order to gain some understanding of how the policy and accountability frameworks for schools might be translated into operations and how the frameworks have impacted on and influenced young people as they move from compulsory to post-compulsory education.
The young people who participated in the study were all pupils at a Sixth-Form College in a socio-economically disadvantaged area of a northern city. This area is also ethnically diverse. There are other post-16 providers in the city but the Sixth-Form College is the most popular post-16 destination for students within its locality.

All the participants in the study were known to the researcher either as students in their classes or as contacts that had arisen from extra-curricular activities. The researcher constructed a table of all students at the college that were known to them. 25 were then randomly chosen as potential participants. These potential participants were then invited by letter to participate. 21 agreed and 4 students indicated that they did not wish to take part. No inference was drawn from the decision of potential participants to not take part in the research.

Issues were identified as arising because of an intersection occurring between “insider research” and the differential in power relations that might exist as result of an adult researching the perspectives of young people. Due consideration was given to the work of Eder and Fingerson (2002) when interviewing students and Briggs (1986) during the analysis of the data.

The eventual participants in this study are identified in the table below:
Table 3.2 Participants in the study of students

<table>
<thead>
<tr>
<th>No.</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>Year</th>
<th>Course</th>
<th>Previous Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bengali</td>
<td>F</td>
<td>13</td>
<td>L3 Voc</td>
<td>Yr1 A Levels</td>
</tr>
<tr>
<td>2</td>
<td>Pakistani</td>
<td>F</td>
<td>13</td>
<td>L3 Voc</td>
<td>L2 Voc</td>
</tr>
<tr>
<td>3</td>
<td>African/Spanish</td>
<td>M</td>
<td>12</td>
<td>L3 Voc</td>
<td>Yr1 A Levels</td>
</tr>
<tr>
<td>4</td>
<td>Somali</td>
<td>M</td>
<td>13</td>
<td>L3 Voc</td>
<td>L3 Yr1</td>
</tr>
<tr>
<td>5</td>
<td>Somali</td>
<td>M</td>
<td>13</td>
<td>L3 Voc</td>
<td>L3 Yr1</td>
</tr>
<tr>
<td>6</td>
<td>Afghani</td>
<td>M</td>
<td>14</td>
<td>L3 Voc</td>
<td>L3 Yr1</td>
</tr>
<tr>
<td>7</td>
<td>White British</td>
<td>M</td>
<td>12</td>
<td>L2 Voc</td>
<td>KS4</td>
</tr>
<tr>
<td>8</td>
<td>Bengali</td>
<td>F</td>
<td>13</td>
<td>L3 Voc</td>
<td>Yr1 A Levels</td>
</tr>
<tr>
<td>9</td>
<td>Pakistani</td>
<td>F</td>
<td>13</td>
<td>L3 Voc</td>
<td>L3 Yr1</td>
</tr>
<tr>
<td>10</td>
<td>Pakistani</td>
<td>F</td>
<td>13</td>
<td>L3 Voc</td>
<td>L3 Yr1</td>
</tr>
<tr>
<td>11</td>
<td>Caribbean/White</td>
<td>F</td>
<td>13</td>
<td>L3 Voc</td>
<td>L3 Yr1</td>
</tr>
<tr>
<td>12</td>
<td>Pakistani</td>
<td>F</td>
<td>13</td>
<td>L3 Voc+A</td>
<td>KS4</td>
</tr>
<tr>
<td>13</td>
<td>Somali</td>
<td>M</td>
<td>12</td>
<td>L3 Voc+A</td>
<td>KS4</td>
</tr>
<tr>
<td>14</td>
<td>Yemeni</td>
<td>F</td>
<td>13</td>
<td>L3 Voc</td>
<td>L3 Yr1</td>
</tr>
<tr>
<td>15</td>
<td>White British</td>
<td>F</td>
<td>13</td>
<td>L3 Voc</td>
<td>L3 Yr1</td>
</tr>
<tr>
<td>16</td>
<td>White British</td>
<td>M</td>
<td>14</td>
<td>L3 Voc</td>
<td>L3 Yr2 + A</td>
</tr>
<tr>
<td>17</td>
<td>White British</td>
<td>F</td>
<td>14</td>
<td>L3 Voc</td>
<td>L3 Yr2 + A</td>
</tr>
<tr>
<td>18</td>
<td>White British</td>
<td>F</td>
<td>12</td>
<td>L3 Voc</td>
<td>KS4</td>
</tr>
<tr>
<td>19</td>
<td>White British</td>
<td>F</td>
<td>13</td>
<td>A Yr2</td>
<td>A Yr1</td>
</tr>
<tr>
<td>20</td>
<td>Pakistani</td>
<td>M</td>
<td>13</td>
<td>A Yr2</td>
<td>A Yr1</td>
</tr>
<tr>
<td>21</td>
<td>White British</td>
<td>F</td>
<td>12</td>
<td>L3 Voc+A</td>
<td>KS4</td>
</tr>
</tbody>
</table>

Of these students, 6 were White British, 7 were of Asian ethnicity, 3 were Black, 2 were Arab and 2 were of Mixed Ethnicity. 12 students were Female and 9 were Male. 5 students had started level 3 programmes at other provision and had transferred to the college at the end of the first year of study. 5 students were in the first year of their studies at the college and 16 were in the second year.

They were interviewed, by the use of a semi-structured interview method, about their reflections on their secondary education and about the process of applying for post-16 study. The participants were drawn from a variety of school backgrounds, ethnicities and programmes of post-16 study. They were being educated at a sixth-form college in a context of socio-economic disadvantage. This was a change to the original design because of issues of gaining access to pupils undertaking post-16 education in a relatively advantaged area. However, as the research design was focused on issues of social justice, it was felt that it was valuable to hear the voices of learners in a context of socio-economic disadvantage and triangulate the data with previous quantitative and qualitative studies.
The interview and analytical approach that was used is similar to that identified in the previous study dealing with the perspectives of school and college leaders, given the caveats identified above.

Interviews were coded using a mix of open inductive coding (Miles et al. 2013) and the addition of new nodes, as more themes were revealed by participants. Themes and codes were developed as the analysis of the narrative took place. In order to help analyse and understand the data, NVivo 10 and 11 software was used. The narratives of the individual respondents were then analysed, findings identified, and a discourse constructed that related these findings to the research question.

3.7 Conclusions

A mixed methods design was chosen as the most appropriate way to approach this study. The quantitative studies were designed to examine if there were statistically significant patterns revealed in relation to the structural performance and access data. These analyses were located within an approach that sought to explore these patterns. In the case of interaction analysis, conventional methods could not be used to examine the data and so a new visual method of examination was devised.

The qualitative studies were not intended to meet standards of statistical validity, as they are explanatory and not exploratory in design. The purpose of these studies and their design was intended to highlight the understanding of the realities faced by participants. It did not seek to establish a truth or a causal mechanism, but rather to examine the experiences of these actors given their location in their social field. So, a phenomenological approach was used in constructing this process and understanding the way participants responded. These processes were designed to illuminate and triangulate the quantitative analysis with the rich, textured and nuanced response of participants to the dimensions of the field within which they exist and operate.

The next chapter will include an exploration of the statistical data that relates to the performance of different types of schools and tries and ascertain if that performance is boosted by the use of equivalent qualifications. It will also consider issues of access to particular qualifications and suggest whether the statistical evidence supports a conclusion of access being restricted on the basis of identified contextualising variables.
4 Do Schools in England “game” accountability measures?

In this chapter, the statistical patterns that relate to the quantitative gaming variables are examined. The findings of the univariate, bivariate and multi-variate analysis of these variables are examined and reported. The chapter also investigates interactions between the contextual variables and the gaming variables. The analysis would seem to suggest that there are statistically significant structural patterns of the gaming variables in the school system and that this may related to the type of school. The findings would indicate areas and associations that inform the focus of the qualitative studies.

4.1 “Gaming” and the measurement of pupil outcomes

In order to meet the demands of the increasingly complex accountability frameworks in which school leadership engages it has been suggested that a strategic approach is employed, referred to as "gaming".

The concept and meaning of gaming is defined in Chapter 2 and identified as the intended strategic measures that are implemented by schools to ensure that they demands of the accountability frameworks.

Schools that have engaged in gaming may or may not have been doing so whilst restricting access to academic (GCSE) qualifications. For example, a school might have been providing the access to GCSEs that would have been expected for a given level of attainment and deprivation and might have been bringing in additional non-GCSE qualifications for (among other reasons) strategic purposes, such as boosting school level performance against the key threshold measure.

As indicated earlier, the key threshold measure of school standards over the period investigated (2012, 2013 and 2014) was the percentage of pupils in a school’s Key Stage 4 cohort who achieved 5 A*-C GCSE passes, including English and Maths GCSE and including any equivalent qualifications.

Schools could achieve performance against the measure by, as already indicated, pupils achieving GCSE and equivalent qualifications, rather than GCSE achievement alone. These equivalent qualifications are usually vocational in nature.

The measures that were used to analyse the data and identify gaming were related to outcomes and access. Outcomes were considered in terms of the level of performance boost that is given to mean school level outcomes. Access was measured by the amount of
GCSE-only examinations that were taken by pupils at the end of Key Stage 4. Gaming was suspected when these values and their patterns were identified as statistically significant.

4.2 How did this investigation identify the presence of gaming and which type of schools were engaged in this practice?

4.2.1 Univariate analysis of the outcome and access variables

a) The outcome variable – the performance boost because of schools utilising equivalent qualifications

Table 4.1 below shows the distribution of the performance boost that was generated from the differential use of equivalent qualifications.

| Table 4.1: Derivation of the outcome variable relating to performance boost outcome |
|---------------------------------|----------------|----------------|----------------|
|                                 | 2012 (n=3,021) | 2013 (n=3,017) | 2014 (n=3021) |
| % 5+ A*-C GCSEs including English & Maths | mean (sd) | mean (sd) | mean (sd) |
| Including Equivalents           | 59.8(15.8)   | 61.6(15.6)   | 57.3(17.0)   |
| Just GCSEs                      | 52.4(19.5)   | 54.2(19.1)   | 54.3(18.3)   |
| Performance boost (percentage points) | +7.4 (7.6) | +7.4 (7.6) | +3.1 (3.7) |

The results of the policy changes that were implemented because of the Wolf Review (2011) can be seen clearly. The magnitude of the mean performance boost that accrued because of the differential use of equivalent qualifications was reduced from 7.4 percentage points to 3.1 percentage points. The spread of the frequency distribution in relation to this measure was also reduced, as is indicated by the reduction in the standard deviation. It is also noticeable that the performance measure based on GCSEs only had remained stable over the years of the study, whilst the performance measure that includes the use of equivalent qualifications fell between 2013 (61.6%) and 2014 (57.3%).

The performance boost could, arguably, have been learner-driven; where qualification mix is arrived at because of learner need, or it could have been institutionally driven, as an
attempt to maximise school level performance at the key threshold and accountability measure of school’s performance.

b) The access variable - the number of academic qualifications

Key statistical measures for this variable can be seen in Table 4.2.

Table 4.2: Statistical summary of the number of GCSE-only entries

<table>
<thead>
<tr>
<th></th>
<th>2012 (n=3021)</th>
<th>2013 (n=3017)</th>
<th>2014 (n=3021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of GCSE exams</td>
<td>7.8(1.7)</td>
<td>8.0(1.6)</td>
<td>8.2(1.3)</td>
</tr>
</tbody>
</table>

Again, the changes to the way accountability measures were constructed is seen to have an impact on the distribution of the variable. There is a reduction in spread, as indicated by the standard deviation. There was also a staged increase in the mean number of academic examinations taken, from 7.8 in 2012 to 8.2 per pupil in 2014.

4.2.2. Univariate analysis of the explanatory independent variables

The explanatory independent variables are included to provide contextual richness to the investigation.

a) Prior attainment of Key Stage 4 cohort at the end of Key Stage 2

Table 4.3 reveals the distribution of this variable over the three years of the study.

Table 4.3: Mean prior attainment of KS4 cohort at KS2 (KS2 Points per pupil)

<table>
<thead>
<tr>
<th></th>
<th>2012 (n=3020)</th>
<th>2013 (n=3016)</th>
<th>2014 (n=3020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KS2 APS</td>
<td>27.8(1.6)</td>
<td>27.8(1.5)</td>
<td>27.8(1.5)</td>
</tr>
</tbody>
</table>
Upon examination, these frequency distributions were bi-modal, but not to any great extent. This is probably because, within England and Wales, there are still a very small number of secondary schools that select pupils for admission based on attainment at the end of primary schooling.

The mean also changed very little over the timeline of the study. In terms of measures of dispersion, the standard deviation remained similar over the years of the study, which indicates that spread has not changed very much. In short, the distribution of KS2 prior attainment by the KS4 exam cohort was stable.

b) Socio-economic disadvantage context

The distribution of this variable is shown in Table 4.4.

<table>
<thead>
<tr>
<th></th>
<th>2012 (n=3021)</th>
<th>2013 (n=3017)</th>
<th>2014 (n=3012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>%FSMCLA</td>
<td>25.8 (17)</td>
<td>27.3 (17.4)</td>
<td>27.5 (16.9)</td>
</tr>
<tr>
<td><strong>Mean(sd)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These frequency distributions were all positively skewed. Over the time period of the study, the mean increased slightly from 25.7% in 2012 to 27.5% in 2014, as did the median, 21% in 2012 to 23% in 2014. In terms of dispersion, the standard deviation fluctuated slightly but remained broadly stable.
c) Type of school

The change in the prevalence of different school types over the study period can be seen in Table 4.5 and Chart 4.1.

Table 4.5: Types of school by governance structure

<table>
<thead>
<tr>
<th>Type of school</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsored Academy</td>
<td>299</td>
<td>359</td>
<td>441</td>
</tr>
<tr>
<td>Converter Academy</td>
<td>680</td>
<td>1045</td>
<td>1201</td>
</tr>
<tr>
<td>Community School</td>
<td>1020</td>
<td>829</td>
<td>683</td>
</tr>
<tr>
<td>Foundation School</td>
<td>536</td>
<td>379</td>
<td>326</td>
</tr>
<tr>
<td>Vol Aid School</td>
<td>413</td>
<td>349</td>
<td>313</td>
</tr>
<tr>
<td>Other (CTC, F, FUTC)</td>
<td>73</td>
<td>56</td>
<td>59</td>
</tr>
<tr>
<td>Total - All Schools</td>
<td>3021</td>
<td>3017</td>
<td>3023</td>
</tr>
</tbody>
</table>

Chart 4.1: Types of school by governance structure
As can be seen from the table and graph the clear trend was towards the academisation of schools and the establishment of new school types. This was a result of the policy of the coalition government that came to power in 2010. The policy was established that schools judged as good or outstanding by the Office for Standards in Education (OFSTED, the schools inspectorate) were given the opportunity, if they chose, to convert to academy status. As can be seen in Table 4.5, at the start of the study non-academised school types were the most prevalent, but by the end of the study the balance had swung towards academy-status schools.

Schools that were judged as failing were expected to convert to academy status, with the support of an external sponsor, and become sponsored academies. The rationale for using the school type as established in the Department for Education (DfE) performance tables is that academisation was supposed to be a rapid response to the issue of poor standards.

Given both of the identified factors, the changes in school type and the rapid requirement for improvement, it was felt that a consistent system picture over three years would illuminate both access to GCSE-only qualifications and the strategic differential use of equivalent qualifications. This would include taking a view of the relative usage of these qualifications across the system as a whole, to ensure that judgments were not biased by the dynamics of changing school types, but rather reflective of the system interactions.

4.3. Bivariate analysis of School type (categorical) and other explanatory contextual (scale) variables

a) School type and pupil prior attainment

The results of the analysis are displayed in Chart 4.2.
Upon examination, these frequency distributions were bi-modal, but not to any great extent, since, within England and Wales, there are a very small number of secondary schools that select pupils for admission based on attainment at the end of primary schooling.

The mean has also changed very little over the timeline of the study and the median has been static. In terms of measures of dispersion, the standard deviation has decreased slightly from 1.6 in 2012 to 1.5 in 2013 and 2014. In terms of the minimum and maximum, attainment has been broadly static, these figures were 23.0 to 33.7 in 2012, 23.4 to 33.5 in 2013 and 23.3 to 33.5 in 2014.
b) School type and socio-economic deprivation

The results of this analysis are shown in Chart 4.3.

**Chart 4.3: Level of socio-economic deprivation by school type**

![Chart showing level of socio-economic deprivation by school type]

Sponsored academies exhibited the highest level of socio-economic disadvantage, whilst converter academies exhibited the lowest level.

### 4.4 Statistical analysis of the gaming of measured outcomes

#### 4.4.1 Gaming and school type

From chart 4.4 below, it can be seen that the type of school engaging in the differential use of equivalent qualifications to the greatest extent was the Sponsored Academy. Overall, in the years of the study, the performance boost gained from these qualifications was twice as large (in %) in this type of school, as opposed to schools as a whole. It was also noticed that the magnitude of the boost from differential use dropped in 2014, as opposed to 2012 and 2013. A presumption is made that this is due to changes to the way in which performance measures were calculated following the Wolf review.
As stated earlier, the relative differential usage of equivalent qualifications needs to be examined. As can be seen from Chart 4.4 and Chart 4.5, all school types have used equivalent qualifications for some of their pupils. However, sponsored academies appear to have used them to a much greater extent than other types of schools. Even in 2014 when it seems that usage dropped, sponsored academies were using them at nearly double the rate of the mean usage for all schools. Further analysis will consider if such a level of usage appears to be justified by context or if there may be other reasons.
Another perspective is provided by Chart 4.6, which plots the relative performance boost to measured outcomes by the differential usage of equivalent qualifications by school type over the period of the analysis as standardised z-scores. In this case, the data for each year has been standardised around a mean of 0 and a standard deviation of 1.
Chart 4.6 echoes Chart 4.4 and Chart 4.5 in illustrating how the boost in measured performance that can be statistically attributed to the use of GCSE equivalent KS4 qualifications declined between 2013 and 2014. Chart 4.5 also clearly highlights the types of schools more likely than average to gain a performance boost from the use of GCSE equivalent KS4 qualifications (above zero; sponsored academies most strikingly, foundation and community schools to a lesser extent). The Chart also shows types of schools less likely than average to gain a performance boost from the use of GCSE equivalent KS4 qualifications (below zero; converter academies, voluntary aided, other).

Chart 4.6 also provides justification for selecting community schools as the reference group, as they are the group closest to the mean (zero) in terms of gaming.

4.4.2 Examination of the bivariate analyses

The bivariate analyses appeared to reveal that there were a series of relationships encompassing the magnitude (both absolute and relative) of the dependant variable, the performance boost accruing from the differential use of equivalent qualifications, the type of school, the mean school-level prior attainment at Key Stage 2 of the Key Stage 4 cohort, and the mean school level of socio-economic disadvantage.
In the case of the scale variables, a series of correlational analyses were undertaken. For the purposes of the exercise, Spearman's rho was the co-efficient that appeared to best fit the circumstances, due to the complexities of the variables, including the non-parametric nature of the dependent variable and the bi-modal nature of the mean school level of prior attainment at Key Stage 2 of the Key Stage 4 cohort. Although, in the case of the prior attainment distribution, the bi-modal observation could be ignored due to the small number of schools involved and the fact that the anomaly was due to local selective practices, which were not representative of the system.

When correlating the mean school level of social disadvantage and the mean school level of pupil prior attainment, it was established that there was a moderately high level of correlation. This needs to be considered when conducting any multiple linear regressions modelling and testing for the impact of multicollinearity on the models will also need to be undertaken. The correlation co-efficients, related to the performance boost to measured outcomes through the differential use of equivalent qualifications, can be seen in Table 4.6.

Table 4.6: Correlation co-efficients - contextual variables and performance boost

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson</td>
<td>Spearman</td>
<td>Pearson</td>
</tr>
<tr>
<td>Performance Boost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSMCLA</td>
<td>0.48</td>
<td>0.58</td>
<td>0.46</td>
</tr>
<tr>
<td>KS2 APS</td>
<td>-0.50</td>
<td>-0.60</td>
<td>-0.51</td>
</tr>
</tbody>
</table>

Statistically significant findings at $\rho = 0.05$ are identified in bold

When examining the correlation between pupil prior attainment and the differential use of equivalent qualifications, another strong and statistically significant pattern is seen. In 2014, the correlation was observed at -0.50 compared with -0.60 in 2013 and 2012. The negative correlation indicates that as pupil prior attainment rises, there is less differential use of equivalent qualifications and vice versa.

There was also a moderately strong and statistically significant correlation between school level of disadvantage and the differential use of equivalent qualifications. It must be noted, however, that this appears to have been slightly less strong in 2014 (0.48) than in 2013 or 2012 (both 0.58).
So, it appeared clear from the bivariate analysis that, as the mean school level of pupil prior attainment at Key Stage 2 increased, then a model would predict that the magnitude of the differential usage would decrease. Whereas the pattern of the relationship between the dependent variable and the mean school level measure of socio-economic disadvantage would suggest a positive relationship, that is, as the level of socio-economic disadvantage increased, so did the differential usage of equivalent qualifications. This finding was investigated in the multiple regression models.

4.4.3 Modelling the gaming of measured outcomes

There was clearly more complexity to the relationship of the dependent variable and the independent variables than could be established with only the understanding of the bivariate patterns of correlation.

In order to examine this issue further, a set of multiple regression models were constructed across all three years of the study that modelled the performance boost and controlling for the explanatory variables as identified earlier in the chapter.

The models that were developed to analyse the performance boost can be seen in Appendix 11.

The final main effects model that relates to the performance boost is shown below in Table 4.7.
Table 4.7: The final main effects model - multiple linear regressions - performance boost due to the differential use of equivalent qualifications

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th></th>
<th>2013</th>
<th></th>
<th>2014</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>95% CIs</td>
<td>β</td>
<td>95% CIs</td>
<td>β</td>
<td>95% CIs</td>
</tr>
<tr>
<td>Performance Boost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>41.91</td>
<td>35.84 47.98</td>
<td>49.20</td>
<td>43.19 55.21</td>
<td>19.04</td>
<td>15.9 22.18</td>
</tr>
<tr>
<td>KS2APS</td>
<td>-1.35</td>
<td>-1.56 -1.15</td>
<td>-1.60</td>
<td>-1.8 -1.39</td>
<td>-0.62</td>
<td>-0.72 -0.51</td>
</tr>
<tr>
<td>%FSM</td>
<td>0.10</td>
<td>0.08 0.12</td>
<td>0.08</td>
<td>0.06 0.09</td>
<td>0.04</td>
<td>0.03 0.05</td>
</tr>
<tr>
<td>Community Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ref)</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Sponsored Academy</td>
<td>4.04</td>
<td>3.18 4.91</td>
<td>4.65</td>
<td>3.86 5.45</td>
<td>1.79</td>
<td>1.38 2.19</td>
</tr>
<tr>
<td>Converter Academy</td>
<td>0.04</td>
<td>-0.63 0.71</td>
<td>0.25</td>
<td>-0.35 0.85</td>
<td>0.05</td>
<td>-0.27 0.37</td>
</tr>
<tr>
<td>Foundation School</td>
<td>0.88</td>
<td>0.2 1.56</td>
<td>0.83</td>
<td>0.08 1.59</td>
<td>-0.12</td>
<td>-0.55 0.31</td>
</tr>
<tr>
<td>Voluntary-Aided</td>
<td>-1.52</td>
<td>-2.27 -0.77</td>
<td>-1.42</td>
<td>-2.21 -0.64</td>
<td>-0.82</td>
<td>-1.26 -0.38</td>
</tr>
<tr>
<td>Other</td>
<td>-0.50</td>
<td>-2.05 1.05</td>
<td>-1.33</td>
<td>-3.04 0.38</td>
<td>-0.65</td>
<td>-1.53 0.24</td>
</tr>
<tr>
<td>Adj R-Sq</td>
<td>0.31</td>
<td></td>
<td>0.32</td>
<td></td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>3019</td>
<td>3015 3019</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statistically significant findings at $\rho = 0.05$ are identified in bold.

4.4.4 Interpreting models of the gaming of measured outcomes

The Prior attainment of the Key Stage 4 cohort was statistically significant and was negatively correlated with the use of equivalent qualifications to boost measured outcomes. The size of the prior attainment coefficient dropped between 2013 and 2014 but remained statistically significant.

Pupil disadvantage was also statistically significant and was positively correlated with the use of equivalent qualifications to boost measured outcomes. The size of the co-efficient dropped between 2013 and 2014 but remained statistically significant.

Once pupil prior attainment and deprivation were statistically controlled for, the difference in the measured performance boost between community schools and converter academy schools was not statistically significant. However, a significantly greater measured
performance boost was observed for sponsored academies and (to a lesser extent) foundation schools and a statistically lower measured performance boost was observed for voluntary aided schools.

4.5 Examining the gaming of access to GCSE-only qualifications

4.5.1 The access to GCSE-only exams and school type

The mean school level number of GCSE-only qualifications taken by pupils in different types of school can be seen in Chart 4.7.

*Chart 4.7: The mean number of GCSE-only qualifications taken by pupils in different types of schools*
It is clear upon examining Chart 4.7 and Chart 4.8 that, on average, sponsored academies entered pupils for the least number of GCSE exams; a consistent picture across the years of the study. In fact, in 2014, even after the Wolf Review (2011), they were entering pupils, on average, for 1 less GCSE than the mean for all schools. On the other hand, converter academies and voluntary-aided schools entered pupils for more GCSE examinations than the mean for all schools. Again, this was a consistent picture across the three years of the study.

In order to examine further the picture across the three years of the study, the absolute figure of GCSE-only entry was standardised to examine the access relative to the mean (conversion to z-scores). The graphical output from the analysis can be seen in Chart 4.9 below:
Access to GCSEs are seen to be greater on average for converter academies and voluntary aided schools and lower on average for sponsored academies and foundation schools.

4.5.2 Examination of the bivariate analyses

As shown in Table 4.8, access to GCSEs was positively correlated with pupil prior attainment and negatively correlated with pupil deprivation.

Table 4.8: Correlation co-efficients - mean no of GCSE-only exams with context

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of GCSE</td>
<td>Pearson</td>
<td>Spearman</td>
<td>Pearson</td>
</tr>
<tr>
<td>KS2APS</td>
<td>0.74</td>
<td>0.72</td>
<td>0.71</td>
</tr>
<tr>
<td>FSMCLA</td>
<td>-0.59</td>
<td>-0.65</td>
<td>-0.56</td>
</tr>
</tbody>
</table>

Statistically significant findings at $\rho = 0.05$ are identified in bold

The pattern seems to suggest that the higher the level of pupil prior attainment at Key Stage 2, the greater the mean school level number of GCSE-only exams for which pupils
were entered. As the level of school disadvantage increased, pupils were entered for fewer GCSE-only exams.

4.5.3 Modelling the gaming of access to GCSE-only exams

To examine the relationship between the mean school level of pupil entry to GCSE-only exams and the key contextual variables, as seen in Table 4.9 below, a series of multi-variate linear regression models were constructed and analysed.

Multiple linear regression models were constructed using data for 2012, 2013 and 2014. The equation for the models is specified in equation 2.2. The iterations of the multiple linear regression models can be seen in Appendix 12. The reference type of school used in the development of these models was community schools.

Significant explanatory variables are identified in bold type. The final main effect model for each of the three years in the study are summarised in Table 4.9 below: The R-squared figures for the final main effects’ models were 0.568, 0.534 and 0.438 in 2012, 2013 and 2014, respectively. The indication is that the model was robust and explained, in 2014, for example, 43.8% of the variation in GCSE-only entries.
Table 4.9: Final main effects model - multiple linear regressions - access to GCSE-only examinations

<table>
<thead>
<tr>
<th></th>
<th>2012 β</th>
<th>95% CIs</th>
<th>2013 β</th>
<th>95% CIs</th>
<th>2014 β</th>
<th>95% CIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to GCSE</td>
<td>Lower</td>
<td>Upper</td>
<td>Lower</td>
<td>Upper</td>
<td>Lower</td>
<td>Upper</td>
</tr>
<tr>
<td>KS2APS</td>
<td>0.63</td>
<td>0.6</td>
<td>0.67</td>
<td>0.61</td>
<td>0.57</td>
<td>0.64</td>
</tr>
<tr>
<td>%FSM</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>Community Schools (ref)</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sponsored Academy</td>
<td>-0.54</td>
<td>-0.69</td>
<td>0.39</td>
<td>-0.59</td>
<td>-0.73</td>
<td>-0.45</td>
</tr>
<tr>
<td>Converter Academy</td>
<td>0.23</td>
<td>0.12</td>
<td>0.34</td>
<td>0.17</td>
<td>0.07</td>
<td>0.28</td>
</tr>
<tr>
<td>Foundation School</td>
<td>-0.1</td>
<td>-0.22</td>
<td>0.02</td>
<td>-0.16</td>
<td>-0.29</td>
<td>-0.03</td>
</tr>
<tr>
<td>Voluntary-Aided</td>
<td>0.33</td>
<td>0.2</td>
<td>0.46</td>
<td>0.34</td>
<td>0.21</td>
<td>0.48</td>
</tr>
<tr>
<td>Other</td>
<td>0.24</td>
<td>-0.02</td>
<td>0.51</td>
<td>0.18</td>
<td>-0.12</td>
<td>0.48</td>
</tr>
<tr>
<td>Adj R-Sq</td>
<td>0.57</td>
<td>0.53</td>
<td>0.44</td>
<td>0.53</td>
<td>0.44</td>
<td>0.53</td>
</tr>
<tr>
<td>N</td>
<td>3019</td>
<td>3019</td>
<td>3019</td>
<td>3019</td>
<td>3015</td>
<td>3015</td>
</tr>
</tbody>
</table>

Statistically significant findings at $\rho = 0.05$ are identified in bold

4.5.4 Interpreting models of the gaming of access to GCSE-only exams

The KS2 prior attainment of the Key Stage 4 cohort was statistically significant and was positively correlated with access to GCSEs at KS4.

