

Institute of Education



Research into the impact of selective schooling and school composition, secondary school size, and academies and free schools for the Guernsey Education Department

Research Report from the London Centre for Leadership in Learning, UCL Institute of Education

August 2015

UCL Institute of Education

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Executive Summary

The Education Department in Guernsey will be launching a public consultation covering four strands of its educational provision in September 2015. These four consultation strands are: i) the model for selection and admissions; ii) determining the optimal size of the school estate; iii) the structure of tertiary provision and iv) the funding of grants to colleges (see Introduction for more details). This review was commissioned by the Department from the UCL Institute of Education (UCL IOE) to inform aspects of the consultation; in particular strands i), ii) and iv).

The project involved a rapid review of literature covering the areas set out below and the development of three illustrative case studies (see annexes). Additional details on the review process are included in the Introduction. The review was undertaken by Professor Toby Greany and Rebecca Nelson from the London Centre for Leadership in Learning, a department of UCL IOE. University College London (UCL) is the top-rated university in the UK for research strength (Research Assessment Exercise – RAE 2014). The Institute of Education (IOE) is a School of UCL. The IOE has been ranked number one for education in the QS World University Rankings for the last two years (2014 and 2015) and was the top-rated UK performer for research strength in education in the 2014 RAE, scoring more than four times higher than the next best performer.

It is important to position the findings from this review in the context of wider research and evidence on school effectiveness and improvement. The focus of this review is related to the Department's consultation areas, as set out above. Understandably, the consultation does not cover many aspects of the school system that, research shows, are central in determining the quality and equity of children's learning and outcomes. These include the quality of the workforce (ie teachers, teaching and school leadership), the quality and coherence of school support and improvement services, and the nature of the curriculum. This is not to underplay the importance of the areas covered by this review, but their significance needs to be understood in the context of these wider aspects.

Different models for school admissions

- Parental choice is used for secondary school selection in England and oversubscription criteria are used when a school has more applicants than places. Although there is a common admissions code, there is flexibility in possibilities for managing oversubscription and a variety of models are in use (Noden et al., 2014).
- There have been criticisms of selection processes for grammar schools. The accuracy of 11+ tests has been questioned. The merits of verbal reasoning and key stage two tests for predicting GCSE performance is the subject of one study.

Testing is criticised as favouring pupils from more socially-advantaged backgrounds (Cribb et al., 2013; Gallagher and Smith, 2000; Strand, 2006; West, 2005).

- There have been suggestions that fair banding may lead to more balanced intakes. The research evidence has been criticised as insufficiently robust (Connelly et al., 2014; Noden et al., 2014; West, 2005).
- School catchment areas, for example as used in the USA and Scotland, may drive up house prices in catchments of popular schools. In a system using catchment areas, there are better opportunities for primary and secondary schools to liaise on both academic and pastoral issues (Connelly et al., 2014; Gallagher and Smith, 2000; Gill et al., 2001; Smithers and Robinson, 2010).
- Lotteries appear to have little effect on school composition or performance (Allen et al., 2013).

The impact of selective versus non-selective systems on equity, social mobility and overall attainment

- Evidence on the benefits, or otherwise, of selective as compared to comprehensive systems is inconclusive (Whitty and Power, 2015).
- Despite the lack of convincing evidence for either a selective or a non-selective system for organising secondary education, the arguments continue in England (de Waal, 2015).
- Socio-economic factors result in social and academic segregation among schools in both selective and non-selective systems (Noden et al., 2014; Cribb et al., 2013; Gallagher and Smith, 2000).

Overall Attainment

- There is little difference in average overall attainment (as measured in external tests) when selective systems are compared with non-selective systems as a whole (Atkinson et al., 2006; Connolly et al., 2014; Hattie, 2008; OECD, 2013).
- Within selective systems the performance of schools is more variable than in non-selective systems. Selective schools have higher performance than the remainder of schools in that system on average. Selective schools also have higher performance than comprehensive schools in non-selective systems on average. Non-selective schools in selective systems have lower performance than comprehensive schools in non-selective systems.
- More research is needed to understand the impact of mixed school intakes on performance (Gorard, 2006).

Equity

- OECD (2013) found that social inequality was greater in selective systems and that the impact of socio-economic status is stronger in such systems.
- There is strong evidence that pupils attending a selective school tend to achieve better academic outcomes than pupils of similar background and prior attainment who attend secondary modern or comprehensive schools (Atkinson et al., 2006; Levavic and Marsh, 2007; Coe et al. 2008; Gallagher and Smith, 2000; OECD, 2013). However, there is also strong evidence that selective schools in England and Northern Ireland have far fewer than the average proportion of poor pupils in the local neighbourhood (Atkinson et al., 2006; Borooah and Knox, 2015; Coe et al., 2008; Cribb et al, 2013; Smithers and Robinson, 2010). Equally, the academic attainment of pupils in secondary modern schools is worse than in comprehensives, supporting the OECD's finding that there is a greater spread of attainment in selective systems (Levavic and Marsh, 2007).
- Increasing the proportion of pupils who attended selective schools in Northern Ireland did not impact negatively on academic outcomes in the grammar schools involved (Guyon et al., 2012).
- There are some comprehensive schools that are as strongly socially segregated as Grammar schools (Smithers and Robinson, 2010).

Social mobility

- Controlling for social class and prior attainment, pupils from state-funded selective schools are no more likely to gain a university degree than those from non-selective schools, particularly when numbers going on to prestigious universities are compared. "Private schooling is powerfully linked to degree chances. Compared to their peers at comprehensives with similar backgrounds and cognitive attainment at ages five and ten, privately educated cohort members had 1.7 times the odds of gaining an ordinary degree and over three times the odds of an elite degree. In contrast, there was no statistically significant advantage of attending a grammar school or disadvantage of attending a secondary modern school." (p 755) (Sullivan et al., 2014).
- There is a wider gap in earnings between highest earners and lowest earners in adults educated in selective systems than the earnings gap for adults educated in comprehensive systems (Burgess. Dickson and Macmillan, 2014).