Pupil disadvantage was also statistically significant and was negatively correlated with access to GCSEs at KS4.

Once pupil prior attainment and deprivation were statistically controlled for, compared with community schools, the mean number of GCSEs taken was significantly higher for converter academies and voluntary aided schools and significantly lower for sponsored academies.
It was noticeable that in this model that the R-Squared values in Table 4.9 were higher than in Table 4.7. This might indicate that the size of the performance boost due to the use of equivalent qualifications is related to the level of access to GCSE qualifications. This might be apparent when looking at the correlation between the two dependent variables.

4.6 Is there a relationship between gaming outcomes, gaming the access to academic qualifications and the type of school?

4.6.1 The association between gaming and access to academic qualifications

An important part of understanding the patterns of association between gaming and the access to academic qualifications is to ascertain is there is a correlation between the two dependent variables. The result of an analysis of correlation can be seen in Table 4.10;

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>-0.74</td>
<td>-0.71</td>
<td>-0.57</td>
</tr>
<tr>
<td>Spearman</td>
<td>-0.79</td>
<td>-0.76</td>
<td>-0.62</td>
</tr>
</tbody>
</table>

Statistically significant findings at $\rho = 0.05$ are identified in bold

Table 4.10 shows a fairly strong negative correlation between access to GCSEs and performance boost outcome measures. On average, as the number of GCSE entries decreased, the performance boost because of the use of equivalent qualifications increased. An assertion of gaming is therefore suggested. Whilst this correlational finding does not confirm that the use of equivalent qualifications is at the expense of access to GCSEs, the evidence strongly suggests so. If a school pursued a policy of entering pupils for equivalent qualifications rather than GCSEs, it will get a performance boost to its measured outcomes. It could be that the change of policy with regard to the construction of league tables is reflected in the correlation analysis as the correlation between the two variables seems to weaken in 2014.

Constructing a model to operationalise this relationship caused a methodological problem which seemed difficult to resolve as it proved difficult to fully establish the sequential relationship between the two variables.
4.6.2 The relationship between the explanatory (contextual) variables and the gaming and access variables

Compared with Community Schools, the model reveals that Sponsored Academies engaged in consistent statistically significantly higher levels of gaming to boost measured performance, than would be expected, given their pupil prior attainment and their disadvantaged context. It is also clear from the model that Voluntary Aided schools engaged in consistent statistically significantly less differential usage of equivalent qualifications than is expected, given their pupil prior attainment and their disadvantaged context. The finding of statistical significance is important in that it indicates that, if the assumptions and strength of the model are accepted, that the relationship between the variables is not what might be expected due to chance.

Examination of the model would seem to suggest that sponsored academies, even after controlling for mean school level prior attainment of the Key Stage 4 cohort at Key Stage 2 and the level of school socio-economic disadvantage, enter pupils, on average and to a statistically significant extent, for less GCSE-only exams than community schools. This is a consistent pattern across all three years of the study.

The reverse is true in the case of voluntary-aided schools; across the three years, they entered pupils for statistically significantly more GCSE-only exams than community schools.

In relation to converter academies, the picture is mixed with no statistically significant difference in 2012, but in 2013 and 2014 these types of schools entered pupils at a school level for more GCSE-only exams compared with community schools. This was a finding with statistical significance. This may be due to the fact that the numbers of schools to have previously had voluntary-aided status had converted to become academies.

Given the high level of correlation (Table 4.10) between the two dependent variables, it was felt that additional insight might be gained from a comparative analysis of the two final main effects models. This comparison can be seen in Table 4.11.
<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coeff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>41.91</td>
<td>-9.53</td>
<td>49.2</td>
</tr>
<tr>
<td>KS2APS</td>
<td>-1.35</td>
<td>0.63</td>
<td>-1.6</td>
</tr>
<tr>
<td>%FSM</td>
<td>0.1</td>
<td>-0.01</td>
<td>0.08</td>
</tr>
<tr>
<td>Community Schools</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sponsored Academy</td>
<td>4.04</td>
<td>-0.54</td>
<td>4.65</td>
</tr>
<tr>
<td>Converter Academy</td>
<td>0.04</td>
<td>0.23</td>
<td>0.25</td>
</tr>
<tr>
<td>Foundation School</td>
<td>0.88</td>
<td>-0.1</td>
<td>0.83</td>
</tr>
<tr>
<td>Voluntary-Aided</td>
<td>-1.52</td>
<td>0.33</td>
<td>-1.42</td>
</tr>
<tr>
<td>Other</td>
<td>-0.5</td>
<td>0.24</td>
<td>-1.33</td>
</tr>
<tr>
<td>Adj R-Sq</td>
<td>0.31</td>
<td>0.57</td>
<td>0.32</td>
</tr>
<tr>
<td>N</td>
<td>3019</td>
<td>3019</td>
<td>3015</td>
</tr>
</tbody>
</table>

Statistically significant findings at $\rho = 0.05$ are identified in bold.

When examining the two final main effects models, it could be seen that, in both cases, there were statistically significant similarities in the identified coefficients.

Sponsored Academies seemed to engage in the disproportionate differential use of equivalent qualifications. This means that their measured outcomes, as a category of schools, and after controlling for socio-economic disadvantage and prior attainment, were statistically significantly boosted by the differential use of equivalent qualifications. When this is compared with the direction of the co-efficient for these types of school in the access model, it can be seen that these schools, as a group, enter pupils for statistically fewer academic examinations. This is important because it may well have an impact on the progression opportunities for pupils who are entered for equivalent qualifications, when they may be better suited to academic study. It appears clear from examination of these figures that Sponsored Academies were engaged in gaming, by entering pupils for exams to boost measured school level outcomes but not meeting the individual needs of learners.

Conversely, Voluntary-Aided schools were statistically significantly less likely to engage in the differential use of equivalent qualifications to give a performance boost to measured
outcomes. They also entered pupils, after controls have been considered, for statistically significantly more academic exams than community schools - the reference group. Subsequent analyses, not reported in detail here, clearly indicate that, when Voluntary-Aided schools are used as the reference group, all other types of school gain a statistically significant performance boost and enter pupils for statistically significantly fewer GCSE-only examinations. This begs the question, if Voluntary-Aided schools can consistently enable pupils to access and be less reliant on equivalent qualifications, why can’t similar outcomes be replicated across the system?

What is also of interest is the relative stability of the model across the two years, before the introduction of accountability measure reforms that were implemented as a result of the Wolf Review (2011, Op. Cit.). In 2012 and 2013, the magnitude of the coefficients related to each of the dependent and independent variables remained broadly the same in both the outcomes and the access model. However, in 2014, across the outcome model, coefficients reduced, which, I suggest, was a direct result of policy changes to accountability measures. In the access model, in 2014, the magnitude of coefficients reduced, meaning that, on average, pupils were being entered for more GCSE-only exams than in 2012 and 2013.

It is important to bear in mind also that over the period of the study a large number of schools changed type, for example, from Voluntary-Aided to Converter Academy or from Community School to Sponsored Academy. Given the dynamic nature of the school system over the period of the study, more fluctuations in the co-efficient in 2012 and 2013 would have perhaps been expected as schools changed from one type to another. For example, if a Voluntary-Aided school with a low performance boost from the differential usage of equivalent qualifications transformed into a Converter Academy, it might be expected that the Converter Academy outcome co-efficient would reduce further and the access coefficient would increase. However, these movements do not appear to have upset the stability of the models.
4.7 Further investigations of the models

4.7.1 Interaction analysis

a) The interaction between access, outcomes, disadvantage, prior attainment and school type

The 3D scatterplots for 2013 that shows the location of each school given the level of performance boost to outcomes and the contextual variables can be seen below:

*Chart 4.10: 3D representation of performance boost (gaming) to explanatory variables*

The plot for 2014 can be found in Appendix 10.

The 3D graphs show a complex funnel-shaped pattern, where increasing levels of KS2 attainment entwine with decreasing levels of %FSM to a point when the performance boost outcome is zero. Looking more closely at the chart, at the point at which KS2 attainment is maximised and %FSM minimised, a group of schools lay 'detached' from the bulk of the data. These schools are all selective Grammar schools and, as such, have extremely high KS2 attainment, extremely low levels of pupil deprivation, and zero or near zero measured performance boost through the use of qualifications equivalent to GCSEs. This would appear to be a rational conclusion, as grammar schools select pupils for academic tracks at 11+ and do not seem to engage in the differential use of equivalent qualifications.
Returning to the 3D scatterplots, as average KS2 attainment reduces and %FSM increases, the variation in measured performance boost between schools is seen to increase - creating a funnel shape. Whilst the interpretation of the nature of the KS2*FSM interaction with respect to measured performance boost was reasonably clear at the high KS2 / low FSM (spout) end of the scatterplots, the increasing variation at the funnel end with decreasing KS2 attainment and increasing %FSM makes interpretation more difficult. Whilst the very high KS2 attainment and very low pupil deprivation seen with the Grammar school 'spout' appear to converge to 'smother' a schools use of GCSE equivalent qualifications to zero, across other school contexts notable variation in the use of equivalent qualifications is observed - and this variation (in gaming) is seen to increase with decreasing KS2 attainment and associated increasing concentrations of pupil deprivation.

To examine the interaction further, simplified binary versions of KS2 attainment and %FSM, based on the relative position of schools to the overall mean values were used to construct a simplified composite variable.

\[b)\] Binary analysis of the possible interaction of contextual variables

Without including examination of school type, the following initial patterns were revealed from undertaking binary analysis.

<table>
<thead>
<tr>
<th>Interaction of context</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>High KS2, Low %FSM</td>
<td>1,294 (43%)</td>
<td>1,250 (41%)</td>
<td>1,281 (42%)</td>
</tr>
<tr>
<td>High KS2, High %FSM</td>
<td>144 (5%)</td>
<td>150 (5%)</td>
<td>184 (6%)</td>
</tr>
<tr>
<td>Low KS2, Low %FSM</td>
<td>491 (16%)</td>
<td>540 (18%)</td>
<td>492 (16%)</td>
</tr>
<tr>
<td>Low KS2, High %FSM</td>
<td>1,091 (36%)</td>
<td>1,076 (36%)</td>
<td>1,063 (35%)</td>
</tr>
</tbody>
</table>

It is clear from an examination of Table 4.12 that the distribution of the scale contextual variables appeared to be static across the three years of the study. It can also be seen that most mainstream English secondary schools operated in a relatively advantaged (2014 - 58%), as opposed to disadvantaged, context (2014 - 42%). Analysis of the data also reveals concentrations of relative poverty and wealth at extremes of the model. Few (approx. 23%) of schools occupy a middle ground.
When investigating the interaction, patterns of association between pupil measured outcomes and access to GCSE-only qualifications were revealed when all schools were considered. The results of this analysis can be seen in Table 4.13:

Table 4.13: Interaction analysis – access to GCSE exams and performance boost

<table>
<thead>
<tr>
<th>Contextual interaction</th>
<th>Perf boost %P</th>
<th>No of GCSEs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>High KS2, Low %FSM</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>High KS2, High %FSM</td>
<td>7.6</td>
<td>7.4</td>
</tr>
<tr>
<td>Low KS2, Low %FSM</td>
<td>7.7</td>
<td>7.4</td>
</tr>
<tr>
<td>Low KS2, High %FSM</td>
<td>12</td>
<td>12.1</td>
</tr>
</tbody>
</table>

A graphical time-series analysis of the data provided greater clarity as can be seen in Charts 4.11, dealing with performance boost DV and Chart 4.12, dealing with the access to GCSE only examinations. These charts can be seen below:

Chart 4.11 - %P Performance boost by contextual variables 2012-2014 all schools
The pattern showed that, in the case of schools with high levels of prior attainment existing in relatively advantaged contexts (High KS2, Low % FSM), there appeared to be relatively little use of equivalent qualifications to boost measured outcomes. Whereas, in the case of schools with low levels of prior attainment and relatively disadvantaged (Low KS2, High % FSM), there appears to be a relatively high usage of equivalent qualifications. Matters are much less clear in relation to other categories of school. It also appears to show that the change of policy, that relates to the construction of the performance measures (see Chapter 1 for detail) has had a marked impact on the performance boost gained from the differential use of equivalent qualifications and an increase in the number of GCSE only exams that were taken. These findings applied to all categories that were analysed.

c) Binary analysis and the importance of school type

The results of this analysis can be found in Table 4.14.
Table 4.14: Binary analysis of variable interaction – school type

a) High KS2 attainment, Low %FSM

<table>
<thead>
<tr>
<th></th>
<th>Perf boost - %p</th>
<th>No of GCSEs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>Sponsored Academies</td>
<td>8.8</td>
<td>5.6</td>
</tr>
<tr>
<td>Converter Academies</td>
<td>2.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Community Schools</td>
<td>3.7</td>
<td>4.3</td>
</tr>
<tr>
<td>Foundation Schools</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Voluntary Aided</td>
<td>2.5</td>
<td>2.7</td>
</tr>
</tbody>
</table>

b) High KS2 attainment, High %FSM

<table>
<thead>
<tr>
<th></th>
<th>Perf boost - %p</th>
<th>No of GCSEs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>Sponsored Academies</td>
<td>5.4</td>
<td>9.9</td>
</tr>
<tr>
<td>Converter Academies</td>
<td>6.1</td>
<td>7.5</td>
</tr>
<tr>
<td>Community Schools</td>
<td>9.3</td>
<td>7</td>
</tr>
<tr>
<td>Foundation Schools</td>
<td>9.2</td>
<td>8.1</td>
</tr>
<tr>
<td>Voluntary Aided</td>
<td>6.2</td>
<td>5.4</td>
</tr>
</tbody>
</table>

c) Low KS2 attainment, Low %FSM

<table>
<thead>
<tr>
<th></th>
<th>Perf boost - %p</th>
<th>No of GCSEs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>Sponsored Academies</td>
<td>11.3</td>
<td>12.4</td>
</tr>
<tr>
<td>Converter Academies</td>
<td>7.9</td>
<td>7.5</td>
</tr>
<tr>
<td>Community Schools</td>
<td>7.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Foundation Schools</td>
<td>9.2</td>
<td>8.1</td>
</tr>
<tr>
<td>Voluntary Aided</td>
<td>4.6</td>
<td>5.5</td>
</tr>
</tbody>
</table>
d) Low KS2 attainment, Low %FSM

<table>
<thead>
<tr>
<th></th>
<th>Perf boost - %p</th>
<th></th>
<th>No of GCSEs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2013</td>
<td>2014</td>
</tr>
<tr>
<td>Sponsored Academies</td>
<td>16.1</td>
<td>15.9</td>
<td>6.6</td>
</tr>
<tr>
<td>Converter Academies</td>
<td>11.4</td>
<td>11.4</td>
<td>4.6</td>
</tr>
<tr>
<td>Community Schools</td>
<td>11</td>
<td>10.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Foundation Schools</td>
<td>11.7</td>
<td>11.4</td>
<td>4.2</td>
</tr>
<tr>
<td>Voluntary Aided</td>
<td>8.7</td>
<td>8.1</td>
<td>3.1</td>
</tr>
</tbody>
</table>

From examination of the tables above, it is once again clear that all types of schools engaged in the differential use of equivalent qualifications, which may well have been appropriate for learners and for the disadvantaged context of the school. It is also clear though that there were real differences in usage, even after allowing for the identified contextual factors. There is also a difference in the magnitude of usage between 2013 and 2014, as was expected, after a different methodology was utilised for the measurement of pupil outcomes, as a result of the recommendations of the Wolf Review (2011).

When considering the interaction of pupil prior attainment at Key Stage 2 and the mean school level of disadvantage, some interesting patterns were revealed. Sponsored Academies engaged in the greatest differential usage of equivalent qualifications, when all combinations of interaction over the study were considered; apart from in 2012 in the case of academy schools with a high mean level of pupil prior attainment and high levels of socio-economic disadvantage. Though, it is noticeable that in 2013 and 2014 the academy schools in which this interaction was present exhibited the same characteristic of usage prevalent in other academy schools.

The data would seem to suggest, therefore, that there is something in the nature of sponsored academy schools that results in higher levels of the differential usage of equivalent qualifications, notwithstanding the interaction of the key contextual factors.

Given the performance boost to outcome measures by the differential use of equivalent qualifications, that were non-academic in nature, it also seemed important to consider the access measures.
Considering the analysis, it was clear that in all 4 of these categories that sponsored academies entered pupils for less GCSE-only exams, on average, than other types of school. This may suggest that decisions on access to GCSE exams, and not equivalent qualifications, were taken by sponsored academies for other reasons than on the basis of context. These conclusions lend credence to an argument that gaming of access is taking place, possibly for the maximisation of measured pupil outcomes, rather than on the basis of pupil prior attainment and the disadvantaged context of the school.

4.8 Criticisms of the models

No cases were dropped, and it was concluded that the models were robust in generating predicted values of the outcome variable.

It was noticed whilst undertaking the Bivariate analysis of both outcome and access measures that there was strong association between the variables for pupil prior attainment and disadvantaged context of the school. Field (2013) identifies the tests for multicollinearity which would highlight potential problems with the model. These tests are;

- No VIF is greater than 10 (Bowerman and O’Connell, 1990)
- No tolerance is below 0.2 (Menard, 1995)

As the models do not breach either of these conditions, multicollinearity does not need to be considered further as a potential problem.

The analysis of residuals, predicted values and Cooks distances indicates that the models are robust.

4.9 Conclusions

In considering the conclusions that can be drawn from the investigation, it is important first to place matters in context.

In terms of the levels of socio-economic disadvantage related to school context, as measured by the % of pupils in a school that are eligible for free school meals or that are classified as looked after, it is noted that the mean level of disadvantage increased slightly over the period of the study (25.7% in 2012, 27.5% in 2014). The analysis also reveals that
the spread of disadvantage, measured by interquartile range, remained fairly static around 23.5 percentage points. The implication being that, whilst the contextual measurement relating to disadvantage increased slightly, differential inequalities tended to remain the same.

The attainment of pupils at the end of KS2 and on entry to secondary school has remained fairly static (27.8 pts in 2012 and 2014). The spread of this factor has tightened slightly from 1.9 points in 2012 to 1.6 points in 2014.

It was also clear from the analysis that these two contextual variables were strongly correlated and flagged up a potential issue when constructing regression models incorporating these two variables of multicollinearity.

The period of the study was a very dynamic one, in terms of school structure, for schools in England that were publicly funded. This happened as a direct result of the policies for accelerating school reform adopted by the coalition government of 2010-2015 and its conservative successor, 2015 onwards. In the period of the study, the number of secondary schools with academy status grew from 979 in 2012 to 1642 in 2014. The number of community schools fell from 1020 in 2012 to 683 in 2014; similar falls were noted in other types of legacy school types, as can be seen in Table 4.5. However, included in the figures for other school types are the fall in voluntary-controlled schools and the growth in free schools and new university technical colleges. This is important because now the majority of schools operate in an independent fashion, free from democratic local accountability and are allowed to chart their own path to school improvement.

Relating school type to the contextual data, it was seen that sponsored academies had the lowest mean levels of prior attainment and the highest levels of socio-economic disadvantage and that the pattern was consistent across all the years of the study. It could also be noted that converter academies had the highest mean levels of prior attainment and the lowest levels of socio-economic disadvantage.

In terms of outcome measures, the differential usage of equivalent qualifications boosted average threshold measures for schools by 7.4 percentage points in 2012 and 2013. The average dropped in 2014 to 3.1 percentage points, probably as a result of the way in which the performance threshold measures were reconstructed by the Department for Education, as a result of policy recommendations arising out of the Wolf review (Op. Cit.).
In all three years of the study, even given the magnitude drop in 2014, sponsored academies used equivalent qualifications to boost performance to a greater extent than all other types of school. Converter academies and voluntary-aided schools used them the least. In terms of relative usage, it can be seen that most types of school moved closer to the mean, apart from community schools. The largest shift in relative usage was by sponsored academies, although usage was still much greater than all other types of school.

Looking at the correlations between the contextual variables, it can be seen that there was a moderately strong positive correlation between socio-economic disadvantage and the use of equivalent qualifications. There was also a moderately strong negative correlation between pupil prior performance and use of equivalent qualifications.

The multivariate linear regression models revealed that sponsored academies used equivalent qualifications to a statistically significantly greater extent to boost performance, after controlling for key contextual variables (pupil prior attainment and socio-economic disadvantage) than community schools. Voluntary-aided schools used equivalent qualifications to a statistically significantly lesser extent than community schools.

When considering access to GCSE-only exams, a measure that relates directly to having a wide range of accessible post-16 opportunities, sponsored academies have the lowest mean levels of entry across all three years and converter academies have the highest mean levels of entry. However, when considering the relationship that these figures have to the mean, it was observed that a change took place in 2014, the year that the threshold performance measure was reconstituted to reflect the recommendations of the Wolf Review (Op. Cit.). In 2014, Converter academies’ GCSE-only mean entries moved closer to the mean, as did sponsored academies. So it appears that the policy change had increased the relative mean numbers of GCSE-only exams entered by pupils in sponsored academies and reduced, slightly, the mean number of GCSE-only entries in converter academies.

There was also a strong positive correlation between the mean level of attainment of the KS2 cohort and the mean number of GCSE-only exams entered by pupils. Conversely, there was a strong negative correlation between the level of school socio-economic disadvantage and the number of GCSE-only exams entered.

When the multivariate linear regression models were constructed in respect of access measures, controlling for mean pupil levels of prior attainment at KS2 and school levels of disadvantage, community schools were used as the reference school type. It was found
that sponsored academies entered pupils for statistically significantly fewer GCSE exams than community schools. There is evidence that pupils in sponsored academies had restricted access to GCSE-only examinations; the ones critical for facilitating choice. It is also indicated that voluntary-aided schools entered pupils for statistically significantly more GCSE-only exams than community schools.

Using these simple models, no significant interactions could be revealed between school types and the contextual variables, due to issues of multicollinearity. However, the methodology enabled an investigation of both access and outcome measures, based on classifying the scale contextual variables into categories. These analyses did appear to support the assertion that issues of access and outcomes were related to school type, in addition to the context within which the school operated.

In summary, the patterns revealed in the investigation appear to suggest, even after controlling for context that:

- Revisions to government policies, as operationalised in changes to the school accountability framework, have resulted in a reduction in the magnitude of gaming by schools but have not eliminated the phenomenon altogether. It has also resulted in increased access to academic qualifications for learners, but some learners still appear disadvantaged in this regard.

- The dependent variables, performance boost and access to academic exams, are strongly correlated and remained so even after the policy changes suggested by the Wolf Review (2011) that were implemented in 2014.

- Sponsored academies were observed to gain the greatest performance boost through the use of equivalent qualifications. This remained the case when pupil context in terms of prior attainment and disadvantage were controlled for and following reforms to school accountability measures.

- Similarly and perhaps related was the differential access to academic (GCSE) KS4 qualifications across school contexts. Across the three years, on average, pupils in sponsored academies were seen as taking the fewest number of academic (GCSE) KS4 qualifications. This remained the case even after controls for contextual variables were included in the models. Academic qualifications are an important gateway requirement for progression to academic post-16 courses. The findings suggest that learners in schools with similar levels of KS2 prior attainment and pupil deprivation in one type of school having access to a wider range of post-16
destinations compared with learners in another type of school. This could mean that the school system, as presently constructed in England, could be reinforcing social inequality and aiding the reproduction of existing social structures.

These quantitative analyses do not, of themselves, establish the existence of causality but would suggest that there is a structural relationship between context, type of school and access to academic qualifications. Of interest to the study is the impact that these patterns may have on learner progression to post-16 studies, an area that will be examined in the qualitative investigations in chapters 5 and 6.
5 School decisions, educational achievement and post-16 progression: Perspectives of school and college leaders

In this chapter the perspectives of school leaders are investigated in relation to the key themes of the study. Specific responses are examined in relation to the determinants of access for pupils to post-16 provision and also to the influence of key contextualising issues. Of particular interest was the rationale that existed in relation to school policy and practices that impacted on educational achievement. Consideration was given to whether this was framed in terms of meeting learner needs or meeting the demands of accountability frameworks.

5.1 Introduction

In Chapter 4, I demonstrated, through the use of statistical analysis across a dataset covering all schools in England, that a mix of academic and vocational qualifications might be used to meet the demands for achievement and attainment accountability measures more than the needs of learners.

Decisions about access to qualifications and the way in which they are mixed for pupils are taken by school leaders, which, of course may be influenced by the context within which they operate. In Chapters 1 and 2, I discussed the nature of the marketised education system. I also identified and examined the key factors that might affect these decisions and surveyed the research literature as to the possible impact on learners of those decisions.

It must also be realised that the comments made by school and college leaders regarding post-16 access covers three types of institutions, which all occupy different locations within the proxied market for post-16 education. The first of these could be characterised as supplying institutions. These types of schools provide secondary education up to the age of 16; the end point for compulsory education in England. In this study, participants from supplying schools were exclusively located in areas of socio-economic challenge. The second type of institution is the school that provides compulsory and a range of post-compulsory courses. These are defined as supplier/receiver institutions. These schools will typically recruit for post-16 courses both internally and externally. All of these schools in the study, bar one, were located in areas of relative socio-economic advantage. The final type of institution covered in the study was a receiver of post-16 pupils and relied entirely on attracting external pupils; a sixth-form college located in one of the most deprived council wards in England.
This chapter seeks to identify and examine the views and perspectives of school and college leaders about the decisions that they take about school operations, policies and procedures that might impact on learner outcomes. It also seeks to examine their views on learner recruitment and access to Post-16 educational provision. The interview method is used to reveal these perspectives. It was originally envisaged that these participants would be drawn from schools and colleges in the same northern city as the learners that were interviewed; however, due to access issues this was not possible. As a result, alternatives had to be investigated.

5.2 School and college leaders' decisions that affect learner's opportunities for post-16 progression

In the increasingly marketised and competitive education system there are a number of decisions taken by school and college leaders' that might affect the opportunities that learners' have to access post-16 provision. These would include; entry requirements for post-16 education, the school’s response to accountability measures and the interventions implemented to raise measured performance

5.2.1 Entry requirements post-16

a) Attainment

In the case of all schools in the study that received post-16 pupils, the minimum level of attainment required for entry to level 3 (vocational and academic) post-16 courses was the achievement of the basic level 2 threshold measure i.e. 5 GCSE (or equivalent qualifications) passed at grades A*-C and including passes in English and Mathematics GCSE. The sixth-form college, serving mainly schools in a disadvantaged context, indicated that four passes at grades A*-C or equivalent would be acceptable.

It was also noticeable in the schools in advantaged contexts that there was rigidity around these entry requirements. The assumption was made that if pupils did not achieve the minimum requirements then they would be unsuited to the demands of academic or vocational level 3 study. In the case of academic courses, this was usually accompanied by a requirement to achieve higher grades in the subjects to be studied at A level. As explained by one participant in such a context:
Right, yes, we are very strict in terms of, increasingly strict in terms of applying the entrance requirements. We have a baseline of 5 GCSEs at A*-C, and a requirement that pupils should have English Language GCSE.

_(Participant E, Head of Sixth-form, advantaged context)_

In contrast, one provider, a sixth-form college, occupied a more disadvantaged context, in which there seemed to be more flexibility in terms of the level 3 entry requirements. This was expressed in an understanding of the context from which pupils arrive and the fact that there might have been barriers to achievement. What is also of interest is that there was more expressed flexibility with regard to vocational than academic courses. Their approach was framed within a narrative of social justice and the desire to offer opportunities for progression that might not otherwise be accessible to such pupils:

but if they’ve got a grounding in that subject and in the right kind of skills, we can take them with slightly lower than expected entry requirements and get them those A Levels

_(Participant I, Associate Principal, Sixth-form College, disadvantaged context)_

It was also noted that, in the case of both schools located in advantaged contexts in an ethnically diverse northern city, a pass in English Language GCSE was determined to be critical, whatever the proposed post-16 study programme.

What was interesting to note was the expression by all participants in the study of a strong negative relationship perceived to exist between pupil levels of attainment and socio-economic disadvantage. It was also clear from the rationale adopted by post-16 providers in relatively advantaged settings that contextual factors were not taken into account when considering applicants for entry to post-16 provision.

This finding does not mean that providers in an advantaged setting do not understand the nature of the inequalities that exist in gaining access to their post-16 provision. However, they make no allowance, when considering entry requirements, for the impact that the interaction of educational achievement and attainment and relationship to socio-economic disadvantage might have on the standard of student outcomes.

It is clear from published research that attainment at the end of Key Stage 4 is a prime determinant of access to post-16 education (Crawford, Meschi and Vignoles, 2011). In this
study, the minimum published entry requirements for access to Academic, A Level, post-16 study did not noticeably appear to vary between institutions in both advantaged and disadvantaged settings. In all cases, the requirement was for pupils to achieve 5 A*-C grades at GCSE, including equivalent qualifications and including English and Mathematics GCSEs.

It is also clear that, in practice, in the case of those providers in advantaged settings, access to specific A Level and vocational provision required a higher level of attainment than this minimum. Whereas, in the case of the providers in disadvantaged settings there seemed to be a far greater understanding of the implications for social justice of the context in which they were operating. This is seen to lead to greater flexibility in the application of the published entry requirements for level 3 studies.

The attainment of learners prior to transition to post-16 educations was covered extensively and referred to by participants who were post-16 providers without exception. However, there seemed to be little regard, in the case of providers in an advantaged context, to contextual factors that might impinge upon educational attainment.

The level of educational attainment by pupils is important because of the relationship of attainment with the sorting and selection process at the transition point from compulsory to post-compulsory provision. This approach could, arguably, lead to the exclusion of pupils with certain demographic characteristics from accessing high-performing post-16 provision, even though they may well be intrinsically suited to progression.

It is important to realise, however, that the narrative commonly used by providers in an advantaged context can be regarded as rational and is often expressed in terms of pupils with lower attainment not having the background for progression to a particular suite of qualifications. One participant provided justification, in terms of a moral imperative, in that they do not wish to enrol pupils on courses at which they will not succeed. Another problematic area was the usual insistence by these providers on the achievement of a minimum threshold grade of a C in Maths and/or English GCSE even though these providers have autonomy to set their own entry requirements.

In the case of the English Language GCSE requirement, for example, it would seem that pupils for whom English is a second language might have more difficulty in achieving this requirement than for pupils whose mother tongue is English. It must also be considered, for example, whether failure to achieve a grade C in GCSE English Language should
preclude an able scientist, for whom English is an additional language, from accessing A Level Physics at a high-performing institution. The implementation of the English Language requirement might have seemed rational but has led to irrational and inequitable outcomes, as indicated, for some pupils. Similarly, a talented artist or actor may be precluded because they have not achieved a C grade in GCSE Mathematics.

The post-16 providers that exist in a context of socio-economic disadvantage appeared to adopt a different approach, being more focused on enabling progression, almost regardless of Key Stage 4 attainment. They were very aware of the context in which they operated and framed their decisions as contributing to social justice. In these cases, a ladder of qualifications was provided, enabling pupils who had not achieved the accountability threshold measure (5A*-C GCSEs, with equivalents, and including English and Maths GCSE) to progress to post-16 study. Students could then aspire to university entrance or post level 3 employment opportunities.

The approach adopted by high-performing providers of a strict enforcement of entry requirements could be seen as systematically discriminatory against pupils who may have faced barriers to their learning at secondary school. These could have included but may not have been limited to; difficulties at home, the nature of the school experience in terms of structures, and the quality of pedagogical practice.

b) Post-16 entry requirements and the qualification mix – findings and discussion

What was noticeable when looking at the entry requirements for post-16 courses, apart from the achievement of minimum grades, was the mix of qualifications required for progression.

All of the schools in advantaged contexts offered few vocational courses at the equivalent to A Level and, in some cases, where they did, they required a higher equivalent grade in the level 2 vocational qualification than they did for the GCSE. Problems arose when specific courses at A Level were considered. Unless there was perceived to be an almost direct relationship between the vocational qualification and the A Level to be studied, there were no progression opportunities. For pupils, matters could be made even more difficult should they wish to progress to A Level courses without having had the opportunity to study for the gateway GCSE subject at secondary school. There seemed to be a general concern about the efficacy of vocational courses as a suitable preparation for progression to academic A Level study:
we would allow. We do take into consideration BTECs, Pass, Merit, Distinction. We would include that as part of their profile, however, for some subjects we might have to consider if the BTEC that they were doing was suitable for their progression.

(Participant I, Associate Principal, Sixth-form College, disadvantaged context)

Specific areas of concern that were mentioned included vocational courses in science that were in use by some schools and also the European Computer Driving Licence.

In the case of the Sixth-Form College, a more flexible approach to the entry requirements for post-16 study was noted. It was also apparent that, in the case of the perception of a major post-16 provider in a disadvantaged context, they regarded other local providers in more advantaged contexts as disregarding vocational qualification as suitable for entry; “They don’t really look at vocational qualifications, no they don’t.” (Participant C, Principal, Sixth-form College, disadvantaged context) and were very critical of the approach the provider adopted, referring to it as “weasel worded”.

In the context of the local competitive environment for post-16 recruitment, this adverse comment could be regarded as derogatory in respect of a competitor. However, given the comments of other providers and the nature of performance measures in respect of further education, it should not be dismissed lightly.

There were also wider issues relating to the usage of vocational qualifications for pupils and the impact that recent policy changes have had. Of particular note and relevance to this study was the fact that significant changes were made to the way in which school performance tables were constructed. From the 2014 results, vocational courses would represent only 1 GCSE pass, whereas before that point, depending upon the amount of content and hours of teaching required for delivery (Guided Learning Hours (GLH)), they could be regarded as equivalent to 1, 2 or 4 GCSE passes. The policy change reflected concerns about the way in which these qualifications were delivered, their rigour and that schools were using them to boost measured performance, rather than to meet the needs of pupils (Wolf, 2011.).

There was also some concern about the impact that what appeared to be rationalised changes in the way accountability measures were constructed might have on pupil’s preparation for higher-level vocational, as well as academic, study. In the case of one
provider offering vocational courses at level 3, there had been an increasing number of pupils presenting for admission with a wider range of vocational qualifications. However, the problem was that pupils now lacked the depth of understanding to enable them to make a smoother transition from level 2 to level 3 vocational study:

But now what you're seeing is, you're still having the problem of pupils meeting the equivalency for level 3 but with a mix of BTECs, but without that depth in there anymore, that breadth, sorry, I mean. So, it makes it harder so we've had to adjust, maybe not how we've stated the entry requirements but looking at them and saying well just because you've got 3 or 4 individual BTECs, doesn't add up to enough to study this BTEC at level 3.

(Participant I, Associate Principal, Sixth-form College, disadvantaged context)

There is a very clear indication here that the removal of multiple equivalencies for vocational qualifications, expressed in terms of GCSE passing grades, was considered by interviewees to have a negative impact in terms of readiness for further study. Thus, a link is established between those curriculum decisions and the post-16 access opportunities available to pupils affected by those decisions because certain routes into post-16, and subsequently higher education, become closed off as a result.

Another factor, in relation to qualifications that had an impact on pupil’s progression to post-16 destinations, was the mix of qualifications that were required. In the case of access to high-performing provision, this depended to a great extent upon the achievement of academic (GCSE) qualifications.

In the case of progression to post-16 destinations, vocational qualifications were generally held to be of less value (Wilson et al, 2006; McNally, 2015). This is, in itself, problematic because access to a particular qualification mix might, arguably, seem to be identified as related to levels of socio-economic disadvantage. Due to the number and range of participants interviewed, it was felt that no particular view of the Key Stage 4 qualification mix could be ascribed to any specific school structure.

What was clear, however, was that, in the case of post-16 providers in advantaged contexts, vocational qualifications achieved by pupils at the end of Key Stage 4 were not seen as being suitable foundations for academic A Level study. These vocational qualifications were only really seen as suitable, in most cases, for meeting the minimum
requirement for entry to post-16 provision and not for progression onto specific A Level courses, which still required the achievement of grades in GCSE exams. In terms of specific progressions, level 2 vocational qualifications were only seen as suitable for progression to level 3 vocational courses.

This was identified as an issue that seemed to affect pupils seeking to access high-performing provision, but who did not have the requisite qualification mix because of the way in which their secondary school provision had been organised. It was noticeable that, in the case of advantaged secondary providers, the curriculum was structured so that all pupils would be able to access a free range of choices, usually biased towards GCSE provision.

Whereas, in the case of post-16 providers located in a disadvantaged context, the impression was given that a much more structural and rigid approach was implemented, in which the school, rather than the pupil, made decisions about curriculum access and qualification mix.

c) The qualification mix at Key Stage 4 and accountability measures

It is clear that, in the case of all schools receiving post-16 pupils, the qualification mix pupils achieved at the end of Key Stage 4 was an important factor in their access to post-16 education. The mix was determined for individual pupils as a clear and direct result of the way in which a particular school structured the curriculum. The existing paradigm relating to the purpose of education within modern society is that it should aim at improving standards. In this study the most commonly accepted reasoning is around schools is that they can be seen to be improving the measured outcomes that pupils attain at key transition points in the education process. In respect of secondary education in England, the key measure is determined by the aggregation of examination results achieved by pupils at the end of Year 11. During the period of the study, the key threshold measure for accountability purposes was the percentage of pupils in a school’s exam cohort to have obtained 5 A*-C GCSE passes, including equivalent qualifications and including English and Mathematics GCSE (5A*CEQEM). At the time of the study, the government set the minimum acceptable level of performance against the measure at 40%, with above median expected levels of progress in English and Maths. Measurement took no account of contextual factors. As a result, schools were clear that performance in English and Maths was the defining determinant of the measure. Failure by a school to achieve this measure
would carry the risk of sanctions by the authorities, reputational damage (for example, in league table terms), and the possibility of a poor inspection outcome.

It is also important to understand that, given the timeline of the study, the way in which school performance, for accountability purposes, was to be measured was in the process of changing. Instead of a headline threshold measure based on attainment (%5A*CEQEM), the move was made to a headline measure based on a value-added methodology - Progress 8 (DFE, 2017a). At the time the interviews were conducted, it was observed in some cases that Progress 8 was the key measure school leaders were considering. In terms of analysis of the data and the implications for learners, the issue was not the construction of the accountability measure; it was the way in which an accountability measure, however formulated, had a relationship with curriculum decision making and the qualification mix that learners were able to access.

The relationship between accountability measures and decisions taken by the school was referred to by many participants in the interview process, who were situated in areas of socio-economic challenge:

> our particular focus this year is on headline measures, so we're using the Progress 8 figure as our headline measure in relation to the basics so, the % of A*-C grades in English and Maths only

*(Participant A, Principal, Sponsored Academy, disadvantaged context)*

They also explained that, historically, it was the nature of the accountability measure that impacted on the qualification mix they offered to different groups of pupils. This appeared to be a common theme and understanding amongst schools in a disadvantaged context; "Those pupils follow a mix of GCSE and vocational courses, again making sure that we meet the Progress 8 measures" *(Participant B)*. In the case of schools in an advantaged context, the opposite seemed to be true.

Another observation by participants located in disadvantaged contexts was that, in relation to the qualification mix and the curriculum choices for pupils, these choices were restricted because of the decisions made by schools. In discussion, they indicated the tension existing between delivering mandatory courses, increasing measured performance in English and Mathematics, and maintaining a broad, balanced and rich curriculum.
In contrast, the perspective of those leaders located in advantaged contexts was that little attention was paid to the demands of the accountability measures when it came to operational decisions, such as the structure of the curriculum and pupil choice.

What was clear was that, in the case of post-16 providers in advantaged contexts, vocational qualifications achieved by pupils at the end of Key Stage 4 were not seen as being suitable foundations for academic A Level study. These vocational qualifications were only seen as suitable, in most cases, for access to level 3 vocational courses and the meeting of general entry requirements. This was also the case for post-16 providers in a disadvantaged context, but in these cases potential pupils were likely to be offered level 3 vocational courses, which, by and large, were not available from post-16 providers in an advantaged context.

5.2.2 Gaming to meet school accountability measures

School leaders, comprising mainly those in disadvantaged contexts, identified a number of gaming strategies and interventions that they took to meet the demands of external accountability measures. These strategic interventions included; curriculum structure and qualification mix, the way pupils were prepared for external exams, the approach to external assessment protocols and procedures, and the ad hoc use of equivalent qualifications.

a) Setting, streaming, pathways and stacking

i) Setting and streaming

Another set of strategic interventions that have been implemented by schools as mechanisms to improve the performance of pupils are the use of setting and streaming methodologies. As indicated in Chapter 2, these interventions sit in the context of the prevailing policy orthodoxy that setting and streaming are effective in raising levels of measured performance by pupils. All schools in the study used setting and/or streaming or a complex mix of both methodologies.

Interview responses suggested that schools in a context of socio-economic disadvantage had adopted increasingly sophisticated curriculum modelling based on setting and streaming methodologies.

For example, in one sponsored academy:
Yea, historically there's been a very interesting curriculum model, where you've had almost burgundy, yellow and a green band, so, the burgundy are the most able pupils, the yellow would be the middle ability pupils and at the bottom, you've got the green band with the lowest attaining pupils on entry or some of the vulnerable pupils

*(Participant A, Principal, Sponsored Academy, disadvantaged context)*

These groupings are constituted as three distinct streams, which may determine access to a specified qualification mix at Key Stage 4. In some cases, allocation to these pathways took place at the point of entry to secondary education:

Headteacher: quite early on but the curriculum is made or designed in such a way that we do six-weekly progress reviews of children and at that point any child that we believe would be able to manage and to access the next tier up in terms of the curriculum offer we move them through.

Researcher: Does that happen from year 7 or?

Headteacher: Right the way through from year 7

*(Participant B, Headteacher, Community School, disadvantaged context)*

Here, the sorting of pupils took place in relation to ability (which is proxied by prior attainment), regardless of the contextual factors that may have impacted on a pupil's prior attainment.

Such streaming, albeit on not such a refined basis, was also common in schools operating in a more advantaged context. In one case, streaming was implemented upon admission to secondary school, with the stream for more able (higher attaining) pupils identified as the "A" band and the "B" band for the less able (lower attaining). Further refinement took place by setting in English, Maths and Science.

The distinctive difference noted between schools in different contexts was the approach adopted at the point at which pupils chose or were guided towards the subjects they would be assessed or examined in at the end of compulsory schooling.

The most common mechanisms utilised amongst schools in the study to raise levels of attainment was the adoption of the setting and streaming approach. As indicated in
Chapter 2, these interventions sit in the context of a prevailing policy orthodoxy that setting and streaming are effective in raising levels of measured performance by pupils (Muijs and Dunne, 2010; Whetter, 2010). Research evidence indicates quite the opposite; overall levels of performance are not improved by the introduction of streaming and setting methodologies. In fact, there is argument in the literature that they may not only have negative impacts on levels of overall pupil performance but also a multiplicity and complexity of other effects (Slavin, 1990; Betts and Shkolnik, 2000; OECD, 2013; Steenburgen-Hu, 2016).

However, it has been identified, as covered in Chapter 2, that, despite the research, setting and streaming are common practice when constructing curriculum models in English Schools and are largely based on attainment at the end of primary school (Muijs and Dunne, 2010). This situation was reflected to a greater or lesser extent in all the secondary schools in the study, regardless of their context. However, it was noticed that the most sophisticated curriculum structures were found in secondary schools located in a disadvantaged context.

At the start of Key Stage 3 in other models, setting was overlaid on a streaming methodology. Pupils were usually allocated to sets and streams based upon their level of attainment at the end of primary school. The research evidence suggests a lack of fluidity in these arrangements (Francis, 2017) and it would seem to entrench disadvantage as a systemic consequence of such mechanisms, maybe actually reinforcing the impact of that disadvantage.

ii) Pathways

For the sake of clarity in the following analysis it is important to distinguish the difference between streaming and the construction of pathways. Streaming is the process of splitting an intake into two or more broad attainment bands, usually for the first two or three years of secondary schools. In such a model, there is little difference in access to the range of subjects between bands. The idea of Pathways is that access to a particular mix of qualifications is determined by prior attainment and perceived potential to succeed in a qualification. The mix of qualifications that may be accessed by a pupil is determined by the pathway that they follow from the end of Key Stage 3 until the end of compulsory schooling (Key Stage 4)
At the time of the study, the key measure for school performance was taken at the end of Key Stage 4. The measure was based upon the percentage of pupils in a cohort achieving 5 A*- C GCSE passes, including Maths and English GCSE and equivalent qualifications. A maximum of two subjects of the five measured could be vocational. However, it should also be borne in mind that a new accountability measure was being introduced, Progress 8, which mandated five subjects, English, Maths, Science, a Humanities subject and a Modern Foreign Language, for measurement, but gave a free choice, including vocational subjects, of an additional three subjects for measurement. If a pupil achieved more than three additional subjects, then the best three results were counted in the Progress 8 measure.

It became apparent during the research that, in some cases, apart from the initial sorting process at admission, the choice process regarding pupil access to qualifications may also be being gamed by schools to maximise measured performance.

In this study, in the case of schools in a disadvantaged context, the transition from Key Stage 3 to Key Stage 4 was characterised by an approach that encapsulated aspects of both setting and streaming. At Key Stage 4 this is referred to as "Guided Options" or "Guided Pathways" and determines pupil access to their Key Stage 4 qualification mix. In most cases, this mechanism is implemented at the transition point between Key Stages 3 and 4.

“Guided options” was a mechanism that appeared to be in common operation in the case of secondary schools located in disadvantaged contexts. One headteacher identified three distinct and different curricula being offered in the same location; “we have a pathways model, so we have three curriculums running within key stage” (Participant B, Headteacher, Community School, disadvantaged context). One aspect of these models that appeared to differ between schools, even though their contextual location may appear similar, was the degree of compulsion that was attached to the process. However, there was an expressed tension here in terms of the demands of the external accountability measures.

It is contended that these models of pre-determined pathways might also be seen to have negative impacts upon the cognitive development of pupils who are “guided” into a mix of qualifications that would not facilitate access to the widest range of post-16 destinations. In short, they would seem to take little account of developed cognition, skills, abilities and talents of individual pupils; rather, they become an expedient way of ensuring minimum levels of measured performance for the school.
In schools in advantaged contexts, by and large, pupils have access to a full range of opportunities to study GCSE qualifications with minimal use of vocational qualifications, almost regardless of the contextual factors pertaining to an individual child.

iii) Stacking

Another approach to curriculum design adopted by schools was what could be what I have termed a stacked curriculum. In a stacked model each year was seen as separate and some GCSE and BTEC courses would be started and completed in one year, for example, Year 10, whilst others would be started and completed in Year 11. Justification is provided within around a narrative of developing personalised learning. In these designs, typically, pupils are streamed, as in other models, but their access to subjects in each year is determined by the stream to which they are allocated. In the case of one of the senior leaders who participated in the study, the model adopted in their school was a variant of this approach, whereas English Maths and Science GCSE courses were studied through a three-year Key Stage 4. However, other subjects might only be studied at GCSE for one year and pupils were expected to complete and be assessed in these subjects in one academic year.

One senior leader identified that constructing a stacked curriculum may well have implications for pupil progression. This is because by the time those pupils are in the process of transitioning from compulsory to post-16 education, they may not have a continuity of study in the subject that they wish to take post-16. This can cause problems with core subject learning not being consolidated prior to entry to post-16 and often means that remedial action is required. Thus, these pupils face an additional barrier, which may militate against effective progression.

Stacking seems to be a rarer form of curriculum organisation but was used by one school in the study. What is worrying about stacking is the lack of continuity of learning and the implications for post-16 progression. Leaders of post-16 provision indicated that pupils who were subject to such an approach at secondary level were not disadvantaged in terms of gaining admission; however, problems arose when they started to study their courses and were unable to access the material from the same basis as pupils who had not been subject to such a structure. This appeared to be because these pupils tended to manifest a learning deficiency in the subject where there had been a lack of continuity.
b) The tactical use of equivalent qualifications

The tactical use of equivalent qualifications to boost measured outcomes takes the form of the *ad hoc* entering of pupils for a qualification that was not part of their original qualification mix, in an attempt to game performance measures. This intervention, although rationalised in terms of adding to a pupil’s portfolio, appears quite clearly to be directed towards an improvement in the measured outcomes for accountability purposes and was articulated as such by one participant, who identified a direct link between the *ad hoc* use of equivalent qualifications (in this case, exclusively vocational) and the threshold school accountability measure in force at the time:

Now you can’t afford to have a child like that who’s coming through who’s a drain on your Progress 8. So, with kids like that we are, we have done an ECDL (European Computer Driving Licence) with them. We think it’s relevant for them, we think it’ll be useful but it’s more useful for us than it is for them.

*(Participant D, Headteacher, Converter Academy, disadvantaged context)*

Similar comments were made by certain other participants operating in a context of disadvantage. ECDL had been the subject of much discussion in the press at the time and was counted as equivalent to a GCSE pass (Adams, 2016; Dickens, 2015, 2016) and the Department for Education announced that it would no longer count for school accountability purposes from 2018.

In the case of some schools, the use of this one qualification raised the school’s performance against the key accountability threshold (at the time, % in a school’s exam cohort achieving 5 A*-C GCSE passes including equivalent qualifications and including English and Maths GCSE) by 5 percentage points, but it was not regarded as suitable for progression, as was explained by one high-performing provider.

Most of the secondary schools located in disadvantaged contexts identified using an ECDL strategy to boost their measured outcomes.
5.2.3 The organisation, implementation and nature of interventions to raise measured performance

a) Internal interventions in preparing pupils for external examinations

Common amongst all the school and college leaders that were interviewed for the study was the attention paid to ensuring pupils were fully prepared for their end of key stage assessments, especially in English and Maths. Whilst the preparing of students for exams had always been part of a school’s approach, it appeared to have become even more intense in recent years. This is probably because these subjects were defining elements of the key threshold measure and were very important in terms of career and study progression.

Participants identified a clear increased emphasis on examination preparation for these subjects, as noted in all school contexts, even those in advantaged locations. It is also recognised by leaders that the way in which these interventions are structured and implemented might not actually be beneficial for pupils.

The individuals interviewed, regardless of context, appeared to indicate that the emphasis of the interventions was focused on enabling pupils to pass the assessment hurdle, rather than cognitive and learning development. It is worth bearing in mind that some of these interventions, although noted in every context, tended to appear much more detailed, structured and focused in schools that faced socio-economic disadvantage, as opposed to those in advantaged settings. The reasoning around these interventions was that they made a contribution to social justice and also recognised the importance of the accountability measures.

In one particular setting, the bureaucracy around interventions seemed particularly highly developed. For example, pupils in each subject produced, in conjunction with subject teachers, forms that indicated areas of subject conceptual deficit. These forms were then supposed to inform "enrichment" sessions with connotations of adding to what was being delivered in the classroom but which were, in effect, actually preparation for assessment. These sessions ran every day of the week in different subjects and were compulsory (supposedly) for pupils who were under-performing in relation to their target grades. This approach was based on regular examination type assessments where pupils were measured against targets. They were also subject to remedial interventions if they were seen as under-performing. No reference during the conversation was made to contextual factors, other than the target grades for the pupils in those subjects.
Another intervention that was used by one of the schools in the study, located in a disadvantaged context, was the restructuring of pupil access to examinations. Here, decisions were taken that placed increased emphasis on the achievement of threshold grades by pupils. If they were perceived by school leaders to be at risk of not achieving the threshold grades, then they would be removed from subjects that were not integral to achievement of the threshold measure.

In terms of preparing pupils for external exams, it was clear that there was an increased focus on preparing pupils for the demands of external exams and assessments. This is probably because of the pressures of the accountability framework and is a view supportive of the findings of other research evidence (Perryman, 2011; McNally, 2015; Taylor, 2016).

These interventions tended to be more complex and directed, in the case of those schools that operated in a disadvantaged context. These often directly targeted pupils who were regarded as being on the borderline between grades that counted in the key accountability measures and those who did not, usually identified as grades C/D at GCSE. The clear implication was that those pupils who were either at a secure level of higher performance or those who were identified as not being able to achieve a pass grade were provided with minimal support. Hence, differential levels of support were provided, dependent upon the pupils’ predicted level of attainment. It would be reasonable to claim, then, that these interventions were directly related to the accountability framework. In some cases, these interventions began to be implemented from the start of the GCSE course. Ethically, such approaches were discriminatory because pupils who may have achieved a C grade but were not regarded as likely to do so were denied support. It also discriminated against those pupils who may have been secure on a higher grade but could have done even better with support.

Characteristic of these approaches in schools in disadvantaged contexts was arguably a panoptic framework of bureaucracy that surrounded such interventions, usually based on a foundation of a notion of target grades and regular examinations and assessments. They were also subject to remedial interventions if they were seen as under-performing. The key indicator for intervention was the target grade for the pupil in those subjects and little regard was paid to contextual factors. Attainment data seemed to be more of a driver and basis for judgment than the cognitive development of the individual. As educational attainment has an established negative relationship with social disadvantage, it is likely that pupils facing socio-economic challenge would be most likely to be subject to a highly
directed regime, which may potentially have benefits as well as costs. The relationship to their choice to remain in education after the end of compulsory schooling needs to be further understood.

Prior to the summer 2014 examination series, other interventions were implemented by schools in an attempt to raise measured performance. These included multiple entries for key GCSE exams (notably Maths and English GCSE) over Key Stage 4, entries to multiple examination boards and the extensive use of resits that were enabled as a result of modular exam structures. Whether these interventions made any difference to pupils’ cognitive development is questionable and would require further research.

Another intervention that has been used is the removal of pupils from subjects that do not count towards accountability measures at the latter stages of their courses, or where performance in core subjects may be compromised (Downs, 2014; Murfitt, 2016.). This approach seems again to disregard the needs of learners and place emphasis on the school maximising its achievement against the key accountability measure.

b) The approach to external assessment protocols and procedures

A type of intervention that was revealed as being used in schools was the way in which external assessment protocols and procedures were disregarded. One headteacher (Participant D) observed a GCSE-controlled assessment, supposedly conducted under examination conditions in a visit to a sponsored academy. In their account, they recounted observing clear teacher directions as to content when pupils were supposed to be under controlled exam conditions. They also indicated that the teacher was correcting work for pupil’s, which was then being submitted for exam board assessment as the pupil’s own work.

They explain their observation:

Ok, and we were in a room where we had teachers floating around, we had kids who had a pre-printed A3 sheet and she effectively told them what it was they were going to write, and it was far too detailed.

(Participant D, Headteacher, Converter Academy, disadvantaged context)

Another leader, with regard to vocational qualifications, indicated that there appeared to be problems with assessment. They indicated clearly that pupils would present for
admission with a set of vocational qualifications that had been awarded. However, when assessed and compared with their GCSE results, they implied that there were serious questions as to the level of achievement claimed by these pupils:

the rules being bent to very very large degrees about pupils being able to produce the work to get the passes, and you would see that, you would see that when you see pupils come in with 3 or 4 GCSEs at maybe E and F but passes and sometimes even merits at level 2 BTEC and you, you instinctively know something’s, you wonder what’s gone on because you think, well hang on that’s not.... have they, have they .. either prioritised the BTEC learning because they know the pupil can pass or have they found a way to get round it by bending rules?

(Participant I, Associate Principal, Sixth-Form College, disadvantaged context)

The practices identified in the observation are clearly unethical and would be regarded as exam malpractice if reported to the appropriate regulatory authorities. Within their account, it is clear that the sponsored academy and the staff were under great pressure to raise outcomes. Such a result would play a part in justifying the structural change in the school’s governance, support the expressed aims of its Multi Academy Trust (MAT) of improving standards and avoid the consequences of performance outside the designated panoptic framework. The most worrying thing is that the pupils who sat the assessment were not generating accurate assessment outcomes. The outcome may have advantaged them in the short term but may well also have longer-term consequences. This is unethical behaviour and a phenomenon that is not confined to sponsored academies but may be more widespread across the system (Ofqual, 2016; Meadows, 2015).

Such an approach can, in fact, cause problems for pupils as they progress to post-16 destinations, in that the reported levels of exam achievement may be inaccurate. They may not have the required foundation for success in further study. It could also mean that post-16 providers do not have the requisite information to effectively support pupils. It may be that, as a result, those pupils do not make the right choice of post-16 provision, may drop out of courses and have to reassess their options.
5.3 Themes and future directions

The study of school and college leaders sits within a wider research study that is concerned with the implications and influences of the school experience on the post-16 destinations of learners. This chapter presents comments on and analyses the perspectives of school and college leaders in relation to identified dimensions of the wider study.