Influencing variables

- Pupils at grammar schools experience a more academic curriculum than similar pupils in non-selective schools (Coe et al., 2008; Gallagher and Smith, 2000; Guyon et al., 2012).
- Higher quality teaching, by more motivated and/or better-qualified teachers, has been suggested as a reason for different attainment outcomes in selective schools (Burgess, Dickson and Macmillan, 2014; Gallagher and Smith, 2000; Hattie, 2008). Higher qualified teachers are more likely to apply for posts in schools that perform higher on external exams, such as grammar schools. (Brown, 2014).
- Differential per-pupil funding has been suggested as one reason for different attainment outcomes in secondary modern as compared with selective (ie Grammar) schools in England, although international evidence on the impact of additional spending is more mixed (Hattie, 2008; Levavic and Marsh, 2007; Pugh et al., 2011).

The impact of parental choice and selection on school quality

- Parental choice of school has been introduced as a mechanism to increase competitive pressures on schools in systems around the world.
- The evidence indicates that some parents make more active use of choice mechanisms than others, and that middle class parents tend to be better able to navigate and use information and systems designed to inform school choice. These active 'chooser' parents tend to prioritise social class (and to a lesser extent race) over school quality as a factor.
- The OECD (Waslander, Pater, and van der Weide, 2010) concludes that "the effects of market mechanisms in education are small, if they are found at all."
- Furthermore, the impact is often differential: some students and schools may experience positive effects while others may face the opposite.

The impact of assisted places schemes and vouchers

- Comprehensive evaluations of the assisted places scheme in England have suggested no effect, on average, on progress and attainment. The cost-effectiveness of the scheme was not probed.
- There is insufficient systemic evidence on the impact of voucher schemes at school level. This makes it difficult to evaluate the overall impact of voucher schemes. A voucher scheme aimed at poor families in Washington DC for pupils of all abilities found that progress in reading was higher for voucher children but with no impact in mathematics (Gill et al., 2001; Walford, 2013; Whitty et al., 1998; Wolf, 2010).

The impact of public and private schooling on outcomes

- Although pupils attending private schools do well in terms of academic performance, there is no evidence that they do any better than pupils in state-funded schools with similarly high prior attainment and socio-economic background.
- Private school enrolment has been linked with the quality of other local secondary schools at ages 11+ and 13+.
- There is evidence that pupils who have attended private schools in England are much more likely to have attended an elite university later in life.
- Parents may choose private education for their facilities, the curriculum offered and their social composition, as well as their academic outcomes.
- Private schools in England benefit from much higher per-pupil income and there is evidence that this is spent on smaller class sizes. There is no empirical evidence which evaluates the performance overall of systems with an elite private system, although there are individual examples which suggest that there may be little difference on average.

Secondary school size

- Research evidence strongly suggests that secondary school size has an optimal level of between 600 and 1000, with smaller schools in this range being better for pupils from disadvantaged backgrounds.

Academies and Free Schools

- It is considered too early to evaluate the impact of converter academies and free schools on performance.
- Evidence from sponsored academies shows that these had a positive impact on pupil performance.
- There is no evidence that free schools are more likely to recruit pupils with higher prior attainment or with lower levels of disadvantage than the national average.

Case studies

Three localities were identified with similar characteristics to Guernsey in terms of the balance of private and state schools, the use of selection and/or the socio-economic profile of students.

The three areas were:

- Northern Ireland – a selective school system with very low numbers in private schools
- Kent – a selective school system with a range of different socio-economic contexts
- Bristol and Bath and North-East Somerset (BANES) – two adjoining local authorities with non-selective state schools and relatively high proportions of children attending independent schools

For each area we have drawn together publicly available data and any case study or other evidence available to present a portrait of how the area performs in terms of overall attainment and the performance of particular student groups. It is important to note that this rapid exercise does not in any way enable causal conclusions to be drawn, but rather provides illustrative examples that Guernsey could learn from.

1. Introduction

1.1 Background and approach

The Education Department in Guernsey is currently undertaking a programme of work which combines four interlinking and interdependent elements. The Department will be launching a public consultation in September 2015 and so commissioned this rapid review of existing literature and development of case studies by the IOE to support the development of its consultation document.

The four areas under consideration are:

1. *Selection*

The consultation should consider if selection is still appropriate to meet the States objectives as set out in the Education Department's vision and if so what format it should take.

2. *Determining the optimal size of the estate*

Currently there are 4 states maintained secondary age schools in Guernsey, consideration is to be given if any changes are required to the number, size and character of the schools.

3. *Tertiary provision*

Post 16 education provision across the Bailiwick is currently delivered by Guernsey College of FE, GTA, Institute of Health Studies, the Sixth Form Centre, and the Colleges. The Vision outlined a need to "...bring together and rationalise the range of Post 16 educational opportunities available within the Bailiwick"

4. *Grants to colleges*

The current funding agreement is in place until 2019, this area will review and identify options for any future funding model

The research brief stated that the project should specifically focus on reviewing the literature in the following areas:

1. Comparison of a) overall social inequality b) overall social mobility, c) overall results at GCSE and d) results for different ability quartiles/quintiles and e) results dependent on which type of school attended and f) ability to meet potential for different ability quartiles/quintiles g) ability to meet potential dependent on which type of school attended in areas with:
 - Grammar School systems, high schools/secondary moderns and private schools where approximately 25-30% attend private schools at secondary level

versus

- Comprehensive and private schools where 20-30% attend private schools at secondary level
2. Different methods of selection at 11 (e.g. moderated teacher assessment, CATS, SATS, 11 plus) and their strengths and weaknesses. Alternatively a defined ability level (rather than 25% of the year group). Is one of a combination better?
 3. Pros and cons of banding (e.g. comprehensive schools have to take approx. 20% of students in each of five ability quintiles from across the region as a whole)
 4. Optimal size of secondary schools
 5. Admissions based on ability versus parental choice versus schools catchments and how the three may be combined with each other and/or with banding
 6. Free schools and academies and why they might or might not work in Guernsey

The timescale and scope for this work was tight and the brief was broad ranging (commissioned and undertaken in July 2015). The research team undertook the work in two parallel strands:

1. Literature review:

We undertook a rapid review of existing literature spanning the three areas set out below. Each of these areas – but particularly the first - has a significant literature associated with it, so we drew on existing meta-reviews and syntheses of robust studies where possible. Taking this approach increased our ability to provide a robust overview of the evidence and key debates in these areas, all of which are contested.