It is also very important to re-emphasise the nature of the accountability measure that was in force at the time of the study. This was a threshold measure, which meant that only attainment at or above the determined threshold was considered. No recognition was given to levels of attainment above the threshold, only that the threshold was met. Also, attainment below the level of the threshold was effectively disregarded, as was the progress made by pupils. There was also no use of the complexity of explanatory variables.

A number of emerging themes can be suggested from an analysis of the data. These relate to the entry requirements for post-16 destinations, both in terms of attainment and qualification mix, and the way schools organise and implement their organisations and pre-exam interventions. It appears quite clear that there may some sort of binary divide between schools in advantaged and disadvantaged contexts.

5.3.1 Entry requirements for post-16 access - attainment and qualification mix

When considering schools in the study and their entry requirements for entry to post-16 education, it is noticeable that providers who operate in a disadvantaged context would be seen by leaders to take contextual issues into account. It was noted that recognition of this dimension of the issue was missing from those high-performing providers of post-16 provision located in relatively advantaged contexts. These high performing providers adopted rigid and strict entry requirements, both in terms of the level of attainment required by potential pupils and the mix of qualifications with which they needed to present. This is a systemically discriminatory practice reinforced by school admission practice, as a result of the system being constructed in such a way that militates against potential pupils from a disadvantaged context achieving the required level of attainment and the mix of qualifications.

The result is that several pupils educated in secondary schools in a disadvantaged context might be denied the opportunity to progress to high-performing destinations. This will not
be because they do not have the complexity of developed characteristics to be successful in these destinations, but because of the way in which the school structures its operations.

5.3.2 Gaming to meet school accountability measures

The argument can then be developed from an analysis of the findings that the nature of the key accountability measure in force at the time of the study appears to have had a relationship with the learner experience in most of the schools in the study. It is contested that this link appears to be stronger in the case of schools located in a context of socio-economic challenge than for those in more advantaged settings. It was also noticeable, in the case of some schools, that there was a rationale that emphasised the primacy of measured school performance.

In the case of curriculum structures, there was no rationale uncovered in the discussions with leaders in disadvantaged contexts that supported the development of curriculum structures based on the foundations of setting and streaming. Research previously cited indicates that, rather than leading to an improvement in measured outcomes for all, such structures favour those who enter secondary school with high levels of attainment. It is these pupils whose performance is arguably improved, whilst there is a corresponding adverse effect observed in relation to those pupils who enter secondary education with lower levels of attainment.

Matters become further complicated with the emerging complexity of these setting and streaming systems, with the addition of “pathways” and “stacking” in relation to the Key Stage 4 curriculum offering. In the accounts of participants, “pathways” were revealed as being more prevalent in the case of schools in a disadvantaged context. Interestingly, the only noted instance of “stacking” was used by a school in an advantaged situation.

Previous research indicates that movement between streams, bands, pathways and sets usually lacks fluidity. The clear implication of the research is that, in the case of most pupils, these structures determine access to qualifications at the stage at which these sorting protocols are instituted. These sorting mechanisms usually appear to be based, to a great extent, on attainment levels achieved at the end of primary school.

This could lead to a conclusion that access to the qualification mix at the end of compulsory schooling may therefore be restricted. The magnitude and nature of restriction is dependent upon a pupil’s prior attainment at the end of primary school and the
implementation of curriculum structures designed to maximise achievement against external accountability thresholds.

What was also apparent, when considering curriculum structures and qualification access, was the way in which some participants determined that pupils should access certain qualifications. Often, these qualifications were of little practical use in terms of pupil progression. The only reasons proffered during the study were that they were easy to deliver, pupils were effectively guaranteed a grade equivalent to a GCSE pass, and that they counted towards accountability threshold measures. This means that a pupil could present for admission and ostensibly meet the threshold measure, but post-16 providers effectively discounted these vocational qualifications.

Given the body of previous research on school attainment and socio-economic context, it is arguable that pupils from a disadvantaged background face restricted access to high-performing post-16 destinations. There seems to be some evidence, from analysis and interpretation of these interviews that restriction of access may be exacerbated by school structures designed to ensure schools meet external accountability thresholds.

5.3.3 The organisation, implementation and nature of interventions to raise measured performance

The other aspect of this study revealed by interviewees was the way in which their schools attempted to ensure, usually towards the end of compulsory schooling, maximum pupil performance on external exams and assessments.

In the case of secondary schools in both disadvantaged and relatively advantaged contexts, it was clear that a wide range of interventions were implemented that were designed to improve pupil achievement on external exams and assessment. A clear issue here is the emphasis on passing the assessment rather than the development of knowledge and cognition. It is suggested that this is due to the high stakes nature of these assessments, given that pupil results contribute to overall school measured performance and the sanctions that might apply should school performance fall short of the acceptable threshold measure.

What was noticeable was the sophistication and bureaucratic nature of the interventions in schools in a disadvantaged context. One area that appeared particularly relevant, in the case of pupils wishing to progress to post-16 destinations, was the curtailment, as the
external assessments approached, of the range of subjects in which the pupils had chosen to sit assessment. It could be surmised that, in some cases, restrictions on assessment could lead to pupils being unable to access certain post-16 providers.

The threshold nature of the accountability measures also appeared to have been carefully considered when deciding on the type of intervention to adopt. In schools in a disadvantaged context, these interventions appeared to be focused on boosting performance critical to the measure, rather than considering the needs of the wider cohort. Other interventions, such as multiple exam entries and early entries, appeared to have been discounted as a result of policy reform in the way in which official school performance tables were constructed.

Another worrying type of intervention, which was identified by a participant, was the way that one school, in a disadvantaged context, was effectively disregarding the procedures and protocols laid down by the assessment body.

Although this was only one instance, and possibly unrepresentative of the wider picture, a triangulating comment was offered by a major post-16 provider, who clearly indicated that they were unable to reconcile, in some cases, the exam performance of pupils with their assessment on entry, which could cause problems for pupils and staff, including; planning work, enabling pupil access, and making sure these pupils were placed on appropriate programmes of study.

5.4 Final thoughts and conclusions

In this study school and college leaders that work in a disadvantaged context are more likely to lead a secondary school which utilises sophisticated setting and sorting protocols designed to maximise achievement against external threshold measures. These setting and sorting protocols are largely based on attainment at the end of primary school. These curriculum structures can also restrict access for some pupils, who may well be capable of academic qualifications at the end of Key Stage 4. The significance of this for these pupils is that they are effectively being denied the opportunity to access high performing post-16 destinations because they do not have the requisite entry qualification mix.

Such a conclusion fits well in triangulating the findings of the quantitative study, which revealed statistically significant patterns indicating that schools in a disadvantaged context were restricting the numbers of GCSE exams that, on average, pupils were entered for in
these schools. Although the quantitative study identified the situation, given the assumptions underpinning the model of the relationship of this finding to types of school, no such assertion could be made from analysis of the interview data.

It was indeed a surprise to hear the account of unethical behaviour related to external exams and assessment from one participant. This will be an area of concern that will be triangulated with the findings of the pupil study, which is reported in Chapter 6. However, if it is the case, it may well mean that pupils who present with a range of qualifications, some of which have been subject to these practices, may be being placed on inappropriate courses, resulting in severe personal consequences for the individual pupil, such as; increased stress and anxiety, failure to complete the post-16 programme, learning barriers in trying to perform at a level that enables higher education progression, and perhaps even the loss of engagement with education for the pupil. There may also be consequences for institutions that are judged on pupil attainment, completion and retention and which may face sanctions if individual performance data is found to be inadequate.
6 Secondary schooling and post-16 decisions: the perspectives of sixth-form college pupils

The focus of the research project is the nature of pupil access to post-16 educational provision. As a result, it was critical to establishing the validity of the research to consider the perspectives of pupils who had recently, and at first hand, experienced the process of transition from secondary school to post-16 provision. Here, that experience is sought, especially in relation to the themes identified in the quantitative study and the accounts of school and college leaders.

6.1 Introduction

It is clear from the quantitative study that there is a statistically significant pattern established of restricted access to key post-16 progression qualifications by disadvantaged pupils attending specific types of schools. There is also evidence, from the previous chapter, based on staff interviews, that lack of access is determined, in large part, by decisions about curriculum structures by school leaders. Further, these decisions might be taken to ensure that schools meet key accountability thresholds, rather than the needs of learners. Such practices also appear to be more likely to be implemented in schools in a disadvantaged, as opposed to a relatively advantaged, context.

It was contended in the previous chapter that, in some circumstances, school leaders are taking decisions about curriculum structure and qualification access that meet the demands of accountability measures rather than the needs of pupils. Such decisions impact on the ability of young people to access those post-16 destinations that truly widen access to higher education.

As has been claimed in Chapter 5, such strategies mainly appear to be taken by those school leaders operating in schools that serve socio-economically disadvantaged communities. To give a rounded picture, it is important to consider the voices of learners, as they are the ones who are, potentially, most affected by these decisions. This is a view supported by Eder and Fingerson (2002.).

The analysis of the in school and college leaders was used to inform the structure of the interviews with Post-16 students but was implemented with flexibility rather than rigidity. The important aspect of these conversations with students was to understand their experiences in the light of decisions taken by school and college leaders. This meant that in
most cases that additional and refined open coding was implemented in the analytical phase.

More detail on the methodological approach adopted can be found in Chapter 3.

6.2 Key themes

6.2.1 Accessing post-16 provision: information, choices and decisions

The Education Act 2011 (Education Act 2011) legislates for the provision of independent and impartial careers advice so that young people may be fully aware of the opportunities open to them. In the study, what became apparent, for pupils who undertook secondary education in disadvantaged settings, was the lack of coherence and strategy that applied to the whole process of preparing these pupils to take informed post-16 decisions. This contrasted with the pupils who undertook secondary education in advantaged settings, who appeared to have a much better, although in some respects still limited, experience.

18 out of the 21 interviewees undertook secondary education in schools that were in a context of disadvantage and did not have post-16 provision. In the case of these pupils, some causes for concern were revealed. Not one participant was able to identify a coherent and comprehensive programme of preparation for the decisions and choices they would have to make about their post-16 education.

Real concerns came to light about the way in which young people in disadvantaged secondary schools were advised about progression. Such provision in these schools was characterised as pupils experiencing very little access to individual support, advice or guidance in respect of possible post-16 destinations. There was one report of such guidance being provided by one lesson a week spent on computers researching post-16 provision with minimal personalised input and guidance:

   we just sit, and we research about colleges, courses, and apprenticeships, like any other sixth-form schools or any type of. And we also had the teacher that give us, that give us like leaflets saying oh look at this look at this and see which one is going to be better for you.

   (Student 14, Yemeni, Female, L3 Vocational)

Other pupils in a similar context reported ad hoc provision, that might have been a cursory examination of possibilities during tutor time or the provision of an event at which post-16
training and education providers were present in a "fair" type setting - a type of exhibition or event in which post-16 providers, training providers and employers present and promote their progression opportunities.

There also appeared to be a clear lack of aspiration for progression to high-performing institutions. The most common reason given for choice of post-16 destination was the distance from the potential pupil's home. Other reasons included; the influence of parents and friends, cultural location, and the choice of level 3 programme.

In one case, a participant explained that progression through low-performing school and post-16 settings was seen as natural. Of interest here is the fact that, recently, this low-performing school and post-16 setting have formed a multi-academy trust, in which they are under common governance arrangements.

It was also found that those pupils from a disadvantaged context, who wished to progress from secondary education to post-16, did not, in the main, perceive the entry requirements at high-performing institutions to be a barrier to their progression. Neither did they perceive that entry requirements were limiting their choice of post-16 programme. In most cases, participants did not refer to the entry requirements of these institutions at all. One participant explained their choice of vocational programme at post-16 level in purely instrumental terms; in that it would be the easiest path to higher education:

Cos I think its probably the teaching and the people I know they said A levels is not good. Like the comments I've had from my friends they said its best for you to a BTEC and get staright to uni. A BTECs much easier, so I took the easier..

(Student 4, Somali, Male, L3 Vocational)

In some cases, young people experiencing a socially disadvantaged context for secondary education did apply to high-performing institutions. In these circumstances, admission was refused or choice of course limited on the basis that they did not get the number and/or level of passes at GCSE or equivalent qualification. As noted above, there was little account taken of the context within which these young people had achieved their grades.

In the locality of the study, there was only one institution in a disadvantaged context that offered post-16 provision. One pupil attending the setting indicated that they had been pressured into continuing in their existing setting, even though it was low performing and
did not offer the desired programmes or courses for the pupil involved. It is worthy of note that disadvantaged pupils in advantaged contexts were also encouraged, provided they met the minimum entry requirements, to continue their education in the advantaged setting. A description was given by one participant in the study:

like our Principal, he was, he was funny because I wanted to go to another college and he said you should stay here you’d do really good in English so if you stayed here, we’d give you the best help as possible and there were like subject teachers who also encouraged us to stay

(Student 8, Bengali, Female, Level 3 Vocational)

A finding that emerged during the research was that 5 out of the 21 pupils had been educated for the first year after the end of compulsory schooling in different settings and on different courses. Usually, this seemed to occur when a pupil from a Black or Minority ethnic cultural background, and/or a background of socio-economic challenge, had embarked upon an A Level programme at a high-performing school sixth form. It appeared that, in these cases, pupils had achieved the requisite grades for entry but had failed to achieve the minimum school defined standards for continuing their programme of study. A typical comment recounts this feature of their previous post-16 provision:

But a lot of people did Business at the end when they failed their Sciences they were halfway through but I didnt know that so I came to Sixth-Form College.

(Student 3, Somali, Male, L3 Vocational)

For these participants, and in line with the findings of Dickerson and McIntosh (2013), distance from the potential provision was seen as a very important factor in the choice of potential post-16 provision. This finding aligns with the work of Crawford, Meschi and Vignoles (2011), in which locality was revealed as a key component of learner decision making post-16.

What was also interesting from interview responses was that they did not perceive the level of attainment at Key Stage 4 as playing a major part in their choice of post-16 destination. Their perceptions appeared to contradict the findings of earlier research (Raffe et al., 2001; Croll, 2008; Crawford et al., 2011; Homer et al., 2014). However, the lack of reference to attainment at Key Stage 4 in participants accounts could be because the pupils
had internally discounted choices of provision demanding an entry threshold that they perceived they would be unlikely to achieve.

In the case of initial progression from secondary education to post-16 provision, pupils who had been educated in secondary schools in a context of social disadvantage seemed to have had a different experience of careers education, advice and guidance when forming decisions about post-16 destination, compared to those pupils from advantaged settings.

Those participants from disadvantaged secondary schools appeared to have much less idea of the options open to them post-16 because of a seemingly more "hands-off" approach adopted by those schools. The importance of effective careers education advice and guidance was identified by Watts (2005, p. 69):

not only in helping young people make the immediate choices that confront them but also in laying the foundations for lifelong learning and lifelong career development.

What could be worrying here, if such a differential does exist more generally, is the implication for social justice. One possible reason for the difference could be the relative financial situation of the schools in these settings and the importance attached to effective and high-quality careers advice and guidance.

The Education Act 2011 (Education Act 2011) devolved the responsibility for delivering independent and impartial careers advice to pupils to each individual school, rather than the service being provided by local government, except in the case of pupils with a Statement of Special Needs, meaning that schools now have to fund the service. Recently, the House of Commons select Committees on Business, Innovation and Skills and Education concluded that:

Careers education, information, advice and guidance in English schools is patchy and often inadequate. Too many young people are leaving education without the tools to help them consider their future options or how their skills and experiences fit with opportunities in the job market. This failure is exacerbating skills shortages and having a negative impact on the country’s productivity. (Business, Innovation and Skills and Education Committees, 2016, p. 3)
Arguably, this was the state of guidance that was revealed by interviewees from secondary schools in a disadvantaged setting and may well have contributed to them choosing convenient destinations, rather than those that might maximise their educational progress.

Another issue that became clear was the experience of pupils from disadvantaged backgrounds who were admitted to high-performing and relatively advantaged, in terms of context, post-16 institutions. Several participants in the study had this experience. In all these cases, they left these high-performing institutions at the end of the first year of post-16 study.

The explanations around the change in post-16 education destinations for these pupils included that pupils had not gained the grades at the end of the first year to progress onto the second and final year of the programme. The usual expression was in terms of the grades a pupil achieved at AS Level, which, at the time, contributed to the full A Level grade achieved at the end of a two-year programme. One participant had achieved passing grades in two A Level subjects at AS but was required to leave their existing provision and find an alternative. This could be construed as a move that would benefit the pupil but could also be seen through the lens of the school rationally organising itself to meet a high-stakes external accountability measure, which is based on the success rates of the Year 13 cohort in external exams. However, such policies and procedures are clearly illegal (DFE, 2017b)

6.2.2 Pupil perspectives on access to qualifications

During the period covered by the study, the key accountability measure, as identified earlier, was the percentage of pupils in a school examination cohort gaining 5 GCSE or equivalent exam passes at grades A*-C (including A*-C passes in Maths and English GCSE).

This is a finding reflected in the accounts of most participants in the study. There was a clear implication that learners, if they were not judged likely to respond well to the demands of GCSE, were placed on vocational courses. One learner indicated, when rationalising why they were taking a vocational Science qualification as opposed to GCSE:

But the reason I wanted to get into that was because I don’t remember stuff; I’ve always not remembered stuff, so I felt like coursework was the best option for me.

(Student 8, Bengali, Female, L3 Vocational)
Another learner was clear on the issue and perhaps provided a different dimension. They indicated that they had chosen a vocational qualification because it was easier than studying for a GCSE qualification. The same learner, in relation to vocational qualifications, also revealed that they were given significant help to complete assignments, thereby being given access to grades they otherwise might not have been able to achieve, to an extent at odds with the requirements of the awarding body.

Usually, in the case of schools with disadvantaged contexts, access to these vocational qualifications, whilst pupils in higher bands or pathways may access them in some cases, is directed towards those learners in lower bands or pathways. It is clear though that access to these pathways depends on bands, which are, to an extent, predicated by achievement at primary school, expected grades at GCSE and performance on internal school assessments.

In the case of another learner in a disadvantaged setting, the issue of access to qualifications became a gendered experience:

I mean the boys like there was a PE one, it was a sports one, it was all boys and then the Health and Social it was all girls there weren't one boy in our class and that's how they (the school) chose it.

(Student 2, Female, Pakistani, L3 Vocational)

Here, middle and lower band male pupils were directed to take a vocational course in Sports Studies, whilst girls were directed towards a qualification in Health and Social Care. However, on triangulating the data with another respondent from the same school it appeared that this was only the procedure in respect of those pupils in the middle and lower bands, which, in the context, formed the majority of the year group. Such an account would seem to encapsulate a gendered approach that contradicts any principles of equality of access.

Other responses by learners appeared to reveal restricted access to subjects for many learners in schools in disadvantaged settings, in terms of GCSE choices, and might well present progression barriers.

What was also apparent and prevalent in some of these cases was access to GCSE Science subjects appearing to be restricted as a deliberate strategy. In some settings, large
numbers of learners were entered for vocational Science, as opposed to GCSE Science. By and large, these were learners sorted into the lower bands. In the case of one sponsored academy and revealed by student 2, this was 50% of the cohort, whilst in another sponsored academy most of the exam group were directed towards vocational Science because the school felt that, due to the nature of assessment for vocational courses, it would be easier for lower attaining pupils to secure a pass.

Another strategy adopted by schools that were concerned about reaching benchmarks was the introduction, during the GCSE years, of additional qualifications that contributed to threshold measures. The key qualification that was identified by learners was the European Computer Driving Licence (ECDL), a qualification that counted towards the threshold measure but that had limited currency for progression purposes, as identified in previous chapters. One learner explained, in response to a question inquiring whether everybody accessed the ECDL, that it was clearly targeted at those pupils who were unlikely to gain the threshold measure of 5A*-C GCSE passes, including English and Maths GCSE and including equivalent qualifications.

The ECDL qualification, counted as equal to a GCSE pass, was described by several learners as taking a minimal amount of time. Methods identified as being used included; collapsing of the timetable and concentrating on the ECDL to the exclusion of other lessons, and ad hoc delivery during tutorial sessions. One learner cast further doubt on the value of this qualification by indicating that in their setting the process had taken only one day. They further revealed that:

> They told us, like, they told us what we had to do and we just we was on the computers doing it and then they were just watching us over.

(Student 13, Somali, Male, L3 Vocational)

Pupils who undertook secondary education in disadvantaged settings had restricted access to academic qualifications, in relation to those in advantaged settings, who reported that they had access to a full range of GCSE subjects.

In the case of those participants who attended a school in a disadvantaged context, the situation with reference to qualification mix appeared to be complex, with varying degrees of rigidity around choices that could be made, but fluidity in provision still exists. This may seem to be confusing and an oxymoron, yet it reflects pupil experience in these schools.
What was apparent was that several participants could not accurately state the qualifications they had achieved, the grades at which they had passed them, or whether they were of a vocational or academic nature. However, they were all, without exception, able to state how many GCSE or equivalent exams they had passed at grades A*-C. It should be borne in mind though that, in some cases, as they had been led to believe, they were in effect counting one vocational qualification as equivalent to 1, 2 or 4 GCSE passes. Such a strategy seems to be the result of a concentration by providers on meeting accountability threshold measures. Further support is given by the accounts of three participants, who revealed that they were entered for the ECDL as a way to increase their number of passes. One pupil made explicit reference to being entered for the qualification to meet the threshold measure:

I think so, I think yea, it was a course like that, they told us it was a thought you weren’t going to get GCSEs at 5 A*-Cs so I think yea. And my one only took like, we did it like in a day.

(Student 13, Somali, Male, L3 Vocational + A Level)

The issues revealed in the interviews of the participants would seem to support previous research on this matter (Wilson, 2006; Wolf, 2011.). However, in the case of this study, participants revealed that they were aware, in the case of disadvantaged pupils, how and why access to GCSE subjects was restricted. They were also clear about the instrumental reasons for the provision of vocational qualifications. In no case did participants reveal that the reason for their participation in vocational programmes at Key Stage 4 was related to an identified career trajectory or interest. It is clear that other issues were in play here, such as the need for the school to meet performance threshold measures. This argument seems particularly compelling in the case of wholesale entry for vocational as opposed to GCSE Science and in the situation as it pertains to the ECDL. It may uncover elements of a causal transmission mechanism between external accountability frameworks and the restricted access to GCSE subjects for disadvantaged pupils.

Another aspect of these findings that may give cause for concern is the way there was a clear differential between access to a full range of GCSE subjects at Key Stage 4, in the case of pupils in advantaged and disadvantaged settings, even after prior attainment at Key Stage 2 was considered. Pupils educated in a disadvantaged context have less chance to access a full range of GCSE options than those in advantaged settings. The finding triangulates with the findings of the quantitative study in Chapter 4. This is important
because, for high-performing post-16 destinations, entry is dependent to a greater extent on attainment in GCSE subjects rather than the vocational alternative (Crawford et al., 2010).

So, some progression routes are closed to pupils educated in a disadvantaged context based on their restricted qualification mix, rather than, it is suggested, their chances of succeeding in those high-performing settings and extends the understanding suggested by Reay (2016.). It might also contribute to an extension of the issues identified by Connor et al. (2004.). Reading these studies, in conjunction with these findings, appears to establish a link between a narrowed secondary curriculum for disadvantaged pupils, the qualification mixes at Key Stage 4 and the nature of the post-16 study programme.

6.2.3 Setting, streaming, pathways and stacking

What was apparent from conversation with participants was that, in all cases, their experience of secondary education was characterised by a curriculum structure based upon a notion of selection. It also appeared that these mechanisms were more complex and developed in the case of schools in a disadvantaged socio-economic context. This feature of secondary schooling assumes importance in relation to the study because, if such practices result in a narrowing of access to GCSE qualifications, then it might be contested that such a situation would restrict choice and access for some groups of pupils with regard to post-16 choices and decisions.

The sorting decision appeared to take place at two key points in a pupil's progression through secondary education: the transition from primary education into secondary education, and the point at which decisions are made about the qualifications that learners will access at the end of compulsory education.

The sorting process at the transition point from Primary to Secondary education was widespread and was commented on by all participants, whatever the socio-economic context of the secondary school. In one case, though, a participant from a disadvantaged context revealed that they had been subject to within-year ability streaming since they were in the penultimate year of primary school at the age of ten. They then indicated that the bands in secondary school were based on what the learner was expected to achieve at GCSE because of what they had achieved at the end of primary school.
What was interesting about the exchange was that the participant clearly identified the predicted grades that were associated with each band. The reflection here is that some learners might feel that the future direction of schooling is pre-determined and what might the impact of that be on their response to education.

However, the study indicates that sorting at the start of secondary school becomes more nuanced as pupil's progress and is even more pronounced and nuanced in disadvantaged contexts. For example, in this study, in the case of pupils educated at schools in disadvantaged circumstances, there appeared to be another sorting exercise conducted prior to the start of the GCSE courses. The process could be at the end of year 8 or year 9, dependent upon whether the school had a two or three-year programme leading up to the exams at the end of compulsory schooling.

Common to settings in a disadvantaged context was the practice of "guided" options, where pupils were given a range of choices of subjects that depended upon their perceived ability.

The most common methodology adopted by schools in disadvantaged contexts, though, was to sort pupils into bands or "pathways", which then determined the choice of subjects they would have access to study at the end of compulsory schooling. These pathways were often determined by the stream pupils were in at the end of Key Stage 3, that is, the end of year 8 or year 9 depending upon the school's approach to curriculum structure.

This is explained and identified in the following interaction:

we had three, like three sets and the highest like got to pick whatever they wanted to and the...

And also, the same learner in interaction;

Yea and then even the middle but then the selection, like the options got a bit smaller and then in the bottom group they got more smaller.

(Student 9, Female, Pakistani, L3 Vocational)

The degree of fluidity as pupils progressed through the key stages was mixed. In some cases, there was clear fluidity, with participants revealing movement between bands, while others reported minimal movement.
In these programmes, there were models based on two main categories of variant. One of these was a "stacked" model, in which different subjects were studied in different years but with the core subjects (Maths, English) threaded throughout the key stage. There was also the "linear" model, which means that pupils’ study all their subjects through the two or three years of the key stage towards the end of compulsory schooling. In one case, a school in an advantaged context had developed a hybrid of these two variants. This meant that some subjects were approached in a "linear" manner, whilst others would be accessed via a "stacked" curriculum structure:

No, three one-year courses from Year 9 to Year 11, so one in Year 9, one in Year 10 and one in Year 11. And you're given the option to pick a long thin subject, which goes, which goes in tandem with other three subjects which happens at the same time.

(Student 7, White British, Male, L2 Vocational)

This practice would mean that some pupils, because of their assessments at the end of primary school, were on a trajectory that predicated their outcomes, in terms of qualification mix, for the end of Key Stage 4.

A feature of this study was the indication that, despite the weight of the research evidence indicating that curriculum structures such as those revealed do not raise overall achievement, they are still commonly implemented by schools. The extent and complexity of these mechanisms is, it is arguable, related to the degree of socio-economic disadvantage experienced by the school community.

These approaches are highly rational in the context of the key accountability measure in force within time frame of the study. The one that was in use at the time of the study, was a threshold measure that concentrated on the achievement of benchmark grades, which was the percentage of pupils gaining 5 A*-C Grades at GCSE or equivalent (including Maths and English GCSE). This could imply that schools will take a rational decision to sort pupils into ability groupings, given the research that indicates that higher (perceived) ability pupils do better under these arrangements than those with lower ability (Slavin, 1990). This is because the nature of the accountability measure means that it becomes more important to ensure that those who can achieve the threshold grades do so, whilst the results of those pupils in lower sets can effectively be disregarded.
Therefore, there could be a potential differential in terms of access to high-performing post-16 destinations between learners who attend advantaged as opposed to disadvantaged settings.

The reasoning behind this assertion is that the research seems to indicate that learners of similar attainment at the end of primary schooling, progressing to an advantaged secondary context, have greater and more flexible access to GCSE qualifications than those in a disadvantaged setting. Secondary schools with high levels of social disadvantage appear to tier access to GCSE qualifications using mainly primary assessments as a base measure. This is also revealed in Chapter 4 of this study, which clearly identifies a statistically significant pattern of differential access to GCSE qualifications related to school levels of disadvantage, mean KS2 prior attainment of the exam cohort and school type. As a result, it could reasonably be surmised that there are more barriers to accessing high-performing post-16 settings in the path of learners from disadvantaged settings, given their admission requirements, which are usually (apart from a minority of vocational level 3 courses) based on GCSE rather than BTEC qualifications.

6.2.4 The pupil experience and teacher support for achievement

Learners from all settings were, in all bar one case, indicative of the support provided by teachers and schools as they approached external exams and assessment. Whereas previous discussion has covered process and internal school structures, it is important to consider the experiences of learners who, in almost all accounts, indicated that they were grateful for the support provided by the staff working with them.