School selection and composition

This looks in particular at:

- the different models for school admissions and selection, including ability, aptitude and intelligence tests, fair banding, parental choice, school catchments etc
- the impact of selective versus non selective systems on equity, social mobility and overall attainment
- the impact of parental choice and selection on school quality
- the impact of assisted places schemes and vouchers, which use state funding to increase parental choice, on pupil outcomes and school quality
- the impact of public and private schooling on outcomes.

Secondary school size

We look specifically at the impact of size on issues such as teacher recruitment and retention, curriculum breadth, and pupil outcomes.

Academies and free schools

We also look at wider models such as charter schools.

2. Analysis of localities with similar characteristics to Guernsey

We identified three areas that have similar characteristics to Guernsey in terms of the balance of private and state schools, the use of selection and/or the socio-economic profile of students. The selection of these was agreed with the Guernsey commissioning team. We have drawn together publicly available data and any case study or other evidence available to present a portrait of how the area performs in terms of overall attainment and the performance of particular student groups. This rapid exercise does not in any way enable causal conclusions to be drawn, but rather provides illustrative examples that Guernsey could learn from (See annexes).

1.2 Context for the research

It is important to position the findings from this review in the context of wider research and evidence on school effectiveness and improvement. The focus of this review is related to the Department's consultation areas, as set out above. Understandably, the consultation does not cover many aspects of the school system that, research shows, are central in determining the quality and equity of children's learning and outcomes. These include the quality of the workforce (ie teachers, teaching and school leadership), the quality and coherence of school support and improvement services, and the nature of the curriculum. This is not to underplay the importance of the areas covered by this review, but their significance needs to be understood in the context of these wider aspects.

1.3 About the research team

Toby Greany is Professor of Leadership and Innovation and Head of the London Centre for Leadership in Learning, a department of the UCL Institute for Education. His research interests include system reform and system leadership, school leadership and improvement and the nature and impact of evidence informed practice. Current and recent research studies include: understanding the self-improving school system (CfBT and Nuffield), TIMSS 2015 (DfE), an evaluation of Evidence-Based Practice (DfE), Teaching Schools R&D themes (NCTL), school-university partnerships (RCUK and NCCPE), Research Learning Communities in primary schools (EEF), A Blueprint for a self-improving system – literature review (ASCL) and conflicts of interest in academies (Education Select Committee). Before joining the IOE, Toby was Director of Research and Policy at the National College for

School Leadership for seven years. He has worked at the Design Council, the Campaign for Learning and the Cabinet Office. From 2005-2006 he was Special Advisor to the Education and Skills Select Committee. He has authored a number of books on schools and education and has taught in Brazil, China and the UK.

Rebecca Nelson's career includes teaching, working in a senior role for a local authority and as a Regional Programme Leader for the Teaching and Development Agency. Since 2011 she has worked for LCLL on a number of research projects, undertaking literature reviews and conducting primary research. She is currently a research officer on two projects: literature review for an *Erasmus Plus - Cooperation for innovation and the exchange of good practices* project on school inspection and a longitudinal evaluation of the *Grand Curriculum Designs* programme, funded by the Esmee Fairbairn Trust. The latter programme was designed and delivered by LCLL in partnership with the RSA. She also contributes to marking and supervision of M level work.

2. School selection and composition

2.1 Different models for school admissions

Summary

- Parental choice is used for secondary school selection in England and oversubscription criteria are used when a school has more applicants than places. Although there is a common admissions code, there is flexibility in possibilities for managing oversubscription and a variety of models are in use (Noden et al., 2014).
- There have been criticisms of selection processes for grammar schools. The accuracy of 11+ tests has been questioned. The merits of verbal reasoning and key stage two tests for predicting GCSE performance is the subject of one study. Testing is criticised as favouring pupils from more socially-advantaged backgrounds (Cribb et al., 2013; Gallagher and Smith, 2000; Strand, 2006; West, 2005).
- There have been suggestions that fair banding may lead to more balanced intakes. The research evidence has been criticised as insufficiently robust (Connelly et al., 2014; Noden et al., 2014; West, 2005).
- School catchment areas, for example as used in the USA and Scotland, may drive up house prices in catchments of popular schools. In a system using catchment areas, there are better opportunities for primary and secondary schools to liaise on both academic and pastoral issues (Connelly et al., 2014; Gallagher and Smith, 2000; Gill et al., 2001; Smithers and Robinson, 2010).
- Lotteries appear to have little effect on school composition or performance (Allen et al., 2013).

Noden et al.'s (2014) report on secondary school admissions considered previous research and analysed admissions procedures from 3000 publicly funded schools, including academies and free schools. In line with the guidance of the nationally prescribed Schools Admissions Code (with the 2010 code applicable at the time of the research), parents apply for places on behalf of their children through a common application form submitted to the local authority in which they reside, listing their choices in order of preference. If there are fewer applicants than places, then all those choosing the school as their first preference must be offered a place (except for grammar schools where children must also pass the entry test). In cases where there are more applicants than places, then oversubscription criteria are applied. The focus of the study is on differences in *oversubscription* criteria, with a focus on the extent to which these result in a mix of pupils from across the ability range.

Researchers found that the clarity of information available to parents on the local authority websites varied and that schools within a single authority might use different criteria (as their own admissions authorities). Full information is not usually available in a single place. Parents may need to contact individual schools directly if a supplementary form or test is required. Local authorities do not always provide easily accessible information about help with travel, uniform and other costs. Complexity in accessing information may make it easier for some parents than others to make an informed choice of school.

According to the admissions code, priority must be given to pupils with a statement of SEN whose parents name a particular school on the application form and to pupils in public care. The majority of schools then use various oversubscription criteria in various combinations. These are listed here in order of popularity as stated for publicly funded comprehensive secondary schools in England in 2012, together with the percentage applying the criterion: siblings (97%); distance from home to school (93%); medical or social need (55%); catchment area (64%); random tie break (50%); feeder primary school (38%); religion (16%); supplementary form (13%); priest's reference (8%); partial selection by ability or aptitude (7%); ethos (4%); no alternative school/journey (4%); banding (4%); compassionate factors (3%); random allocation (2%).

Research by Cribb et al. (2013) showed that children who are not eligible for free school meals have a much greater chance of attending a grammar school than similarly high achieving children (as measured by their Key Stage 2 test scores) who are eligible for free school meals. For example, in selective local authorities, 66% of children who achieve level 5 in both English and Maths at Key Stage 2 who are not eligible for free school meals go to a grammar school, compared with 40% of similarly high achieving children who are eligible for free school meals.

Parents of disadvantaged children may be more likely to take the costs of travel, uniform and other expenses into account when selecting a school. Reducing the catchment area of the grammar school was thought by some to give more local disadvantaged pupils a greater chance of getting in by reducing competition from affluent families from further afield. However, this might simply increase house prices within the catchment area, thereby reducing the chance of poorer parents being able to live in the catchment area in the first place. When interviewed, grammar school Heads said that parents from disadvantaged backgrounds often associate their schools with tradition, middle class values and elitism, creating a social rather than an educational barrier that makes them reluctant to send their child to the local grammar. They believe that children from more affluent, middle class families are coached to pass the entrance exam.

Cribb et al. (2013) found that measures were already being taken or have been proposed to redress the social balance of pupils in selective schools in some areas. For example, grammar schools have been working at developing relationships with the community and with primary school teachers who might encourage parents to apply on behalf of their children. Modifications of the test to make it fairer or offering free coaching sessions to disadvantaged pupils are also being trialled.

The use of coaching for the 11+ is mentioned by Gallagher and Smith (2000) with further concerns about the effects of the test on primary schools. Interview data collected from primary school teachers reported that the transfer year is dominated by the test, with intense pressure on teachers for good results, resulting in a narrowing of the curriculum to focus on tested areas. Much time is spent on preparation for the tests, supplemented by coaching for pupils whose parents could afford this. The reputation of the primary school reflects the success, or otherwise, of their pupils in passing the transfer test. Teachers from both primary and secondary schools believed that the predictive quality of the transfer test was not completely accurate.

Strand's (2006) work tested the predictive ability of Cognitive Abilities Tests (CATs) reasoning tests as compared with key stage 2 tests by looking at data from a nationally representative cohort of over 80,000 pupils in England who completed both key stage 2 tests and CATs Tests at age 11 in 1997 and GCSE at age 16 in 2002. CATs reasoning scores at age 11 were the best single predictors of all GCSE outcomes, but Strand points out that the key stage 2 tests are of curriculum knowledge and understanding whereas reasoning tests are for more general abilities. He suggests that they are best used in combination for the purpose of setting targets and monitoring progress. The Inner London Education Authority (ILEA) originally used a reasoning test in combination with Headteachers' recommendations to place primary pupils into one of three ability bands (West, 2005). The verbal reasoning test was later replaced by the London Reading test, which was considered more likely to be culture free and less likely to lead to dangers of labelling pupils. It was felt that it would help overcome the difficulties that Headteachers had of placing pupils whose first language was not English. With the verbal reasoning test there was evidence that children from ethnic minorities and younger children in the year group were assigned to lower bands in larger proportions than those in other groups.

Banding, with all schools in an area using the same test and system, has been suggested as a means of reducing inequalities by ensuring that schools have balanced intakes in terms of ability (Noden et al., 2014). Under the banding system

used by ILEA, across Inner London as a whole, 25% were in band 1, 50% in band 2 and 25% in band 3 (West, 2005), but West does not present evidence on the ability profile of individual comprehensive schools under this system. Since the abolition of ILEA most inner London authorities abandoned banding although it was retained in Tower Hamlets, Greenwich and Lewisham at the time West's paper was written.

The argument for banding is that one of the reasons for the high performance of grammar schools is that the presence of high-performing pupils improves the performance of pupils with lower prior attainment as well. Conversely, a high proportion of low-performing pupils in many non-selective schools depresses the performance of those with higher prior attainment (Connelly et al., 2014; Guyon et al., 2013). No research has been located for this review on the impact of fair banding in comprehensive schools to support the argument for fair banding across a system.

The challenge of finding robust evidence of the effectiveness of fair banding is perhaps illustrated by the examples of Colston Girls' School and Bristol Cathedral Choir School in Bristol, both of which use fair banding of applicants to allocate places and have high attainment at GCSE level. Although Colston Girls' GCSE cohort in 2014 had 33% eligible for free school meals in 2014, prior attainment at key stage 2 was high, with average point score 29.1. Corresponding figures for Bristol Cathedral Choir School are 14% and 29.2. City Academy, the lowest performing secondary school in Bristol in 2014, had 70% of the GCSE cohort eligible for free school meals and average point score at key stage 2 of 24.5, with Bristol averages 36% and 26.9 respectively.

Allocation of places by catchment area may affect the composition of schools because more advantaged parents can choose to live in the catchment areas of successful schools, with evidence to show that house prices are higher in these areas (Connelly et al., 2014; Smithers and Robinson, 2010). Gallagher and Smith (2000) noted an advantage of catchment areas in that they enable secondary schools to work in partnership with a limited number of feeder primary schools, with curriculum and pastoral liaison supported by local authorities in Scotland.

Although lotteries are recommended in research on behalf of the Sutton Trust (Noden et al., 2014; Smithers and Robinson, 2010), recent research into a scheme linked to catchment areas shows that it was not effective overall in reducing social segregation. Allen et al. (2013) investigated the scheme introduced in Brighton and Hove in 2007. Prior to the change in Brighton and Hove, oversubscribed secondary school places were allocated by proximity to the school, which was particularly advantageous to those living in some parts of the authority where several of the

schools were clustered. The authors comment that lotteries not linked to catchment areas provide equal chances of admission to all, and thereby remove the link with immediate neighbourhood and the dependence on income via house prices. The admission system in Brighton and Hove does not give equal chances to all pupils in the city because it prioritises those who live within catchment areas, with the random (lottery) allocation used initially only for applicants who live within the catchment area. This means that the design of the catchment areas is crucial to the outcome if the purpose is to decrease the degree of school segregation. The analysis of changes to the composition of pupil intakes following the introduction of the lottery to manage oversubscription shows different impact on different schools, as expected in light of the continued use of redefined catchment areas. The lottery was not effective overall in reducing social segregation, however, some pupils with higher key stage 2 attainment were assigned to schools of poorer quality than they might otherwise have expected. Comparison of the proportions of pupils in the authority attending private schools in Y6 and Y7 showed no change, suggesting that, despite this, there was no move to private education for those children who did not get the school they wanted. Overall parental satisfaction with the school allocated rose in the year after the introduction of the lottery. The authors conclude that if used in combination with catchment areas, these must be defined carefully if the aim is to reduce social segregation.