All of the learners framed the interventions of the school in terms of help or support and identified the different mechanisms the schools utilised in this regard; weekend school, after and before school support sessions, one-to-one support, collapsing the year group timetable to concentrate on interventions in key subjects, pupil withdrawal from some subjects to concentrate on English and Maths performance, revision schools during holidays, support with vocational assignments and help for pupil performance with GCSE-controlled assessment requirements.

In regard to discussion of these interventions, those that were allowed within exam board regulations could be considered as within an appropriate ethical framework, whilst those that contravened both the spirit and letter of the regulations would be considered unethical and inappropriate. It is realised that this is a reduced view of ethics but the one
most appropriate in the context of the study. In the case of English controlled assessment, no interaction between learner and teacher is allowed for in the regulations (OFQUAL, 2016) but still appeared to be prevalent.

It also appeared that, when asked, pupils were reluctant to fully explain the extent of the support they had received. However, another pupil explained how their controlled assessment in GCSE English was conducted without clear regard to the procedures and protocols promulgated by the examination board.

Both of these pupils attended sponsored academies, both of which were located in areas of considerable socio-economic deprivation. The first school was also under considerable pressure to improve its performance against the accountability metrics, whilst the second school was regarded as a good performer.

At the time of the study, speaking and listening was an assessed component of the English GCSE exam and, in one exchange, a pupil implied manipulation of the component by the teacher responsible for the conduct of the examination process.

It is clear that in both cases there was a de facto disregard for the examination board regulations, in pursuit of improved measured outcomes for pupils.

A similar situation pertains to the consideration of vocational courses. The various vocational awarding bodies are very clear in relation to authenticity. When examining authenticity and considering the pupil perspective, it is clear that this regulation appears to be being disregarded.

In one exchange with a pupil, a question was asked about writing frames, which is when pupils are given an outline of how to structure their response to an assignment. This is usually in the form of a structure indicating the clear content and the way to approach an assignment with starting sentences for each paragraph. In the case of "guidance sheets", there tends to be a more detailed breakdown of the areas to be covered to successfully respond to the assignment. It also tends to give direct advice to pupils as to what they need to do to get certain grades. These approaches are against both the spirit and letter of the assessment regulations. One pupil described what they felt about the way in which the school operated, in order to help them to achieve, indicating that they felt uneasy about the mechanisms the school was using to enhance pupil achievement.
There appeared to be a clear difference in the approaches that were taken in supporting pupils as they approached their exams at the end of compulsory schooling. In the case of schools in an advantaged context, participants did not reveal any practices related to exam preparation and conduct that could be considered unethical. The opposite was true when consideration was given to secondary schools in a disadvantaged context. There is a least prima facie evidence of unethical behaviour in every school considered in the study, which would seem to support the findings of Meadows (2015). However, what is different about this study is the finding that appears in relation to context and the research approach that has been used.

There was a clear inference by participants in the study that, in the case of pupils who undertook secondary education in disadvantaged settings, exam regulations, procedures and protocols were regularly breached in the case of both GCSE and vocational assessments. It seems that a variety of methods were employed, which led to the submission of work to assessment bodies that could not be regarded as the authentic work of pupils.

The implication of the finding, in relation to admission to and success in post-16 education, is clear. There is undoubtedly an underlying complexity of interacting factors here but there appears to be a degree to which schools and teachers were acting in a way that contravened the spirit and letter of the assessment regulations. This points to the fact that pupils were gaining grades at Key Stage 4 that they would not have achieved if regulations had been fully implemented. The research seems to suggest that there was a strong correlation with the number of pupils in the research who had already studied at level 3 in other settings, had been unsuccessful and had then sought provision in the research setting. This applied to 5 out of the 21 participants in the study.

It is indeed hard to discern any reason for this behaviour by schools in a disadvantaged context, unless such a reason is framed within an understanding of the accountability framework. Given the high-stakes nature of the accountability framework measure (Kohn, 2000; Duffrin, 2000; Haney, 2002; Au and Gourd, 2013; Ydesen, 2014) and the market forces (Allen, Burgess and Mayo, 2012) at work, the proposition can be made that there is a perverse incentive to employ such tactics; in fact, it could be seen as a rational, but not ethical, move by school leaders.
6.3 Comments and conclusions

From an analysis of the discussions in this study, pupils did not see the entry requirements, either in terms of the mix of qualifications or the grades required, of high-performing post-16 institutions as a barrier to their own progression. Rather, they saw progress in terms of their own progression to the next stage of education and clearly saw themselves as making decisions about their future. Those participants who were educated at secondary level in a context of social disadvantage were very clearly aspirational about progression but did not see that progression in terms of accessing high-performing A Level provision. This was a pattern that pertained even to those pupils who would have been able to access high-performing post-16 provision because they had the requisite mix of qualifications and met the grade requirements. It was also apparent that they did not necessarily see those high-performing schools and A Levels as aspirational. In one case, the choice of completing a vocational course was seen in instrumental terms, in that it provided the easiest route to higher education.

In the case of the pupils, in the study, from a disadvantaged context who sought progression to the local sixth-form college, already defined as low-performing, four reasons seemed to have resonance; that it was a "natural" progression, that is was the closest location to pupil domicile, the pupil felt more "at home", and the courses (BTEC) were easier than A Levels. This was in noticeable contrast to those pupils who, although resident in disadvantaged communities, were educated in secondary schools located in advantaged neighbourhoods of the city. These pupils, although now pursuing education in the low-performing post-16 provision, had all sought access to high-performing post-16 provision, usually in school sixth forms located in the schools in which they had completed their secondary education. Out of the 21 participants in the study, 5 fell into this category and had transferred out of their initial Post-16 destination at the end of the first year to restart level 3 (A Level or equivalent) qualifications at the low-performing post-16 provision. In all cases, these pupils were domiciled in neighbourhoods of high social disadvantage and in 4 cases were from BAME (Black and Minority Ethnic) communities.

The reasons around this change in post-16 education destinations for these pupils included that pupils had not gained the grades at the end of the first year to progress onto the second and final years of the programme. The usual expression was in terms of the grades a pupil achieved at AS Level, which, at the time, contributed to the full A Level grade achieved at the end of a two-year programme. One participant, who had achieved passing
grades in two A Level subjects at AS, was required to leave their existing provision and find an alternative. This could be construed as a move that would benefit the pupil but could also be seen through the lens of the school rationally organising itself to meet a high-stakes external accountability measure.

There did appear to be a pattern when the issue of initial progression was considered. Participants in the study from secondary schools located in circumstances of socio-economic disadvantage seemed to have a differential experience of careers education, advice and guidance when forming decisions about post-16 destination, when compared with those pupils from advantaged settings. Those participants from disadvantaged secondary schools appeared to have much less idea of the options open to them post-16, as a result of what seemed to be a more "hands-off" approach adopted by those schools. This issue was previously covered and discussed in the conclusion to Chapter 5.

Arguably, the state of guidance that is revealed in the case of those pupils from secondary schools in a disadvantaged setting may well contribute to pupils choosing convenient destinations, rather than those that might maximise their educational progress.

What was apparent in these schools was the complexity of the setting and streaming arrangements at Key Stage 3 and 4. By and large, these seemed to define access to qualifications in terms of the perceived academic ability of pupils, which was usually and inflexibly based on their prior measured attainment at the end of the primary phase of education. In the case of one participant, it was established that these sorting and selection processes had been in operation since they were in the primary school classroom.

For participants in the study that were from schools with disadvantaged contexts, access to GCSE courses seemed to be restricted, either overtly or through the process of what might be termed "guided options". In these cases, pupils in the higher ability sets and streams were given more choice of options to take, but pupils in lower sets were, in one case, told which subjects they were going to take, or were guided towards options in which staff perceived they were more likely to be successful at the terminal examination or assessment. In most cases, pupils identified these as vocational courses, with all the implications that would have for access to the full range of post-16 studies. Here, schools appeared to predicate pupils’ outcomes five years hence, in terms of what had been achieved at the end of primary school. Given the established contextual effects on
measured school achievement, such an assumption appears to meet neither the conditions of equality nor equity in educational provision.

There were also other dimensions to the option process revealed by participants that could be regarded as worthy of further examination. For example, in the case of a participant from a converter academy, there was the separation, based on gender, of perceived lower ability pupils in two option subjects; males were allocated BTEC Sport, whilst Females were allocated BTEC Health and Social Care. This participant was clear in respect of this practice. There was also the way Science was delivered and assessed, which was framed in a narrative describing how those pupils who seemed unlikely to pass GCSE Science were allocated to a vocational pathway, on the basis that they would be more likely to succeed and which, arguably, was not based on pupil need or the possibility of progression, but rather on the need to generate passing grades for the school to meet external accountability threshold measures.

It was also clear, from participants, that there was a difference in the way in which schools in both advantaged and disadvantaged contexts prepared pupils for and conducted examinations. In those schools in advantaged contexts, a variety of strategies were employed that sought to provide pupils with the best preparation for the examinations they were about to undertake. However, in these cases, all the strategies employed - extra classes, individual support before examinations and focused revision during timetabled sessions - should be considered as ethical. However, in the case of schools in a disadvantaged context, a different narrative emerges. Accounts were given of unethical behaviour that included strategies and interventions in direct contravention of exam and assessment regulations, procedures and protocols, and which could be deemed to be directly restricting access to qualifications studied by pupils. These interventions included; teachers effectively constructing exam responses, writing frames, teachers directly intervening during exam assessments, and the withdrawal of pupils from subjects they were expecting to be assessed in. In the final case, pupils clearly understood that this strategy was being employed to maximise achievement in those subjects that counted towards accountability thresholds.

The above analysis should be of concern to policy makers, who would regard that education provision, should be based on principals of equity, equality and social mobility. In conclusion, it seems that participants from a disadvantaged context do not fully recognise the systematic and systemic barriers to their post-16 provision. However, such a situation is
exacerbated as schools attempt to meet the demands of external accountability thresholds. This thesis would seem to add to the evidence that marketisation of education works against objectives of social justice and social mobility.

Having completed, reported and analysed both the quantitative and the qualitative research in chapters 4, 5 and 6, the findings in relation to the research questions are summarised in chapter 7. They are then used to suggest conceptual framings and develop conclusions to the thesis.
7 Summary and conclusions

In this chapter, summaries are given of the findings in relation to each of the research questions. Suggested conceptual frameworks are proposed that might aid understanding of the transition process which include; restricted access, the vortex of disadvantage, and observations in relation to causality. There is an identification of, and evaluation of any limitations that might apply to the study. The claim to originality is discussed together with suggestions for extending the research. The key issue of social justice identified at the commencement of the project is considered and this leads into suggestions for policy makers that might address these dimensions of the findings.

7.1 Introduction

The research reported in the thesis focused on a key issue of social justice in English schooling. The idea was to establish if it could be considered that, if in relation to post-16 progression, students’ access to provision was restricted as a result of gaming behaviour by schools.

It examined differences in access to high-performing post-16 institutions for pupils, who attended secondary schools in a context of socio-economic disadvantage, as opposed to those who attended school in a relatively advantaged context. On the surface, this appeared to be a relatively simple binary divide. However, on further examination, it was revealed to be far more complex.

It is known from the literature that schools operate in a dynamic and multifaceted accountability framework. As a result of this framework some schools appear to implement strategic interventions that are designed to maximise their measured performance. However, the efficacy of the framework in raising performance is a contested space as is the school structuring of operations in the same regard.

As a result of the investigations in the project, two key emergent concepts are suggested in this chapter, which might help to understand the relationship between school operations, policies and procedures. These were the ideas of restricted access and a vortex of disadvantage. In the case of restricted access this related to the idea that as a result of contextual conditions, access for some pupils to Post-16 provision was limited as a result of structural, systemic and systematic influences on the transition process. The idea of a vortex of disadvantage as a result of school type, operations and interventions was
developed when seeking to understand reasons why access to Post-16 provision might be more restricted for those young people in a context of disadvantage, than those in a relatively advantaged context. The idea also sought to extend an understanding that reflected the complexity of interactions that influenced the pupil transition process from compulsory schooling to Post-16 provision.

As a result of the analysis it was considered that gaming behaviour by some schools might be influencing the restriction of Post-16 access for pupils educated in a context of socio-economic disadvantage.

7.2 The research questions

In seeking to address these issues the research questions were developed as follows;

1. What are the patterns of institutional qualification provision and pupil access at Key Stage 4 in England from 2013-2015 and do these vary by school type and pupil demographic factors?

2. Do some school types engage in the differential use of equivalent qualifications and restrict pupil access to academic qualifications than might be expected given their context?

3. How and why do school leaders in different types of school make decisions about pupil access to qualifications, the nature of the Key Stage 4 curriculums and how pupils are enabled to make choices about post-16 education?

4. How and why do pupils in an area of social challenge in a northern city make decisions about their choice of post-16 education provision and is this any different from pupils in a more affluent area of the city?

Investigating the final research question proved problematic as access to pupils in the affluent context for interview purposes could not be secured. This meant that question 4 had to be modified to reflect the context in which access was possible. The question was reformulated as follows;

4. Were the decisions and choices that pupils, educated or domiciled in a context of socio-economic disadvantage, made about post-16 education related to issues of access and their secondary school experience?
7.3 The approach to the research questions

Decisions had to be made about the overarching research approach and the methods that were to be utilised to examine each of the key questions. The research approach that was adopted was critical realism, which was deemed appropriate given the underlying core focus on issues of social justice. It was then important to decide upon the research methods that would enable the most effective investigation of the identified research questions.

By looking at each of the questions in turn, it was decided that questions 1 and 2, because of their general nature and structural focus were best suited to analysis using a quantitative approach. Further, published secondary data relating to these dimensions of school activity and learner achievement were readily available from the Department for Education (DfE, 2015b). This had the added advantage of covering the whole population of secondary schools in England, and key contextual indicators (level of socio-economic disadvantage and the attainment of pupils on entry to the school), as well as the output measures that were of interest (% of pupils gaining 5 A*-C grades at GCSE including English and Maths GCSE with and without the use of equivalent qualifications and also the mean entry numbers for academic and total examinations at the end of compulsory schooling). Statistical analysis, taking account of contextual variables, was used to investigate both of these research questions. The quantitative study was intended to look at overall patterns and relationships that might relate to context, outcomes, structures and systems. It was not intended and does not attempt to establish any causal relationship in relation to each of these items.

Question 3 was seen as the next logical step in the discovery and illumination of these patterns. The objective was to understand the patterns and relationships that had been identified in the quantitative analysis and to examine the perceptions of those agents in the education system taking the key decisions at a school level that might influence pupil outcomes. The motivations and rationales that drove the decisions these agents took in relation to pupil access to qualifications and outcomes were examined. It was also seen as an opportunity to examine whether they may or may not have taken external accountability measures into account when making decisions for learners. The study was able to access school and college leaders at a variety of leadership levels and within a variety of different institutions. However, it is important to note that methodologically this
was not, and was never intended to be, a representative sample for statistical purposes. Rather, it is accepted as valid within a phenomenological approach seeking to understand the experience of the research participants that may illuminate and further explain the patterns observed in the quantitative study. This would then help triangulation of any identified issues from the patterns identified in the quantitative data and how that translated into an understanding of the education field by school leaders, and then was operationalised through the choices they made and decisions they took.

It also seemed important that, in order to gain a rounded view of the patterns identified in the quantitative data and translated in school and college operations through those in leadership roles, attention needed to be paid to the view of learners in those contexts. If we accept the notion that learners should be central to an education system designed to promote social justice, then factors that militate against that objective need to be illuminated and challenged. It is also apposite to understand that the education system in England is presently constructed to fit a policy narrative and direction of improving standards, which is a concept that is never clearly defined. This policy direction is, it is assumed, leading towards pupils achieving improved outcomes underpinned by rigorous assessment. An increasing diversity of provision is assumed to enable learners to identify and access secondary and tertiary education that meets their individual needs. Finally, it is assumed that the provision will enable learners to take their place in a modern technological and bureaucratic global economy and therefore, be highly functional in nature. To develop a critical understanding of the nature of provision and systematic and systemic constraints, a critical reading of learners’ perspectives needs to be undertaken.

The final research question was designed to examine the understanding and perspectives of learners at the centre of the system. In this exercise, the participants were engaged in a variety of different level 3 programmes, both academic and vocational, were at different stages in their tertiary education, and had different cultural and ethnic backgrounds and different contextual experiences of secondary education. The interviews were semi-structured and directed towards triangulating the key issues identified in the preceding statistical analyses and school leader interviews. but also gaining learners’ perceptions on these systemic and structural issues.

The sample of participants was never identified to be a representative but was originally designed for the research to be able to compare the experiences of pupils in disadvantaged and advantaged settings. However, due to changes in leadership personnel at post-16
destinations in advantaged settings, it proved impossible to gain access to these pupils. This meant that the focus and research question had to be reformulated. The focus was now located on pupils undertaking post-16 education in a disadvantaged setting but covered pupils who attended secondary education in both advantaged and disadvantaged settings. Within a phenomenological approach, qualitative data can be regarded as valid because it is seeking the experiences and perceptions of the participants in relation to issues from the previous chapters. An attempt is then made to critically evaluate these accounts in relation to a contextual understanding of the participants.

This was important as justification for the methodology that had been designed. When considering the quantitative patterns, it was clear that they had informed the design of the qualitative work and set the context for an exploration of the data. The qualitative work was then set up as the explanatory phase of the project, seeking to reveal the rationales and reasons that might sit behind the emergence of the quantitative patterns.

Finally, the data from the quantitative and qualitative studies was synthesised in accordance with research design in order to illuminate some overall conclusions and findings. This can be seen in Section 7.5 where the findings are suggested in the light of results of the quantitative and qualitative data analysis. This was important as justification for the methodology that had been designed. When considering the quantitative patterns, it was clear that they had informed the design of the qualitative work and the context for the exploration of the data. The qualitative work was then set up as the explanatory phase of the project, seeking to reveal the rationales and reasons that might sit behind the emergence of the quantitative patterns.

7.4 Responses to the research questions

1. What are the patterns of institutional qualification provision and pupil access at Key Stage 4 in England from 2012-2014 and how do these vary by school type and pupil demographic factors?

2. Do some school types engage in the differential use of equivalent qualifications and restrict pupil access to academic qualifications than might be expected given their context?

Statistical analyses of school-level secondary data over three academic years 2012, 2013 and 2014. It focused on school-level variations in two dependent variables (DV); Outcome
and Access. The outcome DV measured the performance boost to a key KS4 measured outcome that is provided through the use of equivalent qualifications. The access DV measured the mean number of academic (GCSE) KS4 examinations. The analyses examined variations across 7 different types of schools whilst controlling for mean pupil prior attainment (at KS2) and concentrations of socioeconomic disadvantage.

It was found that mean levels of socio-economic disadvantage had slightly increased over the period of the study but that the range of disadvantage remained stable. Similar findings were applicable in respect of the measure attainment at the end of primary education, although, in this variable, the spread of attainment had increased slightly. These two contextual variables were highly correlated, and multicollinearity was problematic when seeking to disentangle their statistical association in relation to the outcome and access DVs.

It was found that, at the structural and system level, those patterns of outcomes and access were highly correlated with the contextual variables; the level of socio-economic disadvantage for the school and the mean level of prior measure attainment of pupils on entry to secondary education.

After controlling for these variables, multivariate linear regression models were constructed to examine more closely the patterns of outcomes and access and how they might relate to the structure of the system.

In the case of the outcome DV, the models showed that sponsored academies boosted their performance in terms of the threshold accountability measure to a greater and statistically significant extent compared with other types of school. Whereas, in the case of voluntary-aided schools, it was found that they used such qualifications to a lesser and statistically significant extent. It was also noted that the magnitude of the difference reduced in 2014, when policy directions changed the way in which the threshold measure was calculated (DFE, 2015a). However, the findings in respect of the patterns of difference between school types still held. In respect to the different magnitudes of the outcome measures and the contextual variables (Table 15), it was found that sponsored academies boosted performance across all combinations of interaction between contextual variables, apart from the very few of these type of schools with high levels of socio-economic disadvantage and high measured levels of prior attainment).
The models for the access DV echoed patterns found in the outcomes DV models. Sponsored academics appear to enter pupils for statistically significantly fewer GCSE exams than other types of school, whereas the converse is true for voluntary-aided schools. This lower rate of entry is found in all combinations of interaction, but it should be noted that, in the case of schools with high levels of social disadvantage and high mean levels of prior attainment, the access rate is broadly the same between community schools and sponsored academies.

It is therefore arguable that there is a structural pattern of gaming that can be applied in the case of sponsored academies, in that they enter pupils for statistically fewer academic exams than other types of schools and gain a statistically significant performance outcome boost by using equivalent qualifications. It is also revealed that the sponsored academies, by and large, serve communities in areas of socio-economic disadvantage. They also appear to be entering pupils for non-academic qualifications that serve to boost outcomes when compared with pupils with a broadly similar entry profile at other types of school. It is further suggested that this may well be due to the fact that they are organising their operations to maximise school level achievement rather than prioritising meeting the educational needs of their learners (i.e. implementing a gaming strategy)(de Wolf and Janssens, 2017; Ingram et al., 2018). If this proposition was not held then the analysis of the quantitative patterns would not exhibit any statistical difference between different types of school.

The whole issue of qualification mix and the grades achieved at the end of compulsory schooling are important (Gorard, 2010), as it is the primary sorting and selection mechanism that is seen to determine learner progression to post-16 provision. Here again, evidence previously cited suggests that it is the nature of post-16 provision that determines access and subsequent success in higher education (Bhattacharyya, G., Ison, L., & Blair, M. 2003; Noden, Skinner and Modood, 2014). In conclusion, the quantitative data reveals a differential pattern of access to academic qualifications (GCSE-only) that is high in contexts of relative social advantage and lower for those in disadvantaged contexts. This would imply that for similar levels of ability (prior attainment) and socioeconomic disadvantage, pupils who attend sponsored academies are placed in a situation that militates against them having the same progression opportunities as pupils of who attend other types of school. Conversely, pupils who attend voluntary-aided and some converter academy schools are highly advantaged in accessing high-performing post-16 provision. There is also
some statistical evidence that the ease, or not, of access is related to the socio-economic context of the secondary school and that the type of school attended is a key factor.

3. How and why do school leaders in different types of school make decisions about pupil access to qualifications, the nature of the Key Stage 4 curriculum and how are pupils enabled to make choices about Post-16 education?

School leaders who were interviewed for the research were responsible for the provision of high-performing post-16 educational provision were clear about their criteria for entry to academic courses. Even though the general conditions for entry to this provision were usually framed in terms of the accountability threshold measure, 5A*-C GCSE passes including English and Maths GCSE and including equivalent qualifications, the reality of pupils gaining entry was somewhat different. Usually pupils wishing to study an academic programme post-16 were required to meet the general requirement and also to gain a B grade at GCSE in the chosen A Level subject.

In most cases, the high-performing post-16 institutions in the study did not offer any vocational course progression and in one case when it did prospective applicants offering a level 2 vocational qualification had to obtain a merit grade, whereas applicants with GCSE only had to achieve a grade C. This meant that applicants with vocational qualifications had to achieve at a higher relative level (under the English qualification framework a Merit in a vocational subject is measured as the same value as a B at GCSE).

Many of the participants working in advantaged areas were aware that some applicants for high-performing post-16 provision may come from a context of social disadvantage and from schools where some applicants may have experienced restricted qualification access. However, these contextual factors were not considered when making decisions about entry to their respective post-16 provision. In the case of the major post-16 provider working in a disadvantaged area, it was clear that they were much more flexible in terms of the grades required for entry to A Level provision. They had also been engaged in a dynamic process of re-configuring their provision to meet the needs of pupils who wished to progress their education. Although this may be viewed through a lens of decreasing funding provision for post-16 education, which is highly critical for a stand-alone provider, the rationale adopted by these leaders was one of social justice and adopting a key role in their local community.

Participants also revealed that, in all cases, when constructing the curriculum, some regard was paid to the way in which external accountability measures were constructed as
indicated by West, Mattei & Roberts (2011) and also Ingram et al (2018). This was implicit in the case of schools in an advantaged context. In these cases, they referred to a notion of curriculum innovation (Winter, 2017), such as adopting a "stacked" and elongated key Stage 4 model, but it should be recognised that these innovations are commonly adopted as strategies to raise measured outcomes.

Participants in the study also revealed that extensive use was made of setting and streaming but in varying degrees of complexity. In these accounts, it appeared that schools in disadvantaged settings had highly complex setting and streaming mechanisms and that these extended from entry to Key Stage 4 (Gregory, 1984; Muijs & Dunne, 2010).

In terms of interventions that were designed to raise pupil achievement in their external assessments, in the study leaders had a clear emphasis on directing these to pupils who were key in terms of the external accountability measures (Wilson, Croxson, & Atkinson, 2006). What was surprising was the revelation that at least one participant had experienced interventions that were clearly unethical and contravened assessment protocols (Meadows, 2015). The observation took place in a sponsored academy but, interestingly, no participants indicated any similar intervention in their own institution. There is a clear need to triangulate this account with the experiences of pupils to try and identify if this was an unusual occurrence or to seek to establish if unethical methods are more widespread. Another intervention that was identified and would give cause for concern was the way in which pupils were withdrawn from subjects’ mid-course to concentrate on subjects that were a mandatory component of the threshold accountability measures. Such an intervention would have a direct impact on pupils' ability to progress at the end of compulsory schooling.

4. How and why do pupils in an area of social challenge make decisions about their choice of post-16 provision?

In this study those pupils who attended secondary schools in the context of relative socio-economic disadvantage, accessed a particular qualification mix at Key Stage 4 that was dependent upon their placing in certain sets or streams. These sets or streams are identifiable as sorting and selection mechanisms that are mainly predicated upon measured attainment at the end of primary school (Gregory, 1984; Muijs & Dunne, 2010). In some cases, these measurements of attainment were conflated with psychometric tests that were designed to test cognitive ability.
In terms of post-16 progression, apart from the limitations that arose from the qualification mix, what was apparent was the variable experience of pupils interviewed for the study, in terms of preparation for the transition between compulsory and post-compulsory education. In the accounts of participants educated in advantaged contexts, there were descriptions of well-resourced and wide-ranging careers information advice and guidance that pertained to post-16 transition. This was not the situation for participants educated in contexts of relative disadvantage. Such findings reflect the findings of a report produced by Business, Innovation and Skills and Education Committees (2016) of the Houses of Parliament. It was also notable that decisions about progression were not framed in terms of the relative performance of the different post-16 providers but were usually expressed in terms of distance from domicile or peer and parental advice.

Most of the participants who attended secondary schools in disadvantaged contexts did not even consider progression to high-performing post-16 provision, regardless of their prospective achievement at the end of compulsory schooling (Gorard and Smith, 2007). In one case, it was even reported that the advice given was not independent and impartial as required by law. A sponsored academy, it appeared, had promoted its own post-16 provision, even though it might not have been the most appropriate destination for the particular learner.

Another issue that was identified in relation to the progression of participants from disadvantaged contexts was the pattern of accessing high-performing post-16 provision and moving half-way through their chosen programme. This was often expressed by participants because of being unable to achieve internal progression thresholds. However, one pupil highlighted the differential that they experienced at Key Stage 4 and at post-16 in terms of delivery. High levels of support were experienced at Key Stage 4, but such a high level of support was not forthcoming in the first year of tertiary education. It was also hard to rationalise some decisions that were taken by high-performing institutions to terminate post-16 programmes for first year pupils. These decisions could be interpreted, arguably, as a mechanism to ensure high levels of performance against external thresholds, rather than taking the time to support pupils who may well be able but due to context are finding it difficult to adjust to a new environment and context.
7.5 Explaining the findings; emergent concepts

7.5.1 Restricted access to post-16 provision

The project suggests that participants educated in secondary schools facing a context of socio-economic disadvantage experience might experience restricted access to high-performing post-16 destinations. This is important because the nature of post-16 provision attended and the subjects that are studied has a relationship, evidenced in literature, to the nature of access to higher education and subsequent pupil success. From the evidence presented in the research it is contended that restricted access to post-16 destinations could be due to structural and system issues, which are in a complex relationship with cultural and personal factors.

The quantitative examination of the data of the whole secondary school population clearly indicates a pattern emerging, in which certain schools might be structuring their operations to boost performance against key accountability measures. This seems, in part, to be achieved in some types of schools by the systematic use of vocational qualifications in the place of academic qualifications, as a means of boosting measured performance, as defined in external accountability frameworks.

However, the quantitative analysis can only identify patterns, which do appear to happen by chance but for which there is another explanation. The qualitative work sought to understand the mechanisms and phenomena, which may contribute to these patterns. Some of these are understood and described through the experiences of the individual participants in the study.

The accounts of school and college leaders who participated in the research indicated that they took decisions whilst understanding the framework within which they were operating. In the case of access to high-performing post-16 provision, these leaders were quite clear about the entry requirements they impose, around which there is little flexibility. Their protocols disregard contextual, structural and system dimensions. These dimensions may have contributed to a pupil from a disadvantaged locale not achieving the same qualification mix and grades as a pupil of similar ability, who has been educated in a context of relative advantage. The result is inequality, not because of the individual characteristics of the applicant but because of the social framework within which they were located.
The consequence appears to be a result of the way in which schools in the study organise their operations to meet the demands of external accountability frameworks. Although the quantitative study suggested that this pattern might be more prevalent in the case of sponsored academies, such a finding could not be supported by the qualitative work. However, from the participants in the study, this feature appears to be most prevalent in the case of schools that face relative socio-economic disadvantage. Participants who work in sponsored academies and some other schools in disadvantaged contexts described structuring their curriculum in such a way as to predicate pupil access at Key Stage 4 on sets and streams determined because of prior attainment at the end of primary school. Surprisingly perhaps, little understanding was accorded to the nature of measured performance in primary school and its relationship to socio-economic factors. So, a pupil who does not demonstrate their ability in primary school tests because of contextual factors, could be placed in a lower set in secondary school, compared to a pupil with similar ability, but who comes from a relatively advantaged context and has achieved higher measured performance. As a result, the evidence seems to suggest that disadvantage seems to multiply the barriers to progression in the way of the pupil from a disadvantaged context. Francis (2017) a similar point regarding setting and streaming but uses a different approach to arrive at a similar and supportive conclusion.

Other factors also seem to reinforce restriction of access to high-performing post-16 education for pupils from a disadvantaged context. It was clear from participants’ accounts that the quality and nature of information, advice and guidance was not well-resourced and, in some cases, could not be regarded as independent and impartial. This was especially true in the case of sponsored academies and other schools in challenging circumstances. On reflection, in a context of school funding pressures, this may be a result of careers guidance no longer being provided by local government, with responsibility devolved to schools whose provision may be of lower quality and no longer either independent or impartial. It is perhaps surprising that pupils interviewed who were expected to gain the grades for entry to high-performing post-16 provision did not even consider making an application to these institutions.

Cultural and location factors also appeared to interact with system and structural factors, which, it is suggested, placed more barriers in the way of access to high-performing post-16 destinations.
7.5.2 A vortex of disadvantage

It was clear, upon analysis of the data in the study, that a conceptual understanding of the issue of restricted access seemed much more complex than a binary. There is arguably some evidence in the studies for a complexity of identified factors that interact with social disadvantage leading to pupils having restricted access to post-16 provisions. It could be conceptualised and understood that young people, who have relatively high levels of social advantage at primary school, will end up having have a free and wide choice of post-16 provision. Conversely, young people, who experience high levels of social disadvantage, may have a limited range of post-16 opportunities open to them. This outcome and the process that leads to it may be visualised as a vortex of disadvantage (Figure 4).

*Figure 4: The vortex of disadvantage*  

The area bounded by the external limits of the vortex represents the choices that are available to a pupil, educated within a specific context of socio-economic disadvantage, within existing local provision of post-16 education. The choices would include; courses,
levels, localities and institutions. In this case, it may be that a pupil with high levels of prior attainment at primary school, educated in an advantaged secondary school, has a wide range of possibilities for progression to post-16 education as a result. The area would represent the possibilities for progression for that pupil given their demographic characteristics. For example, they might not be able to access all possibilities because of travel constraints and locale of domicile.

Conversely, in the case of a pupil with high levels of social disadvantage, the possibilities of access to post-16 opportunities might be much more restricted, hence resulting in a much smaller area bounded by the vortex.

The key here is to explain the incremental differential between the top and bottom areas that are bounded by the vortex. Levels of socio-economic disadvantage are best described as a continuous variable, which takes any value between 0% and 100%. The idea here is that, for each value of the level of disadvantage, as disadvantage increases, the circle representing post-16 destinations gets smaller as the possibilities for these pupils are reduced as a proportion of all post-16 destinations in the locality.

The reason why the circle gets smaller, and post-16 access opportunities reduce as the levels of disadvantage increase, is due to the complex and multiple interactions between other factors. These factors may well vary in strength as the level of disadvantage increases but it is suggested that their interaction may increase in impact on post-16 opportunities as disadvantage increases and lead to a restriction of access. The vortex of disadvantage illustrates that, as levels of socio-economic disadvantage increase, there is a consequent reduction in pupil access to post-16 destinations.

Forces identified in the examination include: external accountability measures, schooling structures, school operational decisions, curriculum model construction and the quality and nature of careers advice. The nature of those forces and the way they are mixed might vary with different levels of disadvantage. However, it appears clear from a critical reading of the evidence presented in the study that there is an intersectionality of factors that reduces post-16 access as disadvantage increases.

7.5.3 Causality

The evidence, when considered in combination and with a triangulation of the data, seems to suggest that there is a causal mechanism in operation between external accountability
measures and the post-16 destinations of pupils. It is further suggested that the nature and strength with which this mechanism operates is essentially different, dependent upon the socio-economic context in which the secondary school is located. In both relatively advantaged and disadvantaged contexts, some regard seems to be given to the external accountability measures that are in force.

However, in the study, the influence of these accountability measures appears to be a lot stronger in the case of schools located in areas of socio-economic challenge. It is suggested that the strength of these forces is transmitted through the way that leaders understand and respond to them. The leaders, recognisant of the potential consequences of failure for the school to meet the requirements of these measures, appear to construct their operations in such a way as to maximise performance in terms of accountability measures. This is often worked out through complex setting and streaming protocols that serve to reinforce educational inequality, given that they are largely predicated on pupil prior attainment at the end of primary school.

The reason this is important is because it suggests that access to high-performing post-16 destinations, and the subsequent accrued benefits, is largely dependent upon pupil attainment in GCSE exams and their qualification mix. The problem is that, due to the way that school operations are constructed in schools in the study with disadvantaged contexts, some pupils who may have the ability to succeed in these high-performing post-16 destinations might not access them for a variety of system reasons. These reasons might include; the complexity and rigidity of their arrangements, and the predication of setting and streaming on prior attainment at primary school, interventions designed to maximise school-level performance, and poor and incoherent careers advice and guidance. It seems that there is also evidence, from pupils, of unethical interventions to manipulate their exam grades. This might mean that some pupils are accessing high-performing destinations with an attainment profile that has been manipulated, leaving them without the foundation for successful progression.

7.6 Limitations of the study

7.6.1 The quantitative study

The data used for the analysis of the performance boost to measured outcomes gained by the use of equivalent qualifications is the key examination required to understand these patterns. The measures used, %5A*-C GCSE including English and Maths GCSE and
equivalent qualifications and the corresponding measure excluding the use of equivalent qualifications, are the key summative measures of cohort examination performance and so are entirely appropriate for this analysis. In a similar vein, the data used in the analysis of pupil access to academic qualifications are the key data in relation to this metric.

Analysis of the relationship between these key measures and the contextual variables was carried out using standard techniques, including correlational and regression analysis. The only innovation used was the binary analysis of the interaction between variables, which was devised to overcome issues of multicollinearity.

It could be that the depth of the analysis is also limited by the use of aggregate structural data, however, a counter view could be the assertion that the data deals with a key focus of the project. The focus was not on individual pupils but on the structure of the system as it had been constructed. It could also be contended that the operationalisation of the contextual variables is not totally reflective of the context that they represent. It is possible that a more comprehensive perspective could be gained from the use of pupil level data, however, given potential issues of access and time this was probably unfeasible within the parameters of the project.

In order to further assess the limitations of the way that data has been used in this study, it has been analysed in terms of the issues that Hall, Ward and Comer (1988 cited in Creswell, 2013, p. 309) identify as causing problems with quantitative studies in education. The data that was gathered and analysed was extracted from governmental publications (DfE, 2015). These publications provide a summary at the system and school level of the underlying data that relates to individual pupils. Given the focus in the study, it was felt that this was appropriate, although there was an understanding that analysis focused on individual pupils might reveal different results.

There was also a limitation in relation to the way in which data was used. No account was taken of the length of time that schools had been structured as designated in the performance tables; rather, the concentration of the analysis was on the structure of the school at the time that the exams were sat by pupils in 2012, 2013 and 2014. These were usually published in the March of the following year (DFE, 2015a). The justification for this was that the area of interest was the results achieved under the designated structure, rather than the longevity of that structure. However, given the inherent stability of the
structure of the system over the time period of the study, it was felt that this was a
pragmatic and cautious approach.

7.6.2 The qualitative studies

It could be contested that the data in the qualitative study is limited in a number of ways: the positionality of the researcher, that the research is based upon participants who are largely known to the researcher, a key aspect of the research method was insider research, neither study deals with a representative sample of identified participants, the pupil study is only focused on pupils in a disadvantaged context in one location, and the interview and associated coding methodology are constructed to deliver outcomes that reflect the positionality and desired outcomes of the researcher.

It is accepted that in neither the study of school and college leaders or in the case of the pupil study are the participants fully representative of the whole population from which they could be drawn. This is dealt with in the design of the study for a couple of reasons. Firstly, resources precluded designing a study that included many more participants. Secondly, issues of access to school and college leaders and pupils presented considerable barriers to overcome. However, these studies do not claim to be representative, they exist to illuminate and explain the way that some school leaders and pupils are influenced and impacted by the patterns that were established in the quantitative data. Given that limitation and the objectives of the study, it can be clearly seen that they contribute to an understanding of the issue from the context of the participants and, for that reason, are a valid contribution to the debate on these issues.

The way in which these interviews were to be conducted was considered carefully to overcome any criticism that might be levelled in terms of bias. The major problematic issue here was the existing relationship between the interviewer and interviewee and the common location in a field of endeavour. There were two dimensions to this issue. As interviewer, I also had considerable experience and expertise in the field, being an ex-Headteacher and Head of Post-16 Education in a large comprehensive school. Throughout the interview and analysis, I had to understand my own preconceptions and values and how this might reveal itself in the questioning. At the time of the field research phase I was also, as a teacher employed in the college, subordinate to the Principal in terms of status.
It is hoped that the recognition of these limitations and the explicit way in which they appear to have been addressed enables the study to stand as a valid and credible attempt to investigate these key issues.

7.7 The contribution of the research

Otero (2007) identified that there was a lack of research around structural and system issues that might pertain to the existing knowledge around the transition from compulsory to post-compulsory education. This study has helped to address that gap.

The quantitative analysis that reveals patterns of measured outcome and pupil access to qualifications that vary in statistically significant ways by pupil demographic. Analytical insights were achieved by the utilisation of single and bivariate analysis, the establishment of significant correlation between independent and dependent variables and the construction of an original multivariate regression model. This establishes statistically significant patterns of outcome and access by school type, which highlight structural differences in the school system. Also present in the analysis was a innovative descriptive approach to the examining of the interaction effects of demographic contextual factors and the school system, which is not possible using conventional multivariate analysis due to the problem of multicollinearity between contextual variables.

The study uses the quantitative research to identify indicative statistically significant patterns of outcome and access to inform the qualitative work that is undertaken. The originality of knowledge here is claimed in a variety of respects. The interviews with leaders from a variety of school and college types and contexts are revealed and the study attempts to understand some of the reasons for the identified quantitative patterns. This work is original in the way that the semi-structured interviews sought to illuminate the relationships that exist between key areas of school and college operation; learner qualification access, post-16 progression and Key Stage 4 curriculum structure, and school type and external accountability measures.

The qualitative research also seeks to extend knowledge further in the way in which it attempts to hear the voice of learners. The process sought to examine the perceptions of those pupils who attended a low-performing post-16 provision in an economically and socially challenged area of a northern city. The focus here was on the way in which these young people expressed their understanding of the relationship between their school experience and post-16 progress choices and decisions. This was a reflective exercise, as
the pupils had already progressed from compulsory to post-compulsory education. Such an examination of the issue was not identifiable in the literature at the time of writing,

The study also breaks ground in terms of two concepts that have arisen as result of the findings of the study. There is the establishment and reasoning of the concept of "restricted access", which refers to the way in which the full range of post-16 opportunities may not be available to all young people. This is conceptualised as a phenomenon that occurs because of a variety of system, systemic, structural and demographic characteristics. It is a new idea and one that is extended further by the original notion of a "vortex of disadvantage".

The idea of the "vortex of disadvantage" is one that was crystallising as the study progressed. It refers to an idea that for young people with similar levels of cognitive ability, their ability to access the full range of post-16 opportunities become more restricted as the context of social disadvantage increases and is related to the interaction of system, systemic, structural and contextual variables with an element that relates to each individual young person. The result of the relationship of the access possibilities to these factors is not a simple one but rather is imagined as highly complex with varying but, in general, reducing access possibilities as the level of socio-economic disadvantage increases. Recently, Francis (2017, Op. Cit.) has identified that disadvantage that might be increased for certain pupils but did not relate their study to post-16 progression or conceptual notions of multiplying factors in relation to disadvantage, as in this conceptualisation. This work also takes account of new additional dimensions – such as type of school- that have been created through recent policies.

Finally, this work is original and extends knowledge because of the mixed methods approach that is used in relation to the issue of post-compulsory education and the focus of the research. In most cases studies, the literature that examines progression (Ball et al., 2003; Smith and Gorard, 2007) has tended to be either quantitative or qualitative studies of these issues. This mixed methods study provides a different way of investigating and illuminating issues that relate to post-16 progressions. The study uses established and innovative quantitative methods to establish patterns of relationships between factors. It then seeks to illuminate these relationships by using qualitative interview techniques to understand the explanations of these patterns, in terms of the way in which they generate, or not, responses from the actors in the field. It is this establishment of the systematic,
systemic and structural patterns and how they relate to the actions and perceptions of individual actors in the field that is unique.

**7.8 Directions for future research**

This study contributes to a body of literature that has examined issues of post-16 progression. However, it is asserted that it extends that knowledge by identifying statistically significant patterns of qualification access and outcomes and illuminating the reasoning of school and college leaders, as well as hearing the learner voice.

Signposting future research, it seems that the following areas are some of those in need of further examination:

1. Has the introduction of a new external accountability measure for schools had any effect on patterns of institutional qualification measured outcome and learner qualification access?

2. Does the delivery and assessment methodology of vocational courses at level 3 prepare learners for the pedagogical model and assessment that they will encounter in higher education? Does this vary depending upon course and institution?

3. What support would be the most effective in enabling improved access for disadvantaged learners to high-performing post-16 provision and for them to succeed in that provision?

4. What impact does the quality and nature of careers advice in secondary school have on encouraging learners in a disadvantaged context from access to high-performing post-16 institutions?

**7.9 Recommendations for policy makers**

7.9.1 The accountability framework

The present accountability regime has the use of statistics as a key component. This is based on the aggregation of pupil-level statistics and then interpreted at a school level for accountability purposes.

If learners are the prime focus of our education processes and systems, and as an understanding of what learning is to the individual is an essentially qualitative task then perhaps more prominence needs to be given to the views of learners. Such an approach
seems unlikely because it does not enable the existing narrative in favour of a positivistic market influenced approach.

Subsequent to the study, the key attainment measure changed from one that was based upon threshold attainment (the 5A*-C GCSE measure, including English and Maths GCSE and equivalent qualifications) to one based on notions of expected progress, “Progress 8”. The prime rationale for, development of, and limitations of “Progress 8” are covered in Chapter 1. However, as covered in that section, early indications appear to be that “gaming” strategies are still being implemented, at the expense of some pupils. So even though the measure has changed, the pernicious relationship between accountability measures and “gaming” strategies still seems to have existed. So whilst accountability is not in the same place at the present as it was during the study, the findings can still be regarded as relevant.

The difficulty that policymakers face is how to tell how well a school is educating young people when there is over-reliance on one measure. Such a question may form the basis of a post-doctoral research project.

7.9.2 Removing access bias in post-16 admission decisions

Most post-16 provision in the English education system is publicly funded and therefore, arguably, there should be equality of opportunity to access these high-performing destinations. It seems clear that because of the way in which some schools in this study in disadvantaged contexts construct their curriculum operations, some pupils who could, arguably, cope with an academic diet at post-16 at high-performing destinations might be denied the opportunity to gain access. This seems to be as a result of the qualification mix, they are able to access. It is suggested that there is parity of esteem, outside of English and Maths GCSE, between academic GCSE grades and the grades awarded for vocational courses, when the progression qualification is in a similar field of study. For example, a distinction in a vocational science qualification should be regarded as a suitable foundation for access to an A Level Science subject. If needed, remedial action would be agreed by the admitting institution and the candidate to address any gaps in required knowledge or skills.

Similarly, post-16 destinations need to understand that attainment at GCSE is strongly correlated with socio-economic context. This implies that if equitable access to high-performing post-16 destinations is an objective of policy, then admissions procedures and protocols will need to be constructed recognising the educational context of the applicant.
The key here would seem to be the potential for applicants to cope, thrive and develop in such settings, rather than access being effectively restricted to the context of their secondary education.

7.9.3 Information, advice and guidance

It was clear from the pupil participants in this study that there was a differential in the impartiality, quality, coherence of advice about post-16 progression, depending on whether a pupil was educated in an advantaged or disadvantaged context. In the case of the advantaged settings it was noted that information, advice and guidance was structured into the curriculum experience and was cogent and coherent. The same did not apply in the case of those pupils in disadvantaged settings. Advice appeared to be ad hoc, not guided by professionals and in one location, designed to encourage pupils to remain in an institution, almost regardless of whether that choice met the pupils' needs and requirements. This would suggest an enforceable policy that ensures all pupils gain access to high quality independent progression advice regardless of setting. For the sake of clarity, the recommendation is that careers provision should be provided by independent organisations, free of contractual relationships with the secondary education setting and not left to staff employed by the school. To do otherwise leaves the process open to manipulation that contributes to further entrenchment of inequality of educational opportunity.

7.9.4 External assessment procedures and protocols

The research seems to suggest that some schools engage in unethical behaviours in relation to external assessment procedures that are required by the examination bodies for implementation by centres to ensure the integrity of the examination system. It is surmised that the scale of breaches may be hidden due to the consequences if they are reported to the appropriate authorities. It could be that this situation requires a two-pronged attack. Firstly, assessed coursework and assignments in both academic and vocational subjects should be removed from assessment activities. The comment is not made lightly, but it is suggested that, given the accountability pressures on schools and colleges, the temptation, as reported, to manipulate results is too great.

Secondly, exams need to be administered and supervised by independent persons, who are responsible and contracted to the exam boards, rather than having a loyalty to individual
institutions. This would appear difficult but could be organised on a local basis using appropriately trained individuals, who might already be employed by schools and colleges.

7.10 A final word

Even though the accountability measures may change, I argue that this study still has relevance and resonance. It shows ways in which schools operate in the light of complex and dynamic accountability systems. The key is the relationship of school operations to accountability measures and the effects that they might have on learner opportunity, in this case, to have a full choice of the way in which they progress in education. If schools attempt to game accountability measures then the study seems to reveal that learner choice and opportunity is adversely affected. There is some emerging evidence that this is the case in England even though the key accountability measure has changed.

The research arose out of personal experience. I have seen too many bright young people face barriers to progression and to achieving their aspirations. Such a situation, I believed, did not arise because of their lack of ability, determination or resilience but because of the structural systemic and systematic inequalities within the English system. I know that the findings and conclusions of the study do not provide definitive answers but hope nonetheless that they shine a light on areas of concern and suggest some changes that might help to remove some of those barriers.
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Appendices

APPENDIX 1 – ETHICS APPROVAL LETTER

Sheffield Hallam University

Our Ref. AM/SW/66-MAR
18 September 2015
Nick Marshall
Unit 7 Science Park
Sheffield Institute of Education
Faculty of Development and Society
City Campus
INTERNAL

Dear Nick,

Request for Ethical Approval of Research Project

Your research project entitled “Learner Destinations at Post-16: The Impact of learner outcomes and school experience” has been submitted for ethical review to the Faculty’s rapporteurs and I am pleased to confirm that they have approved your project.

I wish you every success with your research project.

Yours sincerely,

[Signature]

Professor A Macaskill
Chair
Faculty Research Ethics Committee

Office address:
Business Support Team
Faculty of Development & Society
Sheffield Hallam University
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APPENDIX 2 - ADMISSION ARRANGEMENTS - NORTHERN CITY SECONDARY SCHOOLS - 2015/16

Proposed Oversubscription Criteria for Statutory School Age at Community and Voluntary Controlled schools 2015/16.

1. Summary

1.1 This report is submitted to ensure that the Authority meets its statutory duty with regard to admission arrangements to its schools for the 2015/16 academic year. The Authority is required to determine its admission arrangements for Community and Voluntary Controlled schools by 15 April 2014. These arrangements include those for the normal year of entry, i.e. Reception, Year 3 (separate junior schools) and Year 7. Where the Authority admits external pupils to Sixth Form schools (Year 12) it must also determine admission arrangements.

1.2 The Authority’s proposed arrangements comply with the requirements of the statutory Admission Code of Practice. Its admission arrangements include the oversubscription criteria and other detailed information that explains how the Authority manages this function.

1.3 Where there are no proposed changes from the previous year, there is no requirement to consult, subject to the requirement that the Authority must consult on its arrangements at least once every 7 years. There are no proposed changes to those arrangements approved for 2014/15 and therefore the Authority has not consulted. It is still required to determine its arrangements.

1.4 The City Wide Learning Body has commissioned a review of the current admission arrangements in a northern city including the Council’s current oversubscription criteria, to establish whether or not they provide the best outcomes for the families. It is hoped following the review that a common policy can be agreed, which can be supported by all schools to provide a fair and equitable system. If there were to be any recommendations to change current criteria, the earliest that they could be implemented would be for the 2016/17 academic year, following a statutory period of consultation of a minimum of 8 weeks between 1 November 2014 and 1 March 2015.
2. What does this mean for northern city People?

2.1 There is a clear link between school attendance and attainment. Providing parents with a good opportunity of obtaining a place at their preferred school means that a child is more likely to have regular attendance. The Authority continues to operate a catchment area based system, which remains popular with parents. In September 2013 75% of parents applied for a place at their catchment secondary school.

2.2 The admission arrangements in a northern city enable parents to apply for up to three preferred schools. Parents are provided with access to practical information with regard to the application process and to individual school based information. The admissions process is explained to parents in the Composite Prospectus “A Guide for Parents” which is a statutory document produced by the Authority every year. It includes details of all schools with the exception of independent schools.

2.3 The catchment area system helps parents plan their children’s education from primary to secondary school, with every primary school having formal linked status with at least one secondary school.

2.4 Whilst the Authority cannot provide a place at every parents preferred school because of oversubscription, it does nonetheless attain a high number of satisfaction with 89% of Reception applicants in 20/13/14 obtaining a place at one of their 1st preference primary school and a further 7% obtaining places at their 2nd or 3rd preference. For Year 7 91.5% were offered their 1st preference and 6% their 2nd or 3rd.

3. Outcome & Sustainability

3.1 The Authority operates under the provisions of the statutory Admission Code of Practice which aims to provide local communities with a greater voice when it comes to issues such as school places and the types of schools they want for their children.

3.2 Residents are treated fairly and equitably. The Authority ensures that all schools comply with the rules laid down by the Code of Practice.

3.3 The Local Authority co-ordinates applications with other Admission Authorities on behalf of parents so that they only have to make a single application. The Local Authority is also the body that makes a single offer to the parent, ensuring transparency and consistency. The single offer is made on the national allocation dates of 1 March for Year 7 and 16 April for Reception and Year 3.
4. **Main Body of Report**

4.1 **Special Educational Needs**

Section 324 of the Education Act 1996 requires the Governing Bodies of all schools to admit a child with a statement of special educational needs that names their school. This is **not** an oversubscription criterion, schools are required to admit a child in these circumstances whether they have places or not.

4.2 **Northern City Council Oversubscription Criteria**

The Local Authority has an overriding duty to comply with parental preference wherever possible. In the event of oversubscription places will be offered in the following order of priority:

(i) **Priority One**

**Looked After or Previously Looked After Children**

All Admission Authorities **MUST** prioritize the admission of “Relevant Looked After Children” within their admission criteria. A “Relevant Looked After Child” is defined as: “a child who is looked after by a local authority in accordance with section 22 of the Children Act 1989(b) and who (a) is looked after at the time an application for admission to a school is made and (b) in relation to whom the local authority has confirmed that the child will still be looked after at the time when the child will be admitted to the school.

Regulations introduced within the new Admission Code of Practice extend this category to also include children who were looked after but ceased to be so because they were adopted or became subject to a residence order or special guardianship order.

The following is required of faith schools:

Admission authorities for faith schools may give priority to all looked after and previously looked after children whether or not of the faith. They must however give priority to looked after children and previously looked after children of the faith before other children of the faith.

Where the admission authority for the school also provides for the admission of pupils not of the faith, then priority shall be given to a relevant looked after child or previously looked after child not of the faith over another child not of the faith.
Looked After or Previously Looked After Children

– Admissions outside the normal admission round.

In accordance with the Regulations described above, Looked After Children and previously looked after will be prioritized for admission at their preferred school when an application is made for other year groups.

(ii) Priority Two

Attendance at the linked Infant School

This category applies to the transfer from Year 2 to Year 3 at separate linked Infant and Junior Schools. Priority will be afforded for places at the Junior School to children who have attended the designated linked infant school and whose parents apply for a place there. Whilst children attending linked infant schools will be prioritized after those in category one above, admission cannot be guaranteed. In the event of oversubscription, normal admission priorities (i.e. those at iii, iv, v and vi) will be applied.

Children living in the catchment area for a separate junior school who apply for a place there but do not attend the linked infant school will be considered after any child that does attend the linked infant school.

(iii) Priority Three

Catchment area with Sibling

Children who normally reside with a parent or person with parental responsibility in the defined catchment area and who will have a brother or sister at the preferred school on the day of admission will be considered next, except for admission to separate junior school as described in 2 above.

The definition of a sibling for these purposes is given at (v) below.

This means that all catchment/sibling applications are prioritised before catchment applicants irrespective of distance. The normal distance tie-breaker will apply within each category.

(iv) Priority Four

Catchment Area

Children who normally reside with a parent or person with parental responsibility in the defined catchment area but will not have a sibling at the preferred school at the point of admission will be considered next.

In the event of oversubscription, tie-breakers will be used as describe below.
(v) Priority Five

Siblings

A sibling is a child who permanently or usually lives at the same address as:-

1. a brother and/or sister

2. a stepbrother and/or stepsister (to include half-brother/sisters)

and in both cases will be attending the preferred school at the point of entry. Where the requested school is a separate infant or junior school, attendance at the linked junior school or infant will be included.

In circumstances where an older sibling attends a school sixth form, Sibling priority will only be afforded if the older sibling attended the school prior to Y12.(vi).

Priority Six

Contributory Feeder School (Year 6 to Year 7 only)

Applicants for a Year 7 place whose children attend a designated feeder primary school but do not fit into any of the above categories 1, 3 or 4 above will be considered next. (Secondary Schools only)

Parents are advised in the Composite Prospectus “A Guide for Parents” that if they choose to send their children to a non-catchment primary school, they have a lower priority for entry to the linked secondary school and that there is no guarantee of a place there.

(vii) Priority Seven

Children of Services personnel will be prioritised where an application is received outside the normal admission round.

Viii) Priority Eight

All other applicants

Any applicant who does not fall into one of the above categories will be considered next.

Tie Breakers

For any admission category that is oversubscribed there are two stages of further consideration.

A. Exceptional medical, social or special educational needs

Where exceptional medical, social or special educational needs are demonstrated and supported by a professional, an application may be prioritised by the Admission Committee (AC) but only within its admission category. It is the parent’s responsibility to provide supporting evidence.
The applicant must supply sufficient supporting evidence from relevant professionals at the time of the original application, for the Authority to consider whether an individual case constitutes exceptional circumstances to be prioritised. In any event, the evidence must support the view that the child must attend the school applied for and that they could not have their needs met at any other school.

Applications will only be submitted to the Admission Committee for further consideration if they are accompanied by supporting evidence.

B. Distance

In circumstances where exceptional circumstances are not demonstrated, the final tie-breaker will be the distance from the home address to the school building. This is a straight-line measurement from the centre of the house to the centre of the school building.

Where the remaining place could be made for a number of children living equi-distant from the school the determination of the single offered will be made by random allocation:

The random allocation will:

i) be independently supervised by a representative of the Legal and Governance Service;

ii) take place on a date and time notified in advance to the participating parents so that they can attend as witnesses.

4.3 Equal Preference

The statutory Admission Code of Practice made the practice of offering places on a “First Preference First” basis unlawful. All Admission Authorities in Sheffield must operate an Equal Preference system when determining the final school offer. This means that each of the three preferences will be considered as equal preferences and oversubscription criteria applied to each preference irrespective of ranking. The ranking of the preferences is relevant only where the applicant is eligible for more than one school. In this case a place will be offered at the highest ranked school for which the child is eligible.
4.4 **Waiting Lists**

A waiting list will be maintained until 31 December 2015 for transfer to separate junior schools (Year 3) and transfer to secondary schools (Year 7). A waiting list will continue to be maintained for the full academic year for admission to Reception, i.e. until 31 August 2015.