2.2 The impact of selective versus non-selective systems on equity, social mobility and overall attainment

Summary

- Evidence on the benefits, or otherwise, of selective as compared to comprehensive systems is inconclusive (Whitty and Power, 2015).
- Despite the lack of convincing evidence for either a selective or a non-selective system for organising secondary education, the arguments continue in England (de Waal, 2015).
- Socio-economic factors result in social and academic segregation among schools in both selective and non-selective systems (Noden et al., 2014; Cribb et al., 2013; Gallagher and Smith, 2000).

Overall Attainment

- There is little difference in average overall attainment in selective systems when compared with those of non-selective systems when the systems are compared

as a whole (Atkinson et al., 2006; Connolly et al., 2014; Hattie, 2008; OECD, 2013).

- Within selective systems the performance of schools is more variable than in non-selective systems. Selective schools have higher performance than the remainder of schools in that system on average. Selective schools also have higher performance than comprehensive schools in non-selective systems. Non-selective schools in selective systems have lower performance than comprehensive schools in non-selective systems.
- More research is needed to understand the impact of mixed school intakes on performance (Gorard, 2006).

Equity

- OECD (2013) found that social inequality was greater in selective systems and that the impact of socio-economic status is stronger in such systems.
- There is strong evidence that pupils attending a selective school tend to achieve better academic outcomes than pupils of similar background and prior attainment who attend secondary modern or comprehensive schools (Atkinson et al., 2006; Levavic and Marsh, 2007; Coe et al. 2008; Gallagher and Smith, 2000; OECD, 2013). However, there is also strong evidence that selective schools in England and Northern Ireland have far fewer than the average proportion of poor pupils in the local neighbourhood (Atkinson et al., 2006; Borooah and Knox, 2015; Coe et al., 2008; Cribb et al, 2013; Smithers and Robinson, 2010). Equally, the academic attainment of pupils in secondary modern schools is worse than in comprehensives, supporting the OECD's finding that there is a greater spread of attainment in selective systems (Levavic and Marsh, 2007).
- Increasing the proportion of pupils who attended selective schools in Northern Ireland did not impact negatively on academic outcomes in the grammar schools involved (Guyon et al., 2012).
- There are some comprehensive schools that are as strongly socially segregated as Grammar schools (Smithers and Robinson, 2010).

Social mobility

- Controlling for social class and prior attainment, pupils from state-funded selective schools are no more likely to gain a university degree than those from non-selective schools, particularly when numbers going on to prestigious universities are compared (Sullivan et al., 2014).

- There is a wider gap in earnings between highest earners and lowest earners in adults educated in selective systems than the earnings gap for adults educated in comprehensive systems (Burgess, Dickson and Macmillan, 2014).

Influencing variables

- Pupils at grammar schools experience a more academic curriculum than similar pupils in non-selective schools (Coe et al., 2008; Gallagher and Smith, 2000; Guyon et al., 2012).
- Higher quality teaching, by more motivated and/or better-qualified teachers, has been suggested as a reason for different attainment outcomes in selective schools (Burgess, Dickson and Macmillan, 2014; Gallagher and Smith, 2000; Hattie, 2008). Higher qualified teachers are more likely to apply for posts in higher performing schools such as grammar schools (Brown, 2014).
- Differential per-pupil funding has been suggested as one reason for different attainment outcomes in secondary modern as compared with selective schools in England, although international evidence on the impact of additional spending is more mixed (Hattie, 2008; Levavic and Marsh, 2007; Pugh et al., 2011).

2.2.1 Overall Attainment

Evidence on the benefits, or otherwise, of selective as compared to comprehensive systems is inconclusive. However, despite the lack of convincing evidence for either a selective or a non-selective system for organising secondary education, the arguments continue in England (de Waal, 2015). In her introduction to an edited volume of chapters by different authors, de Waal notes that although debates about selection have tended to be ‘polarised between advocates of the idealised grammar school and champions of the idealised comprehensive school.’ (p 1) the issues are more complex. She points out that, whatever the ideological position on the benefits or drawbacks of selection, there is agreement on the underpinning aim of improving the quality and fairness of education. However these terms are themselves not clearly defined or agreed. As Whitty and Power comment in their chapter, which provides a chronological description of relevant national policy in England and key findings from empirical academic research:

Can we draw any conclusions from this history about which type of school system – selective or comprehensive or diversified – is most effective? While this appears to be a straightforward question, a succession of research studies over a period of more than 50 years has failed to produce a consensus on the selective versus comprehensive issue. This is partly, of course, because we cannot begin to answer the

question without first answering a series of prior questions. The obvious one is 'effective for what'? Should we make judgements on the basis of the contribution of different types of school system to academic attainment (and then for all, for some or for 'closing the gap'?) or to wellbeing, employability, social mobility, social cohesion – or what? (pp 25-26).

In a chapter on educational systems, Connelly et al. discuss research on the impact of the introduction of comprehensive schools in England based on the longitudinal 1958 National Child Development Study (NCDS), which suggested that the changes made little difference overall to either standards or equality. Atkinson et al (2006) found that selective local authorities in England do not achieve substantially improved performance overall when compared with similar non-selective local authorities. Hattie (2008) combines international evidence from both primary and secondary systems which divided pupils into different tracks for all their subjects and found an effect close to zero.

Based on analysis of data collected from OECD countries in PISA 2012 tests, OECD (2013) found that 'a school system's performance overall is not better if it has a greater proportion of academically selective schools' (pp 36-7).

Although, on average, performance in non-selective systems is much the same as in a selective system, the variability of performance between schools in a non-selective system is, on average, less than in a selective system. On average, selective schools in a selective system perform better than non-selective schools in the same system and better than the average performance of schools in a non-selective system. Non-selective schools in selective systems perform worse than selective schools in the same system and worse than the average performance of schools in a non-selective system.

Connelly et al. cite Gorard (2006) who argued that studies on the impact of overall school composition are not robust, with more evidence needed to show the impact of mixed school intakes on performance.

Example

In the table below, GCSE results from 2011 to 2014 have been chosen as comparison years.

	% achieving 5A* to C GCSE grades including English and maths.
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	2011	2012	2013	2014
Northern Ireland	60.1%	60.1%	60.9%	65.2%
Northern Ireland - grammar	93.9%	92.9%	94%	94.5%
Northern Ireland – non-grammar	34.3%	34.3%	37.7%	44%
England (all schools)	59.0%	59.4%	59.2%	53.4%
Kent	59.4%	61.3%	63.1%	58.1%
BANES	64.2%	57.5%	63.6%	61.9%
Bristol	50.2%	51.6%	52.3%	55.2%

Northern Ireland (mainly selective) has GCSE performance slightly above that for England (mainly non-selective), with both selective Kent and non-selective Bath and North-East Somerset (BANES) performing slightly better or slightly worse than Northern Ireland, depending on which year is chosen.

Grammar schools, as a whole, in Northern Ireland have very high performance, both when compared with non-grammar schools in Northern Ireland and the average performance of all the non-selective schools in Bristol and BANES. However, the schools in Bristol and BANES have much higher performance, on average, than the non-selective schools in Northern Ireland.

This illustrates the point that, overall there is little difference in performance between selective and non-selective systems on average, but that there is greater variation in performance in selective systems.

2.2.2 Equity

An important point to make on equity is that a focus on the quality of schooling appears to be just as important as any focus on admissions, as the rapid improvements in schools in London over the past 15 years illustrates. Ofsted's *Unseen Children* (2013) report showed that there are very significant differences in the performance of children on Free School Meals in different local authorities in England. These differences do not appear to relate to differences in admissions or selection, but to differences in the overall quality of schools and their commitment to, and effectiveness in, closing attainment gaps. This suggests that factors such as the level of support and challenge available for schools and, perhaps, wider factors such as the availability of high quality providers of Initial Teacher Education may be just as important as selection and admissions in terms of addressing equity issues.

The OECD (2013) states that:

In systems with more academically selective schools, the impact of the socio-economic status of students and schools on student performance (in the 2012 PISA tests) is stronger (pp36-37).

Cribb et al. (2013) found that across English schools, less than 3% of entrants to grammar schools are entitled to free school meals. The average proportion of pupils entitled to free school meals in selective areas is 18%. Their research also shows that in selective local authorities, children who are not eligible for free school meals have a much greater chance of attending a grammar school than children with similar prior attainment, as measured by their Key Stage 2 test scores, who are eligible for free school meals. For example, in selective local authorities, 66% of children who achieve level 5 in both English and Maths at Key Stage 2 who are not eligible for free school meals go to a grammar school compared with 40% of similarly high achieving children who are eligible for free school meals.

Cribb et al.'s work (based on three contributory studies) also investigates possible reasons for this disparity. They found that pupils are less likely to attend a grammar school if they attend primary schools with a high proportion of pupils from deprived backgrounds. Some pupils attending a primary school with a large number of high-achieving pupils are also less likely to go to a grammar school, perhaps because they under-estimate their own ability.

In Northern Ireland, Borooah and Knox (2015) found that 7%, on average, of pupils in grammar schools are eligible for free school meals with the corresponding figure in non-grammar schools at 26%. Faith is a particularly divisive feature of schools in Northern Ireland and Borooah and Knox's article explores the additional discriminatory effects of the current, largely selective, system on poor Protestant children with poor, Protestant boys suffering the worst.

Coe et al (2008) provided a comprehensive review of earlier studies that compare the performance of pupils in selective and non-selective schools in England, funded by the Sutton Trust. The authors found weaknesses in many of the studies, saying:

Most of these studies suffer from limitations of methodology, data or interpretation; some are quite serious. In particular, their inability to control for other differences; problems with the quality of baseline or outcome data; issues in the calculation of value-added; inappropriate choice of the unit of analysis; failure to acknowledge the heterogeneity of selective systems; focus on cohorts that were educated in the 1970s; and researchers' apparent preconceptions all undermine the trustworthiness of their results (p iii).

Despite their reservations about evidence from the UK, the authors consider the weight of good- quality evidence (e.g. from Atkinson, 2006; Gallagher and Smith, 2000; Levavic and Marsh, 2007) is sufficient to justify the finding that that pupils who attend grammar schools do better than equally able pupils in comprehensives, with this finding confirmed by later reviews, including those of international systems in the meta-analysis by Hattie (2008) and by OECD (2013). This finding was further reinforced by Coe et al.'s own work, which found that pupils in grammar schools do a little better than similar pupils in other schools, although the difference is reduced when school composition is taken into account. Their finding is further qualified by analyses which show that although grammar school pupils made greater progress from key stage 2 to key stage 4 than other pupils, the same pupils were already making faster progress in their primary schools, suggesting that other differences than a grammar school effect may make the difference.

Levavic and Marsh (2007) used data from twenty English local authorities that were either wholly or partially selective. Students in secondary modern schools achieved worse GCSE results on average than equivalent students in comprehensive schools while grammar school pupils obtained much better GCSE results.

A study by Guyon et al. (2012) investigated the effect of increasing the proportion of children attending grammar schools, by looking at affected pupils' GCSE and A level outcomes before and after a policy change in Northern Ireland. With falling rolls in schools across the province, in 1989, grammar schools were required to accept a number of pupils up to their admission number, rather than on the basis of reaching a threshold mark in the 11+ transfer test. This increased the proportion of pupils attending grammar schools overall by 15%. There was a differential effect, as grammar schools in some areas where rolls were not falling continued to admit the same local proportion as previously. Before and after comparisons and comparison between areas were made when the affected pupils reached GCSE and then A level. Overall performance rose, and was sustained, at about 10% higher than previously. Guyon et al found no negative effects for grammar schools, despite the fall in average prior attainment of their pupils. Top ability pupils did not suffer and pupils who would not previously have been admitted did better by being at grammar schools. The authors conclude that there is convincing and unambiguous evidence for increasing the proportions of pupils educated in academic tracks.

Smithers and Robinson's (2010) work suggests that the effects of faith, high house prices, travel, uniform and other expenses may also be factors which contribute to their finding that, in England, some comprehensive schools are as much, or more, socially divisive than grammar schools.