5. **Catchment Area Amendments**

5.1 **An Academy**

The Authority is currently consulting on minor changes to the catchment areas for A, B and C Primary Schools from September 2015. The amendments are necessary as a result of proposals to create a distinct “carved out” catchment area to serve the new Academy. A number of addresses that currently fall into A, B and C Primary Schools would change to an Academy under the proposals. Any changes to current catchment areas will affect parents of children beginning Reception in September 2015.

5.2 **Another Academy**

The Authority is also consulting on minor changes to the catchment areas for D Primary School and E Academy (Formerly F Primary). The proposed changes would reduce the current catchment area for D whilst extending the catchment area for E.

It is proposed that the North West part of the current catchment area for D be redesignated to become the catchment area for the new Another Academy.

5.3 Consultation on both proposals ran until 21 February 2014, there were no responses received. Final arrangements will be determined by 15 April 2014.

6. **Co-ordinated Admission Schemes**

6.1 **The Authority** is required to co-ordinate all applications for residents applying for a place in the “normal year of entry” – i.e. Reception, Year 3 (Separate Junior schools) and Year 7.

This means that a parent completes the Common application form, expressing up to three preferences and the Authority liaises with schools and other local authorities on their behalf.

6.2 The Local Authority will inform the parent of the outcome of their application, including information on the appeals process if a place if refused at any of their preferred schools.

6.3 The Authority has determined co-ordinated admission schemes as required by law for the 2015/16 academic year.

7. **In-Year Admissions**
7.1 There is no longer any requirement for the Authority to co-ordinate in-year applications. An in-year application is made outside the normal year of entry.

7.2 Headteachers were consulted in the Spring Term of 2013 and agreed that they wished the Authority to continue its co-ordination roll for in-year as well as normal year of entry. This was endorsed by the City-Wide Learning Body.

7.3 Effectively the Local Authority co-ordinates all admission applications for statutory school aged pupils.

8. Admission Arrangements for External Applicants for Sixth Forms

8.1 The Local Authority co-ordinates sixth form admission arrangements for external applicants on behalf of all City Sixth Form Schools:

Faith School A (Academy)
Faith School B (Academy)
G (Academy)
H (Foundation)
I (Community)
J (Academy)
K (Community)
L (Academy)
M (Academy)
N (Academy)
O (Academy)
P (Academy)

Sheffield Local Authority is the legal body with responsibility for determining arrangements for its community schools I and K.

8.2 There is no statutory requirement to co-ordinate sixth form admissions but the Authority has undertaken this roll since 2005 and continues to do so as a traded service.

8.3 The advantages of co-ordination are that the pupil only has to complete one application form and all pupils are restricted to a single offer, ensuring that available places are maximized. Furthermore all schools operate the same closing and allocation dates so all pupils are treated equitably.

8.4 The advantage for the schools is that all applications are managed centrally.
9. **Proposed Sixth Form Admission Arrangements for 2015/16**

9.1 The Local Authority is responsible for determining arrangements for the admission of external pupil to sixth form at I and K Community Schools. Proposed oversubscription criteria are set out below.

9.2 Exceptional Circumstances

It is important that appropriate provision is made for pupils in exceptional circumstances. For some applicants the Admission Authority may wish to exercise reasonable discretion for an individual young person who could benefit from the programme offered their sixth form but because of his/her exceptional circumstances has not met the minimum entry criteria.

These circumstances may include pupils with English as a Second Language where the current school can demonstrate that the pupil would benefit from attending the sixth form but may not meet the minimum entry criteria. Any placement in this category would require careful discussion and the views of the school and any potential prejudice to the provision of efficient education and/or the efficient use of resources as a result of the placement would always be considered before a decision is made. The incidence of such cases is expected to be low.

We are aware that exceptional circumstances do sometimes affect pupils’ grades. As such it may be that we make an offer to a pupil who does not achieve or is not expected to achieve the minimum entry criteria or individual subject criteria.

These exceptional circumstances will be considered on an individual basis and may include long term illness; immediate family bereavement in examination season. This category may also include pupils who are or who have been “Looked After” and pupils with special educational needs and/or physical disability with a requirement for adapted buildings and/or facilities which can only be met at this particular school.

9.3 Local Authority Oversubscription Criteria

Where there are more applications from external candidates than there are places, places (subject to meeting the entry requirements) will be offered in the following order:

1. Looked after pupils - this category also includes pupils who were previously looked after but ceased to be so because they were adopted or became subject to a residence order or special guardianship order. The pupil should meet the minimum entry criteria described below. Exceptional circumstances may be considered.

2. All other pupils who are predicted to meet the minimum entry requirement of 5 A*-C GCSE passes. Some subjects will also require a minimum subject grade at GCSE. Please see details in the school prospectus.
3. If an entire category cannot be admitted without exceeding the number of places available then places will be offered to those pupils within the category that live closest to the school. All distances will be measured in a straight line from home to school.

9.4 Schools that are their own Admission Authority will be required to determine their own admission arrangements for 2015/16. Headteachers have been advised about the steps they must take to ensure that arrangements for 2015/16 are determined and are lawful.

9.5 G, L, M,N and O have indicated that they wish to follow the Local Authority’s arrangements, these schools have been advised that they must still ratify the arrangements.

9.6 H, J and P will follow the Authority’s arrangements but will prioritize applications from G and Q, R and S respectively.

9.7 Faith School A and Faith School B Schools will determine their own arrangements but will remain part of the co-ordinated arrangements.

9.8 The statutory timeframe for consulting on 2015/16 arrangements begins on 1 November 2013. Consultation must take place for a minimum of 8 weeks and must finish by 1 March 2014. Arrangements must be determined by 15 April 2014 at the latest.

10. **Legal Implications**

10.1 The Authority must determine admission arrangements for its Community and Voluntary Controlled schools. The implication of not doing so would be that the Authority would be in breach of its statutory duty.

11. **Reason for Recommendations.**

11.1 In order to comply with its statutory duty, the Local Authority is required to determine its Admission Arrangements for the 2015/16 academic year. There are no proposed changes to the arrangements that were approved for 2014/15.
12. **Recommendations**

12.1 The Executive Director: Children, Young People and Families in consultation with the Cabinet Member for Children’s Services are requested to:

(i) Determine the proposed Admission Arrangements for Community and Voluntary Schools for the 2015/16 academic year.

(ii) Determine the proposed Sixth Form Admission Arrangements for external applicants for the 2015/16 academic year.

(iii) Note the overall co-ordination roll undertaken by the Local Authority on behalf of all Sixth Form Schools.

(vi) Note the possible catchment area changes highlighted at paragraph 5.
APPENDIX 3 - FAITH SCHOOL B ADMISSIONS POLICY (RETRIEVED 17 NOVEMBER 2013)

1

Diocese of Northern City
Admissions Policy
for
Faith School B Sixth Form
for the Admission Year 2014/2015

Introduction
Within the Northern City, the Catholic community has a rich tradition of nurturing and developing high quality Christian Education. In continuing this rich tradition, the Catholic Diocese of Northern City is committed to maintaining and developing these schools for the benefit of the Common Good.

Parental Preference
The Local Authority UCAS Progress and Common Application Form provides the opportunity for parents/carers to express up to three choices of schools in rank order of preference. You are invited to submit up to three ranked preferences on the Local Authority’s Common Application Form. Applications will be considered on an Equal Preference basis.
The Published Admission Number i.e. the minimum number of places that will be available to external candidates is 75

Criteria for Admission
In each category places will be prioritised for children who are looked after or previously looked after children who are not Catholic. New Regulations introduced within the new Admission Code of Practice extend this category to also include pupils who were looked after but ceased to be so because they were adopted or become subject to a residence order of special guardianship order. (Footnote 1)

Category 1
Pupils who are already at Faith School B. (They will apply using the school’s internal application procedure and through UCAS Progress).

Category 2
Pupils in diocesan secondary schools (Footnote 2) and Catholics from other secondary schools (Footnote 3). (Pupils from other schools in Northern City will apply through UCAS Progress and pupils from schools outside of Northern City will apply using the Common Application Form procedure). 2
Category 3
Pupils who attend a Community, Voluntary Aided, Foundation, Trust, Independent School or Academy. Within this category there will be discretion to offer places to pupils facing exceptional circumstances as described in the Admissions and Oversubscription Criteria for entry to Northern City Sixth Form schools for External Pupils – Academic Year 2014-15 (Footnote 4). (Pupils from other schools in Northern City will apply through UCAS Progress and pupils from schools outside of Northern City will apply using the Common Application Form procedure).

Category 4
Pupils who attend schools other than the Community, Voluntary Aided, Foundation, Trust, Independent School or Academy. (Pupils from schools outside of Northern City will apply using the Common Application Form procedure).

Criteria that will be applied if there are more applications than places at the school
Where there are more applications for admission than the planned admission number stated, the Governing Body will apply the following criteria in strict order of priority:
Should the planned admission number be reached mid category, the Governing Body, as the admissions authority will make a decision based on distance – with priority for admission being given to children who live nearest to the school as the crow flies. The distance will be measured from the main entrance of the pupil’s home to the main entrance of the school by the Local Authority and provided to the school. (Footnote 5)
In circumstances where two or more children live the same distance from the school the offer of a place will be decided by drawing lots. The first name drawn will be offered the place.

Minimum Entry Requirement
The minimum entry requirements apply equally to all categories:
In agreement with other schools, this will be based on the criteria set out in the Admissions and Oversubscription Criteria for entry to Northern City Sixth Form Schools for External Pupils – Academic Year 2014-15, which sets out grades for pupils who are predicted to meet the general minimum entry requirement, and subject grades. Within the category there will be discretion to offer places to pupils facing exceptional circumstances as described in the Admissions and Oversubscription Criteria.
All pupils must meet a minimum entry requirement for entry to the sixth form:
• for AS/A2 (level 3) courses the minimum entry requirement is normally 5 or more A*-C grades at GCSE including English Language and Maths (except under exceptional circumstances)
for double or single award A Level (level 3) the minimum entry requirement is
**normally 5 or more C grades at GCSE** including English Language and Maths
(except under exceptional circumstances).

A further minimum requirement may be set in terms of the **required subject grade** for some specific courses. These indicate the kind of performance at GCSE that is required to be successful in the Post-16 course applied for. A table of school subject entry requirements is available in this prospectus.

For further details of the Sixth Form Admissions arrangements, please contact
Mr., Sixth Form Manager: faithschoolb.co.uk

**Footnote 1**
Definition of “Looked after children”
A Looked After Child is a child who is (a) in the care of a local authority, or (b) being provided with accommodation by a local authority in the exercise of their social services functions (Sect 22(1) of the Children Act 1989). A previously Looked After Child is a child who immediately after being looked after became subject to an adoption, residence or special guardianship order

**Footnote 2**
Catholic Feeder Schools for Admission into Notre Dame VI Form
- Faith School A
- Faith School D
- Faith School E
- Faith School F
- Faith School G
- Faith School H

**Footnote 3**
Catholic children are children who have been baptised into the Roman Catholic Church, those formally received into the Roman Catholic Church, Catechumens, Candidates for Reception (those formally preparing to be received into the Roman Catholic Church) or those members of Churches who are in Full Communion with the Roman Catholic Church.
A list of Eastern Catholic Churches which are in full communion with the Roman Catholic Church is available from the Diocesan School’s Department.

**Footnote 4**
Exceptional Circumstances
It is important that proper provision is made for pupils in exceptional circumstances. For some applicants the Admission Authority may wish to exercise reasonable discretion for an individual young person who could benefit from the programme offered in a sixth form school but because of his/her exceptional circumstances has not met the normal entry criteria. These circumstances may, for example include asylum seekers, pupils with special educational needs which can only be met at a particular school and pupils with a physical disability who require adapted buildings and/or facilities. These circumstances may also include pupils with English as a Second Language where the current school can demonstrate that the pupil would benefit from attending the sixth form but may not meet the normal admission criteria. 4
Footnote 5

Place of residence
A pupil will be deemed to live at the residential property at which the parent or persons with parental responsibility for the pupil resides at the closing date for receiving applications for admission to the school.
Where parental responsibility is held by more than one person and those persons reside in separate properties, the pupil’s ordinary place of residence will be deemed to be that property at which the pupil resides for the greater part of the week.

Footnote 6

Late Applications
Late applications will be dealt with in accordance with the criteria as set out above.

Footnote 7

Waiting List
Waiting lists will be dealt with in accordance with the criteria set out above.

Footnote 7

False Information
1. Where the Governing Body has made an offer of a place at this school on the basis of a fraudulent or intentionally misleading application from a parent, which has effectively denied a place to a pupil with a stronger claim to a place at the school, the offer of a place may be withdrawn.
2. Where a pupil starts attending the school on the basis of fraudulent and intentionally misleading information the place may be withdrawn by the Governing Body, depending on the length of time that the pupil has been at the school.
3. Where a place or an offer has been withdrawn, the application will be re-considered, by the Governing Body and a right of independent appeal offered if the place is refused.

Appeals against the Governing Body's decision to refuse admission

If a place is not available, parents have the right of appeal to an independent panel.
**Entry Requirements**

The standard entry requirement for an AS/A2 or Level 3 BTEC programme is 5 subjects at A* to C including a grade C in English Language. This is common across the 11-18 schools. The following is a list of specific requirements for some subjects:

<table>
<thead>
<tr>
<th>Course</th>
<th>GCSE Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>B in Art or Graphics</td>
</tr>
<tr>
<td>Biology</td>
<td>B in Biology or Additional Science B in Mathematics</td>
</tr>
<tr>
<td>Business Studies</td>
<td>C in Mathematics and grade C at GCSE Business Studies if taken</td>
</tr>
<tr>
<td>Chemistry</td>
<td>B in Chemistry or Additional Science B in Mathematics</td>
</tr>
<tr>
<td>Computer Science</td>
<td>B in Mathematics and C in Computing, if taken</td>
</tr>
<tr>
<td>Design &amp; Technology : Food Technology</td>
<td>C if taken, or C in Mathematics</td>
</tr>
<tr>
<td>Design &amp; Technology : Product Design</td>
<td>B in a relevant Design Technology subject, such as Product Design or Resistant Materials</td>
</tr>
<tr>
<td>Design &amp; Technology : Textiles</td>
<td>C in Textiles or relevant Design Technology Subject</td>
</tr>
<tr>
<td>Design and Technology : Systems &amp; Control</td>
<td>B in a relevant Design Technology Subject</td>
</tr>
<tr>
<td>Drama and Theatre Studies</td>
<td>C in Drama if taken</td>
</tr>
<tr>
<td>Economics</td>
<td>B in English and Mathematics</td>
</tr>
<tr>
<td>English Language</td>
<td>B in English Language</td>
</tr>
<tr>
<td>English Literature</td>
<td>B in English Language and B in English Literature</td>
</tr>
<tr>
<td>French</td>
<td>B in French</td>
</tr>
<tr>
<td>Geography</td>
<td>C in Geography if taken</td>
</tr>
<tr>
<td>Health and Social Care</td>
<td>C in Health &amp; Social Care if taken</td>
</tr>
<tr>
<td>History</td>
<td>C in History if taken</td>
</tr>
<tr>
<td>Mathematics and Further Mathematics</td>
<td>Mathematics - B in Mathematics</td>
</tr>
<tr>
<td></td>
<td>Further Mathematics - A in Mathematics</td>
</tr>
<tr>
<td>Music</td>
<td>B in Music or Grade 5 (ABRSM or equivalent on first study instrument)</td>
</tr>
<tr>
<td>Physical Education</td>
<td>B in GCSE science and a C grade in GCSE PE / BTEC equivalent. Pupils must also regularly take part in at least one sporting activity outside of school at a high level.</td>
</tr>
<tr>
<td>Physics</td>
<td>B in Physics or Additional Science B in Mathematics</td>
</tr>
<tr>
<td>Psychology</td>
<td>B in GCSE Psychology if studied, B in English, C in Mathematics</td>
</tr>
<tr>
<td>Subject</td>
<td>Requirement</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Religious Studies</td>
<td>B in English</td>
</tr>
<tr>
<td></td>
<td>B in Religious Education</td>
</tr>
<tr>
<td>Sociology</td>
<td>B in English Language</td>
</tr>
<tr>
<td>Spanish</td>
<td>B in Spanish</td>
</tr>
<tr>
<td>Music: BTEC</td>
<td>B in Music or Merit at Music BTEC</td>
</tr>
<tr>
<td>Performing Arts (Dance): BTEC</td>
<td>Merit at Level 2 BTEC if taken / C grade in GCSE</td>
</tr>
<tr>
<td></td>
<td>Dance if taken</td>
</tr>
<tr>
<td>sport: BTEC</td>
<td>Merit at Level 2 BTEC if taken / C grade in GCSE</td>
</tr>
<tr>
<td></td>
<td>PE if taken</td>
</tr>
</tbody>
</table>
A High School

School Progress Pathways & Target Setting

At School the curriculum is structured in four pathways, Aqua, Maroon, Blue & yellow.

Each Curriculum area has identified the key skills and knowledge that are essential in each year of the journey from Year 7 to Year 11 to ensure all of our pupils achieve their desired outcomes.

All Students are set targets in all subjects that are based on making more than national average progress. GCSE targets are set for all pupils on entry and pupils are allocated to Progress Pathways in all subjects.
### A Girls School - Guided Options

**Option Blocks**

Option Blocks 48

<table>
<thead>
<tr>
<th>Option Block A – Tuesday</th>
<th>Option Block B – Tuesday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pathway 1</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Years 10 and 11</strong></td>
<td></td>
</tr>
<tr>
<td>Media Studies</td>
<td>History</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Art</td>
</tr>
<tr>
<td>Geography</td>
<td>Performing Arts</td>
</tr>
<tr>
<td>Music Technology</td>
<td>Music</td>
</tr>
<tr>
<td>Food Technology</td>
<td>Psychology</td>
</tr>
<tr>
<td>Spanish</td>
<td>French</td>
</tr>
<tr>
<td>Textiles</td>
<td>Photography</td>
</tr>
<tr>
<td><strong>Pathway 2 Year 10</strong></td>
<td>Health and Social Care</td>
</tr>
<tr>
<td><strong>Year 11</strong></td>
<td></td>
</tr>
<tr>
<td>Music Technology</td>
<td></td>
</tr>
<tr>
<td>Business Studies</td>
<td>Health and Social Care</td>
</tr>
<tr>
<td></td>
<td>Music Technology</td>
</tr>
<tr>
<td></td>
<td>Business Studies</td>
</tr>
<tr>
<td><strong>Pathway 3 Year 10</strong></td>
<td>Work Related Learning (accredited courses)</td>
</tr>
</tbody>
</table>
Year 11

Level 2 BTEC Course (to be decided during Year 10)

OR

Health and Social Care or Business Internship

Pathway 4

Internship in Health and Social Care or Business Studies

Years 10 and 11

Pathway 5

Media Studies

History

Years 10 and 11

Physical Education

Art

Geography

Performing Arts

Music Technology

Music

Food Technology

Psychology

Spanish

French

Textiles

Photography
Another High School - Curriculum Pathways

Curriculum Pathways: Achieving Success and Valuing Others

To help pupils and their parents plan a curriculum that suits their needs and interests the school offers four pathways or routes through Key Stage 4.

To start all pupils must study a core curriculum as required by law. This consists of English, Mathematics, Science, PE and a PHCSE programme.

In addition the majority of pupils at Another will be required to choose a Humanities subject (Geography, History, RE) and a Modern Foreign Language which will enable many of them to achieve the EBacc standard. (Defined as five A*-C grades at GCSE including Maths, English, a Modern Foreign language and a Humanities subject*)

The final element of the curriculum at Key Stage 4 are the Options subjects which allow pupils to personalise their learning by combining subjects and specialise where they have particular interests and abilities. Another can offer up to 18 separate options depending on interest and take up.

*The government only recognises History and Geography as EBacc Humanities subjects. Helsby offers RE as well as it is a traditionally popular and rigorous alternative that leads to Post-16 study

A is a pathway for pupils aiming to enter Higher Education or Employment with training with a widest range of breadth in their options. It is for those who are not yet certain of their future path but want to experience a range of subjects before they become more specialised post-16.

These pupils will therefore study English, Maths, PE and PHCSE in their core curriculum alongside Core and Additional Science. They will also choose a Modern Foreign Language and a Humanities subject. Finally, they will choose three options to complete a GCSE programme of eleven subjects.

S is a pathway for pupils aiming to enter Higher Education or Employment with training with a greater focus on science and associated careers such as Medicine, Dentistry and Veterinary Science. It will not cut off other career routes as the curriculum is designed to retain breadth and balance at this stage.

These pupils will therefore study English, Maths, PE and PHCSE in their core curriculum alongside the separate science subjects, Physics, Chemistry and Biology. They will also choose a Modern Foreign Language and a Humanities subject. Finally, they will choose two other options to complete a GCSE programme of eleven subjects.
V is a pathway for pupils aiming to enter Higher Education, Further Education or Employment with training with a balance between practical, vocational and academic subjects in the curriculum.

These pupils will therefore study English, Maths, PE and PHCSE in their core curriculum alongside Core and Additional Science. In this pathway pupils will opt for a vocational programme instead of a Humanities subject or Modern Language. The vocational programme will provide the opportunity to pick up a mix of GCSE and vocational qualifications in ICT, Construction or Food alongside programmes that will teach skills in managing money, caring for the environment and preparing for work. Finally, they will choose three options to complete a personalised programme. This is a broad and balanced alternative, but it will not meet the EBacc standard due to the absence of the Modern Foreign Language. It will allow pupils who wish to pick a Humanities subject as one of their three options.

O is a pathway for pupils aiming to enter Higher Education or Employment with training with a wide range of breadth in their options. It is for those who are not yet certain of their future path but want to experience a range of subjects before they become more specialised post-16.

These pupils will therefore study English, Maths, PE and PHCSE in their core curriculum alongside Core and Additional Science. They will also choose a Humanities subject, but they will be offered a vocational option (Leisure and Tourism) instead of a Modern Foreign Language. Finally, they will choose three options to complete a GCSE programme of eleven subjects. This is a broad and balanced alternative, but it will not meet the EBacc standard due to the absence of the Modern Foreign Language.
Interview with [redacted]

OK so when I write this up I will write it so that its anonymised

Yeah that's fine yeah yeah

So that you won't be able to

Yeah yeah

So please could you give me some idea of the context of the college?

Well the college is in the [redacted] area that covers some of the most deprived wards in the country, um. I mean at that time had the joint lowest progression rate to higher education in the country and very low participation rate post 16. There were always far too many young people to go post 16 but they all involved traveling. We could either go to the six form schools at the other side of the city or there were well worn routes to go but what college reorganised I mean that some of the curriculum offer wasn’t available locally for young people and the perception was that young people weren't staying on in education, even if they did progress at school. So we were set up with seven schools, um, so we've got seven partner schools. All of our partner schools are below national average in terms of A*–C including English and Maths. And in fact last year, only last year, this recent year, only one school achieved 50%. Um the schools have made significant strides. But what we've done is look at the way they have been.

Radio check – That's alright with me... sorry

How to work the thing anyway

So attainment post 16 is significantly below average. The schools have improved since the college opened when they were in the sort of as I've mentioned, in terms of 5 A*–C but obviously accountability measures have changed the ways of recording attainment have changed and then over the past 4–5 years there hasn't been an improvement so what it means then is that the majority of young people leave school without 5 A*–C including English and Maths and they can't then access level 3 anywhere. So what we did take young people on level 3 courses without English and Maths whereas other Post 16 providers don't so if students decide to do elsewhere they wouldn't be doing a level 2 course rather than a level 3 course. I asked... [redacted]... other schools...

[redacted]

To me what we've got is an issue and that's kind of shaped our curriculum really making sure that we can support those young people. The other key thing I think about context is a very high proportion of students come from disadvantaged post codes so we have the... I mean we have the, the third highest... um, percentage of young people coming from disadvantaged post codes in the sector so I think whereas two London Sixth Form Colleges who are higher than us in terms of levels of deprivation, um, and we also have a lower points score on entry than the vast majority of Sixth Form Colleges so we have the highest proportion of level 3 students with an average GCSE score of less than 5 and that's a significant amount of our cohort. Um, we have a lot of students come to us, as I've said without English and Maths so that's something like around 30% of our level 3 cohort don't have one or the other or both, um, and a significant chunk of, of the rest of them have actually achieved their English and Maths at college so they left school without it so they might have had from level 2, um, we have a very diverse student body, so currently we have around any... think it might be 30% of our students declaring themselves from a White British background.
but the ethnic mix amongst our BME students is quite significant, we have very high volumes of Pakistani but also African, um, Somalian, Yemeni students as well. So we've got quite a, quite a mix. Its not that we've got a single BME group that's non-white population. Now are partner schools are slightly different because they, because they, tend towards two extremes. We've got some of the partner schools, um, which are about, you know, about 90 55% white, and other schools, so Fir Vale for example, is probably 90% Pakistani, well not Pakistani anymore, that's changed but BME. So students come here with quite different experiences, um they might have come from quite a diverse learning community or actually not depending on the schools.

Ok, you, one of the things that you said was about, you've had to change the curriculum um, could you just talk

Well

That one through

Well

Well from where you were and where it is now.

Well I think, I was talking about the prior attainment in our schools has shaped our curriculum so we we've made some changes but to be honest when the College opened it had a very different profile to most Sixth Form Colleges. Because we knew that at the time it would be more than 50% it would be about 70% of the young people in the area couldn't access traditional A levels. So we had quite a lot of Level 1 and Level 2 work, we always have had, but also quite a significant volume of level 3 vocational and the wrap around support for English and Maths alongside that and that's increased since we opened so we have progressively introduced more blended pathways for students really so not just having the full width extended diplomas for BTEC but all, having more of the single A level equivalents as well. So that students can combine some A level study with vocational study or they can do a sort of mix of vocational subjects rather than having to do the extended diploma. We always did a lot of English and Maths but we've really probably about six years ago we really started to up the ante on that because we just recognised that, long before OFSTED started to witter on about literacy that that was the thing that was holding our students back. If anything, yes, we were always very committed to getting students those passport qualifications when they left, so that they could access university courses. So in a sense were found the transition to post 16 study programmes much less of an issue than most colleges because we've always done the English and Maths component of it.

Ok so you think that you've identified, it's interesting isn't it that there's been some sort of stability and some sort of slight rise in performance.

Yep

On the key threshold measure but you're noting that the English and Maths is still in deficit. Is that what you're

Yes

I'm not trying to put words in your mouth no no I'm not trying to... use deficit in a pejorative sense.

No no the English and Maths definitely is an issue because we get young people come in who we used talk about slightly profile, you know that they have some things that they are very good at but they may have really low Maths and English.

This begs the question about barriers on access levels 2 exam qualifications, are our BTEC equivalents? How are they then delivered?
"Only one way to get success for these kids."

"Yeah, still and yeah, and the equivalence isn't there, um I think I'm not sure what's going on in terms of their applicational qualifications, they don't give a straight equivalence."

"So in terms of their applicational qualifications, they don't give a straight equivalence, I know that. Now, we used to and we still will we'll give an absolute equivalence to a vocational qualification if the student is wanting to study in that same area, but if they are wanting to do an A level package, then we need to look at their GCSE profile because otherwise they just aren't going to cope."

"Ok so this is normally it, so have your noticed different schools doing different things with them?"

"Yeah, oh absolutely. And to be honest if you ask me now to give you patterns I probably couldn't but what we have seen is young people coming through with some strange, very strange mashes of the vocational courses, so what we used to get was the young person who's played but, you know, they'd got a first diploma in sport and another GCSE and it was fairly obvious that the progression route for them would be level 3 sport, should they wish to do that. Um, you now have kids coming mainly with one GCSE or two GCSE equivalences in BTEC courses and they may have passed but they don't have the subject knowledge so they're struggling to get a level 3 course.

"I mean, you now have kids coming mainly with one GCSE or two GCSE equivalences in BTEC courses and they may have passed but they don't have the subject knowledge so they're struggling to get a level 3 course."

---

"And that's not going to engage somebody who already got level 2 qual if they just don't have their English or Maths, um, certainly um, like the one kid I seen S A* C in five different subjects so historically that meant that they would discount any of the GCSE equivalencies before the results came out."

"Before, now that's coming, now obviously the landscape has changed and fewer kids are coming through with that, um, but yeah they are still coming through with it, at least."

"Yeah, but still and yeah, and the equivalence isn't there, um I think I'm not sure what's going on in terms of their applicational qualifications, they don't give a straight equivalence, I know that. Now, we used to and we still will we'll give an absolute equivalence to a vocational qualification if the student is wanting to study in that same area, but if they are wanting to do an A level package, then we need to look at their GCSE profile because otherwise they just aren't going to cope."