Example

	% disadvantaged pupils, 2014	Average key stage 2 score on entry, 2014	% achieving 5A* to C grades inc. English and maths, 3 year average	
			Disadvantaged pupils	All pupils
England	26.9	27.6	38.7	58.7
Kent	20.9	27.5	33.7	60.8
Highworth Grammar School (Ashford, Kent)	11	31.5	89	98
The Norton Knatchbull School (grammar, Ashford, Kent)	9	31.5	96	94
The North School (non-grammar, Ashford, Kent)	25	26.2	27	37
The John Wallis C of E Academy (non- grammar, Kent)	32	24.0	24	45

Example

	Av key score stage 2 on entry	% disadvantaged pupils	% 5 A* - C at GCSE including English and maths 2014			Low attainers
			All pupils	High attainers	Mid attainers	
England – state funded	27.6	26.9	56.6%	92.8%	50.9%	5.5%
Bristol	26.9	36.0	55.2%	94.6%	54.1%	6.8%

BANES	28.3	15.6	61.9%	94.3%	50.5%	2.8%
Kent	27.5	20.9	58.1%	94.7%	52.5%	4.8%

High attaining pupils' performance at the measure of 5A* to C grades at GCSE in 2014 in both non-selective Bristol and non-selective BANES was about the same as in selective Kent, suggesting that overall performance is affected by varying proportions of high attainers in these authorities. Middle attainers do slightly better in non-selective Bristol than in selective Kent but middle attainers in both LAs do better than in non-selective BANES and nationally.

2.2.3 Social mobility

Sullivan et al. (2014) followed the education histories of 7700 individuals, recorded in the 1970 British Cohort Study. They found that 31 per cent of private school pupils in the 1970 birth cohort obtained a degree from an elite university, compared to 13 per cent from grammar schools, 5 per cent from comprehensives, and 2 per cent from secondary moderns. However, the researchers concluded that the apparent success of grammar schools on this measure could be attributed to pupils' social backgrounds and other factors such as their attainment at age 11.

Burgess et al. (2014) used a large, representative household panel survey to compare adult earnings and inequality for those educated in selective local authorities with those educated under a comprehensive system. Controlling for a range of background characteristics and the current location, the wage distribution for individuals who grew up in selective schooling areas was found to be more unequal. At the lower end of the distribution (where individuals in selective systems are more likely to have attended a secondary modern school), individuals born in a selective schooling area earn less than those from the matched non-selective areas, while this reverses for the top end, where individuals born in a selective area earn more than those educated in comprehensive schools. They suggest that the mechanism by which the inequality arises is through the higher quality teaching in grammar schools, which are more likely to attract high quality teachers.

2.2.4 Intervening variables

Guyon et al.'s (2012) findings imply that a more academic curriculum may result in better examination performance for grammar school pupils than for similar pupils in schools with a less academic curriculum. Gallagher and Smith (2000) also comment on the academic nature of the grammar school curriculum in Northern Ireland and suggest that a combination of the academic culture of the schools, high expectations and the learning environment created by the pupil peer group have an impact on

performance. Coe et al. (2008) found that grammar schools entered pupils for harder GCSE subjects and were more likely to have sixth forms.

Burgess et al. (2014) suggest that higher quality teaching, by more motivated and/or better-qualified teachers, is a factor in the higher earnings in later life by those in selective schools. Hattie (2008) reviewed qualitative evidence that “low track classes are more fragmented, less engaging and taught by fewer well-trained teachers.” (p91). He concludes that “the quality of teaching and the nature of student interactions are the key issues, rather than the compositional structure of classes” (p91). Gallagher and Smith (2000) found that the grammar school teachers in their study were proud of the achievements of their pupils and felt both more motivated and more highly valued by the public than their colleagues in other secondary schools.

A recent study of the applications made by highly-qualified graduates provides support for the view that these are more likely to apply to work in schools with overall higher attainment. Brown (2015) investigated data on the qualifications of newly qualified teachers in schools in England and found that those with higher qualifications were more likely to be working in schools where there is high attainment and a high proportion of pupils from affluent backgrounds. This was the case even when he considered schools with higher levels of pupil progress, but with lower examination performance. His work suggests that it is harder to recruit highly qualified teachers in schools where overall attainment is lower and with the proportion of pupils from affluent backgrounds is lower, even though the school may have a good record in promoting the progress of pupils.

Levavic and Marsh (2007) used data from twenty English local authorities that were either wholly or partially selective. After taking account of the cost factors and grant entitlements, secondary modern schools in the years 2000/01–2002/03 were funded around £80 less per pupil while grammar school pupils received over £100 more per pupil compared to comprehensive schools. They claim that students attending secondary modern schools do not receive sufficient additional funding to offset the depressing effects on attainment of the increased social segregation arising from a selective system. Hattie (2008) considered some examples of research that showed no impact of increased resources on school performance, but also other work which suggested that increased spending on more highly-qualified and experienced teachers had an impact on attainment. Pugh et al (2011) investigated the effects of school expenditure on performance and key stage 4 in England, in 2003-7, at a time when per pupil spending was increasing. The conclusion was that “spending money may be a necessary condition for school improvement but it is clearly not a sufficient one” (p186). They point out that what matters most is how teachers teach and the

quality of their teaching and mechanisms of any link between these and the resources available to the school are hard to capture.

2.3 The impact of parental choice and selection on school quality

Summary:

- Parental choice of school has been introduced as a mechanism to increase competitive pressures on schools in systems around the world.
- The evidence indicates that some parents make more active use of choice mechanisms than others, and that middle class parents tend to be better able to navigate and use information and systems designed to inform school choice. These active 'chooser' parents tend to prioritise social class (and to a lesser extent race) over school quality as a factor.
- The OECD (Waslander, Pater, and van der Weide, 2010) concludes that "the effects of market mechanisms in education are small, if they are found at all."
- Furthermore, the impact is often differential: some students and schools may experience positive effects while others may face the opposite.

There is some evidence from the Netherlands that parental choice may contribute to school quality, where schools have parity of esteem, are equally funded with open admissions and there is no elite school sector (Patrinos, 2013). As Fung and Lam (2012) point out, parents may have different perceptions of quality which may be culturally determined. In England, parents choose schools for a variety of reasons, often unconnected with the quality of the school, and thus the effect of school competition on quality is limited (Connolly et al., 2014; Nelson and Ehren, 2014)

In England, choice of school is based on parental choice. Reviews of research by Connolly et al. (2014) and Nelson and Ehren (2014) found that parental choice is influenced by socio-economic factors. School performance and school quality are a factor in choice of school, but other factors are important and more important for some parents. Evidence from England suggests that more affluent parents are better able to access and interpret published information, have access to social networks and informal data about the school and experience fewer constraints, such as proximity to the school or cost of housing in its catchment area. More educated and more affluent parents are more likely to cite academic standards when giving reasons for their choice, whilst less educated and less affluent parents are more likely to cite proximity to the school. More advantaged parents choose better performing schools, particularly in areas with many schools and therefore a lot of potential school choice, but they also choose schools with much lower proportions of pupils eligible for free school meals, relative to other schools available to them.