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---

"So, to clarify, you're saying that they are coming here with the pass, yes."

---

"But they might not have anything else you see, so they might not have enough to go onto a level 3 programme but if we put them onto level 2. They'll effectively be redoing the qualification they've got from school, so that becomes quite problematic."

---

"Are there any problems for the student and the college?"
the joined up planning process um, I don't necessarily like the joined up planning process when the local authority were doing it, but (laughs) there was just isn't need whatsoever so um, it is really a marketplace because if you have a tagged funding stream i.e. you get paid for the number of students you recruit in one year that's the money that you get next year. No longer do you have to negotiate with the funding body about growth if you get em if you can you have the money. I think that leads to some dodgy practice. I'll be honest.

Oh would you like to, can I explore that a bit more?

You can.

bear in mind that it'll be confidential.

Anonymised. Yes um right, now this is anecdotal but um, I know that each year we get a significant number of young people who have started out there post 16 studies at another Institution. Um and failed.

Yes.

Or been told that they've failed so we get young people who are getting um, it's and it's as in that as qualifications and they're told that they can no longer carry on at the sixth form school where they are studying and some colleges as well actually um and so they come in saying but I've failed and I've said well no you haven't you've got qualifications here. But I'm not allowed to carry on where I am, now if it were a general question, and I'm not for a moment suggesting this doesn't happen (33:18) The fact that schools are judged on retention and they're certainly not judged on A to A2 progression, a critical person might think that you get as many kids as you can at the start of the year to count on day 42 when you get your funding count and then you don't really care whether they stay the course or not because you're not going to judge if they drop out because you're only judged on the pass rate and if there are a very critical person I could think there was a lot of this going on. But schools are quite happy to just get kids on go. I'm sure that individual managers would not say that's the case and I'm sure that there are lots of people, you know, who really care about the young people they're looking after but it does seem to be a systemic problem that lots of young people drop out at 17 from school sixth forms.

Do you think that, um, in the city that there's a differential in the entry qualifications that are required for access to post 16?

I know there are, yeah (laughs). Yeah definitely. To be perfectly honest we are more in line for our A level with other providers than we used to be, um, but, um, the majority of right, the post 16 schools tend not to offer BTECs anyway they tend to just be partly A level while they advertise the entry requirements is 5 A*-C including English and Maths in reality you generally need to have a D in the subject that you wish to study. So, in effect, if you want to do A levels you need to have 4 A*s so it's a nonsense to say its 5 grade Cs including English and Maths

So its GCSE only, they're not really?

They don't really look at vocational qualifications no they don't. Um probably, I think have changed now but they used to have wonderful wonderful, almost like a lot of things about their entry requirements which was to have something like 6 GCSEs is a grade B or above I don't know what that even means, but to do an A levels in vocational or A level.

Sheffield college always used to require both English and Maths, um, at GCSE, incidentally they would then put young people on a level 2 course and only allow them to take one of English or Maths
That's very interesting. Going on there a bit, um, you've, you've indicated you've made decisions about which students to admit, basically everyone, yeah.

Yeah.

Background, widening participation, um, how many applications do you think that you receive for entry for post-16 study a year?

I can, I can give you the figures, um, we get, many more applications than convert to enrollments so it's somewhere in the order of um, mmm. up to eight hundred applications we've lost last year to recruit around three hundred and fifty new students, I probably get that slightly wrong, um, so we have multiple applications out there, we know that um, but it's always been that way. We used to have a conversion rate of just below 50% but we've improved that to round about 60%. But that's not unusual; I know that there are a similar conversion and actually they've got pretty much the monopoly in, no, yeah.

So where are they going then, is there, that's what I'm quite interested in too?

Well, we've just got some interesting market share analysis, so we've got, I bought a report on a modelling tool called vector, which can show us where our students come from, show us also where young people from areas we draw from, from where they go to. It's an absolute relic, I mean our, our biggest, um, competitor, by a long way, is, is just given the breadth of their curriculum, so and the number of sites they've got that it's perhaps not surprising, um, there is a significant proportion of young people from the area that go to Sixth Form on schools on the other side of the border, which is, which is, which is high as people would imagine, I mean it's something that we want to.

Improve our share of but young people will also go to. They do go out of city and well, um, we have, very different recruitment patterns from the different schools, um, so for some schools we're very much a sort of, think it's knowledge, um, a safety net option. So we'll get a lot of applications but not many enrolled.

That's very honest.

Well you know, it's not surprising, um, and then there are other schools actually, we'll have very good conversion rate so, a lot of young people will come to us. Interestingly we have, we certainly have the, the, the, largest market share in the area, um, most of the students will come to us, we, we, we, we, and 20% of our students come from within two miles of the college, so it's very local.

So: What's the school in.

That's the one at the bottom of the.

No, just because they live in, doesn't mean they go to the school in.

No, no, yeah.

There a lot of stability around our partner schools young people travel quite a lot, so if you look at bus stops, as you come in the morning you can see an array of different uniforms.

Yeah, yeah.
They might be outside one school putting a bus to somewhere else so, in terms of residence we get most of the young people from [redacted], that doesn’t mean we get them all from there, one of our biggest um, partner schools but um yeah, the rest of the city.

Yeah, Yeah the interesting

(indistinct)

Why do you think that they choose [redacted]

Um, a lot of students, this is kind of anecdotal but I think, um, anecdotal isn’t necessarily wrong a lot of students come to us because they’ve had siblings come here, we’ve got quite a good track record.

Hmm

(23.07) with families in the local area so its not uncommon for us to talk to parents who say oh yeah I’ve had three children come to your place um, so the sort of word of mouth um, Where we get feedback on why students have made positive choices to come here its often to do with the support and care that we give to students. Um, parents from many of our communities like the fact that we work with parents and that, um, you know, I suppose, arguably, we’re a bit school. Parents like that.

They think it’s a safe environment for their young people to come to. Um, we did er, quite an extensive piece of market research um, a couple of years ago which told us some of the things that we had assumed but it was quite interesting to get it confirmed and that was, that was, um it actually told us some things that we hadn’t really thought about. They, they did some, um, research with young people and asked them what they associated with college and what they associated with school etc, etc, etc, etc.

Hmnm

The positives around colleges for young people were to, more grown up, more adult environment, given a bit more autonomy. Yeah, Um, and to its good preparation for what you wanted to do next.

Schools they very much associated with, um, academic. So the freedom and the grown-ness of colleges they quite liked but they didn’t associate academia with colleges. Which is quite an interesting thing. So that’s us but also any other college so one of the things that we are um, going to be, well have been much more bullish about and certainly just get the OFSTED report, we’ll be very much more bullish about is the academic standards. So, I think that students make positive choices around an inclusive environment, individual support and care, they’re perhaps not the same as, they probably don’t associate it as much with academic excellence as we would like them to.

So, do you think that the choice is constrained by what they’ve done at secondary school?

Constrained in terms of subjects or constrained in terms of advice

Constrained in terms of subjects and access to subjects and pathways

Um, I think it is becoming more constrained because the young person who, historically, had the opportunity to really excel in an area they liked on a vocational route is now having a much more mixed experience in terms of just having those little qualifications rather than a broader one. Um, and I worry that that will discourage some young people from um, you know, seeking to get more qualifications. Um, the, there appears to be um, a squeezing of the arts for some of our students because there isn’t a, Govean view of the world doesn’t have much room for that does it?

Um, so the fall out of the EBacc, even though that’s not being talked about very much is still very
evident. Um, yet interestingly, you know, we're not seeing languages coming through, we’re not particularly seeing Geography coming through, but the other humanities are stronger. Um, so, when we first opened our level 2 offer, which was BTEC, was very different from the GCSE experience that students had had and for young people who’d not been successful at GCSE that was quite attractive because it was something completely different.

Yeah, yeah.

We may, in fact, be moving back towards a situation like that again. Because they've not had the same vocational experience at school. And what happened is that when schools charged with diplomas coming on line, remember all that, so, the increasing vocationalisation of the curriculum in schools meant that we weren't really very different, we might be doing something that they'd already experienced. Good things about it and bad things about it. It was good if they knew they like that and obviously it was a bit, kind of, not that again if they'd had a less positive experience. So, moving forward, (ugh), I think there's probably less opportunity for people to have really experienced different types of learning. Um, I worry, and this is probably just my prejudice, but I worry that there is a whole sort of backwards step in terms of young people come in with negative perceptions of learning cos they've had to redo GCSEs for ever. Um.

Would you say that there's been an industrial model of qualification achievement, qualification? Perhaps that's too harsh a word. Is it? I focussed.

Yeah, focussed, I had one Headteacher say to me. "Yeah when all else has failed we throw furniture at them to get them the grade c in English and Maths." Basically its been all of that kind of housing, all the intervention, enormous amount of focus on English and Maths, and Science to a degree. Sometimes you've got kids coming here who've got English, Maths and Science, have nothing else. Because its been housewoded to such an extent in schools, so that broader education, and the young person being able to find the thing that they enjoy or they

And they've tackled a couple of vocations on the end of it. Is what I've sort of noticed with a couple.

Yeah,

Of students, if they've got English, Maths, Science and they've got a European Computer Driving Licence or something.

Yes, and not a vocational thing with depth (Emphasis) so "Yeah, yep, I think that's a bit of a worry, not a productive experience really.

So, how many students drop out of provision here before they complete?

Um, we have very high retention so our retention last year was 95% I think. Um, in terms of body retention its probably higher. Um, because you do have some students who'd drop down a qualification, um, in terms of the absolute numbers I would get them for you. I couldn't tell you offhand.

That’s fine, I'm just sort of getting a, its

So, retention is high, yep.

It's just a what about the preparation of students when they're coming? you're receiving, you haven't known these students
Yeah, Yeah

How do you find they are prepared for, I think that you’ve alluded to some of it but I just that, it’s a
more direct question

They’re, they’re young people, I think you know, there’s a danger I think, sometimes that um, people
assume that our students are much less well-prepared than young people elsewhere in the country
and from more affluent areas. There might be some of that but actually I don’t think that many 16
year olds are that well-prepared for Post 16. I really don’t. I think that we need to be very mindful
of the kind of support the students may have had in school. But, what, what our job is to find ways to
support them when they’re here. And, by and large the majority of our students are pretty
wonderful, really. Um and if they’ve happen to have come from, a you know, they’ve come from an
area where educational attainment is fairly low pre-16, that’s not their fault. You know, it’s really not.
I think our students have, we’ve got some confidence building to do for our students. Um, because
what they don’t have is the sense of entitlement and um, broader. Right, well our students are,
you know them, they can be a very strange mixture of the very streetwise, streetwise savvy, and
disarmingly naïve at the same time. Do you know what I mean?

Yeah

Unlike when I taught in [redacted] was nice and middle-class or kids that had been to private schools
and then were taken out of private schools and come to the sixth-form college. Where there really is
a sense of well, come on teach me! You’ve paid to teach me and you know, that’s what I mean by a
sense of entitlement. Um, which was frustrating when I worked there, but our students don’t
necessarily have the wealth of, I’m hesitating about how I say this because I don’t want to be
seeming to have, a deficit model of our students.

It’s that cultural capital thing.

I understand what you’re saying.

I don’t want to say their backgrounds haven’t prepared them for the wider world [22.02] cos clearly
their backgrounds have but their backgrounds are different from the norm in a Russell Group
University. Does that make sense?

Yeah, I get where you’re coming from

Yeah, yeah, they’re not the sons and daughters of lawyers and doctors and they don’t have those
family networks that can get them the work experience or just the assumption that I will go to
university and I will have that career. Um, or even that, you know, um, I used to tell a story which, you
know, might be out of date now but, you know, I don’t know if it is. When we’d been open two years
learning support took a group of students to Bradford to the museum of photography there so this
was mainly level 1 level 2 students, um, who’d been doing work with learning support. They went
for the day they went on the trip then they went for a curry and came home. I think there were
about 10 students there and only three of them had ever eaten in a restaurant.

That’s quite interesting isn’t it?

It was, its shocking on many different levels isn’t it, you know, um, they haven’t necessarily got,
um, some of the experiences that other young people might take for granted and yet they’ll have, in
other ways they’ll have much more experience.
OK, so let me ask you, do you th, not the deficit model of cultural capital, the cultural capitals different.

It's different. Yes.

Which doesn't prepare, prepare, which causes some issues when they transition?

Yes, yes, yes and we have to really make sure that we are, um, cos it can cause issues in two ways. We've got a lot of students who have perhaps quite unrealistic expectations about what they will be able to do, um, without really understanding what it is to take them there. So, you know, perhaps family expectations for them to work in medicine when actually, yes, you could have a career working in a medically related area, but becoming a doctor going to be a really really hard stretch for you. Um, and others who you know, can't really see themselves doing anything, you know. It's quite difficult. But I think what they don't have is the stage you go through, this is what you do, this is what you do next, and i'm massively generalising, but i think it's slightly more complex.

Indicate more complex strategies

So, just tying it all together then how important to you are external accountability measures then? The question I was going to ask anyway because, having just been through that pro, one of them.

Well, when we get our good OFSTED published I'll be saying I've been pleased with accountability measures. Um, OFSTED has been a blessing and a curse. For us. Um, because having the Required Improvement hanging over us for a long time probably didn't do us any good in terms of recruitment etc. Having said that, having had the scrutiny and working with the link man, as we did for a number of years. I think that that has really put a focus on quality improvement. And what is has, um, really sharpened up is that focus, yeah it's great that we're here for all the young people in this area but just being here for them isn't enough. If we don't get them good outcomes for years, everybody will say like accountability measures when they get a good gets on the back, which is unusual for us.

(Laughter). But it genuinely, genuinely, one of the worst things that happened to this college actually is that we were left alone for too long at the start. And we thought we were doing great things but the world had moved on and we hadn't noticed. Um, to be perfectly blunt so our first inspection was very much a they don't understand us, they don't get us, and I don't think they did, um, but equally we weren't probably doing what we should have done for those young people. Practice wasn't as good, there was a bit of, what can you expect from those students? And that's not acceptable.

OK. That's that's interesting so what about threshold measures then? You mentioned OFSTED, what about threshold measures? Not really that, sort of that,

Oh, you know I'm talking about league tables and value added. Explain.

And things like that.

Oh, the value added I hate because I can't work how they do it frankly, I mean, I really cont. ALPS doesn't work for us because of the blended pathways our students do. ALPS looks awful because it discounts so many students from the BTEC and from the A level. So that doesn't work.

Nick Allen is useful because that shows us how our students perform in terms of prior attainment, compared to the National picture and that's really helpful, um and OFSTED are increasingly looking
et Nick Allen which is a good thing, um, but the level I value added that is generated by the LPA, no, I certainly think it at all. Making a look dreadful, um, and yet the LPA, seldom value added was good so, I don't understand that, um, in terms of the QAA, qualifications student can't, um, ugh, I think them last year because it made us look good, um, what has changed massively and very much in our favour is that historically, each Post 16 provider didn’t do English and Maths, um, and people should hear the squealing and the bleating, this is going to be revolutionary, I hope, from my fellow principals about the fact that English and Maths are now included in the success rate tables. They really don't like that, that's not fair. I think well, welcome to my world, no it might not be, if you're doing the qualification, so because we are good at that, that suddenly makes us look a bit better. The other thing that's happened with the changes to the success rate tables is that they've stripped out all the very short qualifications that people used to do so, you get really inflated success rates for your big GCEs cos they did several thousand two hour summer schools, you know, which counted, and everybody passed well something not really relevant but I don't mind accountability tables, well threshold when they seem transparent and fair, I don't know if you are aware of the Data Dashboard that's been introduced?

Well, I've seen the one for school, I haven't yet seen the post 16 data

The post 16 Data Dashboard is a nightmare because they um, there's a horrible measure which says, why, all the other measures say, of those who attained A levels, how many got B plus, of those who didn't get only got, but they have a languages the percent of students who got these facilitating it counts, yeah, well none of ours take it, so they be like zero

That's the, the Russell Group

The Russell group never wanted it, they completely deny that actually, they do deny it cos if you look at the patterns of kids are still getting in with b

Yeah,

Yeah, different bits of research around it

Yeah, well our most successful progression to Russell Group, is from vocational, is from Applied Science. A very, very significant number of our applied science students go Russell Group. And all of them that have gone to Russell Group in the past two years none have done facilitating subjects. So (laughter) doesn't work for us.

Well, thank you very much that's been very very useful

It's a bit rambling

No it wasn’t rambling at all, it was great.

If you need it, the introduction to our self-assessment report has the profile of the students so its got things like the percentage of students with EAL, its got the percentage of students from disadvantaged post codes, points on entry, so I can forward you that.

That would be really good. So that is the letter to you as Principal, I'm sorry if its not come out too well.

That's OK, I can read it.
Obviously I'll be talking to Dominic and to Rachel. I've got a questionnaire ready to go out to students.

Right

It's all online, and I'm going to clear it with Rachel and Dominic first.

Excellent
APPENDIX 8 NODAL CODING OF INTERVIEW TRANSCRIPTS - QUALIFICATIONS

<Internals\Students\160412_0014> - § 4 references coded [7.53% Coverage]

Reference 1 - 1.12% Coverage

So was there a perception that Vocational Science was um, easier than doing the GCSE?

Its more or less the same because they taught us the same way so in our classes line up for GCSE are classes line up for BTEC as well the same teaching. They have an exam at the end whereas you do your assignments in class.

Reference 2 - 2.28% Coverage

I told you no options but with my science exam, like there was a group there was a class that wasn't allowed to sit their science exam if they didn't get past a D in their practice exams. So I never sat a Science exam for my GCSE so the group, for that group, and I was one of the people in that group like, they used like your know your Year 9 exam results, they just put that onto your GCSE results to say that you've done 1. But I never sat a GCSE Science exam, Additional or Core.

Reference 3 - 0.41% Coverage

and for kids who didn't do so well in Science they put them through the BTEC?

Yeh

Level 2 Science

Reference 4 - 3.72% Coverage

Six sets. and So how many of those were doing GCSE?

Let's see. 3 GCSE and 3 Vocational.

3 GCSE and 3 Vocational?

<Internals\Students\160510_0024> - § 18 references coded [18.78% Coverage]

Reference 1 - 0.87% Coverage

OK. did you find BTEC easier at GCSE than.

I think.

Reference 2 - 0.32% Coverage

I think, I think, I think like GCSE in my opinion is much tougher than BTEC.

Yeh
Way much tougher.

Reference 3 - 1.21% Coverage

Yeh so, yeh so they didn't give you writing frames? you know like you get guidance at Level 3, did you get guidance at Level 2 as well?

No, they don't really, they give you a bit of guidance, they teach you it like all it on the laptop and then you've got to like write it all down or type it on the laptop and then they don't..

OK, you type down what they say on the laptop and then you plug that into your assignment?

yeh, they give you more like lectures instead of like one-to-one if you know what I mean.

Ok

Reference 4 - 2.86% Coverage

um, GCSEs, did you do GCSEs, how many did you get? did you do BTECs?

I did BTEC Sport Diploma..

Reference 5 - 2.37% Coverage

Did you do any BTECs at ..

Er, I did BTEC SCience I think. I did BTEC SCience.

Reference 6 - 0.21% Coverage

I did BTEC SCience I think yeh, I did BTEC SCience and I did Applied SCience with it

So BTEC SCience, BTEC Applied SCience

Reference 7 - 0.66% Coverage

Did you do ECDL?

Reference 8 - 1.38% Coverage

at Fir Vale?

Yeh. i did yeh

so that counted on your five yeh?

Reference 9 - 0.98% Coverage

They said, would you call it like every term, every term or every two terms, each group would do it, so everyone in the middle pathway got to do it, so Like for the
first two terms when school starts er, it could be like two classes do it and the next
two terms another two classes so by the end of the year everyone does it in the
class set.

Reference 10 - 0.38% Coverage
tell me, how many lessons did you get a week on that?

I think, we only did it for Tutorials in Tutorials

Right, Ok

so. Like

Reference 11 - 1.00% Coverage

so about 20 minutes here and there?

in Tutorials yeh, tutorials are more like if the teacher has no work for us they could just say ah, got on with someone else work or just sit in the middle table aand talk but literally not loud, so

Reference 12 - 2.67% Coverage

Is that called Wider Key Skills?

Them guys they go to every City

yeh

in

Yeh, so they bought it in?

yeh, they bought it in..

How long did it take, a couple of weeks?

Reference 13 - 0.24% Coverage

A couple of weeks, yeh

Reference 14 - 0.64% Coverage

so, another, another thing round here then Guys. So, If I ask you about BTECs at
school, were they seen very much as easier qualifications than GCSEs?

Yeh

In school?

because there wasnt, You dont have to do exams.
Was it seen as easier?

What BTEC?

Yeh

They made it look hard but it was

It was easier?

yeh I only had BTEC , like I did BTEC business but I only had like two hours a week. That was the only subject that had the lowest amount of studies I could have like...

But you still passed it?

Still passed it. yeh

what did you get?

I got a pass, I got a merit actually. I was a pass but then I stayed in to do some extra work so I got a merit

and ECDL you did in ..?

They passed us .

But we only did BTEC SCience they like chucked us with a lot of Science lessons like we used to have, we used to have Science like nearly everyday.

cos I wasn't really good at Maths so she helped me and I passed that. erm I got , for English I got a B, for Maths I got a C, for Science I got a pass

So, was that vocational Science you did(yes)?

Yeh, vocational Science , for Leisure and Tourism I got a B, ICT I got an A,

Right sos talk me about Leisure and Tourism. Vocational?
It was a BTEC course.

A BTEC. and ICT a BTEC as well?

no, no it was GCSE I think.

Reference 3 - 0.52% Coverage

Or was it a BTEC? Probably a BTEC. Yes I just remembered it you see.

So you took loads of BTECs really?

Yeh.

Reference 4 - 1.73% Coverage

It was really half and half. People who did the sciences, they did a proper exam one, whereas we did the course bit, the coursework nased one. But the reason I wanted to get into that was because I don't remember stuff, I've always not rembered stuff so I felt like coursework was the best option for me

Reference 5 - 2.73% Coverage

So what GCSEs did you have? so lets just talk that, what GCSEs did you have?

Reference 6 - 1.75% Coverage

Ok so I had obviously English, Maths, Science,

No not Science

then what, the GCSEs, ICT was a GCSE, I did an actual exam. You know what it was when you asked me about BTEC?

Was it ECDL, the ICT?

Edexcel.

yep ECDL. Was it the European Computer Driving Licence?

Reference 7 - 1.61% Coverage

Was it Edexcel or was it WJEC? I just remember the boards?

Can I have a look on the system? is it alright for me to have a look?

Ye, Yea. Thats fine. But when you asked if it was a BTEC, I was just a bit confused. But ICT was an exam.

Lesiure and Torism

Lesiure and tourism was more coursework based.
Be a BTEC.

Reference 8 - 1.55% Coverage

Uh, yea, we did do little exams here and there but it was mostly coursework.

And what about in vocational science?

Reference 1 - 1.10% Coverage

Did you pick any vocational like BTECs or?

IT

Reference 2 - 1.07% Coverage

Yea, if you wanted to do it because I was like, I was good at IT and in our school they picked like a group.

Reference 3 - 0.28% Coverage

So, the top group you could choose to do vocational science?

Yea, the lower ones couldn't choose.

They had to take it?

Yea.

Reference 4 - 1.62% Coverage

Yea, I'm sure mine was like that, this two week thing.

Reference 1 - 1.46% Coverage

I got Media, English, Maths, Triple Science, Spanish and ER food tech.

Reference 2 - 1.20% Coverage

And was Media a BTEC?

No.

Media was a GCSE

GCSE.

So you had GCSEs across the board.
Yea

Reference 3 - 5.13% Coverage

eyea, I went to Greenbark\(^1\) Academy as secondary school and er, the GCSEs i got is Maths, er, I got Science, i got Double Science, what is it? er, both core science and then Additional, yea, I got er, I got RE, Media and PE. Yea, I think, yea I think thats it.

And where any of those BTECs

Em, yea, PE was.

and what about the Media?

Reference 4 - 0.46% Coverage

Our Media was GCSE.

Reference 5 - 2.62% Coverage

5 A-Cs and I only got four.Ok, so did they.. What did you get your four in?

This ECDL course thing and em ,

Oh right, Did everybody do ECDL at

Reference 6 - 0.49% Coverage

Newfields?

No, not everyone, it was just if they were worried you wouldn't get your 5 A*-C

Reference 7 - 0.22% Coverage

and how long did that take the ECDL?

Reference 8 - 1.30% Coverage

5 Days.

5 days and they then ..

Yea, we learnt it for four of the days during the week and then on the fifth day on the Friday we did the test.

Reference 9 - 2.58% Coverage

Ok, so what about , what about you? Did you do the ECDL at Greenbark?

\(^1\) Pseudonym
I think so, I think yea, it was a course like that, they told us it was a thought you weren't going to get GCSEs at 5 A*-Cs so I think yea. And my one only took like, we did it like in a day.

How many days did you do it in?

One day.

Reference 10 - 1.97% Coverage

How did you do an ECDL which is a GCSE in one day? Explain.

I don't know, they said it would take you longer than a day but then they said we had to come in, we had to come in from like nine o'clock in the morning to like, I think it was like, it was the whole day basically we was working on it and finished at the end of the day.

Right.

Reference 11 - 1.67% Coverage

and how did they do the test?

They told us, like, they told us what we had to do and we just we was on the computers doing it and then they were just watching us over..

Reference 12 - 2.92% Coverage

I also did BTEC Science but that was like in Year 9 and after I passed that and I did COre and Additional Science.

so they put you through BTEC Science in Year 9

Reference 1 - 1.38% Coverage

Did you do any BTECs?

No mine were all GCSE except for Science I had OCR(Vocational?)

Vocational Science?

Yea

OK.

Reference 2 - 3.18% Coverage

im Jodie, I went to Chaucer and I think I got 8 GCSEs and one BTEC.
What was the BTEC in?
Health and Social Care.
Good. And was that worth one or..
One I think it was level 2
It was level 2 one

Sorry, which kids did BTEC Science?
Oh, which kids? Oh the lower bands because they didn’t understand that their er, um, that GCSE would be an exam and that it would be hard.

This happened, a lot of us didn’t do like, we wasn’t getting the grades we were supposed to be predicted so they put on for the entire year group ECDL for us all to do

Yea
To get us one extra qualification

I come from around Circle\textsuperscript{2} area, I went to Ace\textsuperscript{3} Secondary School Em, I did just the general things, Triple Science, Business, I can’t think what else, Geography, French and that’s about it.

And was it a GCSE Business or a vocational Business?

Er, Vocational.

But were there loads of vocationals on offer for the..

Yea
Bottom two pathways

\textsuperscript{2} Pseudonym
\textsuperscript{3} Psuedonym
Yea

So tey were guided?

Reference 1 - 1.56% Coverage

Out of the 12?

no, They accounted for three.

that accounted for three? or 4 at the time would be

yeh

yeh

Reference 2 - 3.07% Coverage

Northern Technology College⁴ and I got 11 GCSEs, level 2 diploma in one of them

And how much was that level 2 diploma worth?

two

ok. And what GCSEs did you get?

Oh, Oh grades?

Yeh

5 bs , 4 Cs , and E and a D.

Ok what about you at GCSE?

---

⁴ Pseudonym
### Phase 1 Open Coding

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APPENDIX 10 - 3D REPRESENTATION OF PERFORMANCE BOOST AND CONTEXTUAL VARIABLES

Relationship of Performance Boost to Explanatory Variables

- Sponsored Academy
- Convent & Academy
- Controlled School
- Other
- Voluntary Aided School
## APPENDIX 11 - ITERATIONS OF MULTIPLE LINEAR REGRESSIONS OF MAIN EFFECTS MODELS

### a) Performance boost

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### b) Access

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APPENDIX 12 - SPSS SYNTAX USED FOR GROUPING SCHOOLS

This SYNTAX groups schools into four groups as discussed on p97. Prior to running the SYNTAX, the %FSM and KS2 APS variables were categorised into two groups identifying whether a school had a value that was higher than the median (=2) or was at or below the median (=1). Using these two binary variables, the following syntax inter-relates them to construct a 4-category variable as shown on p97.

`COMPUTE FSMKS2NM=0`

`IF (KS2APSNM=1) AND (FSMCLANM=1) FSMKS2NM=1.`

`IF (KS2APSNM=2) AND (FSMCLANM=1) FSMKS2NM=2.`

`IF (KS2APSNM=1) AND (FSMCLANM=2) FSMKS2NM=3.`

`IF (KS2APSNM=2) AND (FSMCLANM=2) FSMKS2NM=4.`

`ADD VALUE LABEL FSMKS2NM 1 'Low KS2, Low FSM' 2 'Hi KS2, Low FSM' 3 'Low KS2, Hi FSM' 4 'KS2 Hi, FSM Hi'.`

`EXECUTE.`