Smithers and Robinson (2010) find that parental choice is determined by factors other than academic excellence: 'Parents tend to seek out schools where children

similar to their own go. In addition to ability and income level, ethnic background and faith play a part' (p i) with parental choice an important factor in determining the social profile of secondary schools. They point to potential consequences of a school having a high proportion of pupils from advantaged families. Because of the link in feeder primary schools between socio-economic status and attainment, these secondary schools also have pupils who have higher scores at key stage 2. This makes it more likely that the schools will have good results at GCSE level and making it more likely that they are chosen by more informed and better off parents. High competition for places at the school may lead to higher prices within the catchment area so that lower income parents cannot afford to live near the school and travel costs will rise.

Nelson and Ehren found that the link between parental choice and socio-economic factors is found in other European nations, but in the Netherlands this is not the case. There are no catchment areas in the Netherlands and no elite private sector. There are a large number of private schools in the Netherlands, but these receive funding from the state at the same level as state schools and so may be compared with academies and free schools in the UK. Secondary schools attended from the age of 14 offer an academic or a vocational track and each is perceived publicly as of equal value. Although quality and performance influence school choice, particularly for the academic track, proximity to the school, religion and ethnic composition are also powerful influences. Patrinos (2013) describes the open admissions systems used by all schools and the lack of social segregation between schools. He uses PISA data to show that not only does the Netherlands overall have higher performance and a lower performance gap than many other European jurisdictions, but the private schools have better results than state schools. He uses this evidence to suggest the Dutch system of competition and equal funding has been effective through mechanisms such as schools becoming more effective in managing personnel, teaching students, promoting school efficiency, managing budgets, and involving parents as appropriate.

Fung and Lam (2012) cite research that different parents may have very different ideas about what is best for their children; in other words, they may have different definitions of quality that are culturally determined. In Hong Kong, parents are given vouchers for nursery education and make a free choice based on information provided by the school. This information tends to focus on academic benefits of attending the setting, rather than on broader views of quality recommended by early years' educators. According to Fung and Lam, this emphasis reflects the value given by parents to academic performance in Hong Kong even when this may be detrimental to broader developmental goals for nursery education.

Parental choice is often a mechanism for promoting competition and quasi markets in education. A recent summary of research on competition and markets in education for the OECD (Waslander, Pater, and van der Weide, 2010) concluded that “the effects of market mechanisms in education are small, if they are found at all.” Furthermore, the impact is often differential: some students and schools may experience positive effects while others may face the opposite.

The reviewers go on to ask why this might be case. On the demand side they look at the evidence on how different groups of parents make choices about schools, and whether improving the quality of information available to parents (for example through Ofsted reports) changes their decisions. They find that middle class parents tend to be more active ‘choosers’ than their working class peers. Importantly, it is the social composition of the school (and, less consistently, the racial composition) that appears to matter more to the choosers than the quality of teaching and learning per se. Public performance indicators such as Ofsted reports can be helpful in this context (by signalling quality issues), but the reputation of a school in the minds of local parents is less closely tied to its performance in league tables or Ofsted inspections than might be expected. For example, the PISA 2009 parental questionnaire showed that parents value ‘Academic achievement’ lower than ‘A safe environment’, ‘School climate’ and ‘Reputation’.

On the supply side, it seems that there is a threshold level for competition, above which schools start to alter their behaviour. Urban areas are more likely to exceed this threshold than rural ones. A number of studies indicate that local hierarchies of schools exist, from the most to the least popular, and it is schools in the middle of these hierarchies that face the greatest competition. Schools at different ends of these hierarchies tend to respond differently to competitive pressures, but the dominant response is for schools to try to control their intake by attracting the most ‘desirable’ students. This might involve anything from increasing marketing spend to developing attractive new facilities.

2.4 The impact of assisted places schemes and vouchers

Summary:

- Comprehensive evaluations of the assisted places scheme in England have suggested no effect, on average, on progress and attainment. The cost-effectiveness of the scheme was not probed.
- There is insufficient systemic evidence on the impact of voucher schemes at school level. This makes it difficult to evaluate the overall impact of voucher schemes. A voucher scheme aimed at poor families in Washington DC for pupils of all abilities found that progress in reading was higher for voucher children but with no impact in mathematics (Gill et al., 2001; Walford, 2013; Whitty et al., 1998; Wolf, 2010).

Walford (2013) and Whitty et al. (1998) both provide a description and an evaluation of the assisted places scheme (APS) in England, Wales and Scotland during the Conservative period of government from 1980 until 1997. The scheme provided for academically able children from poor families to be selected for free or subsidised places in private schools. During the period that the policy was in place 75 000 pupils benefited in over 200 independent schools. The assumption underlying the scheme was that education in these independent schools was of a higher quality than that available in the state system. Independent schools had to apply to be part of the scheme and, if selected as being of a high enough quality by the Department of Education and Science, agreed to accept a fixed number of students on the scheme each year. There was an additional requirement that at least 60% of the pupils had to have attended state-funded schools prior to accepting the APS place. Once in the scheme, schools recruited suitable pupils, using their own selection criteria.

The evaluations conclude that the scheme had not had the effect intended – that of increasing social mobility by offering opportunities to academically able, poor children, which were not available in their local state schools. In practice, because parents had to apply to individual schools, it was the most informed parents, who valued the type of education on offer, who sought assisted places. As well as academic entrance tests, other selection methods were used, such as interview, so that, in the words of one independent head cited by Whitty et al the pupils would ‘fit in’ to the culture of the school. Analysis of the backgrounds of children benefiting from assisted places showed that, although the family income was low, parents were on the whole well-educated and had high cultural capital. Analysis of progress of the pupils benefitting from assisted places shows that they did well at GCSE and A level, but progress and attainment in primary school, before taking up the assisted

place, had also been high. Pupils with similar prior attainment in local grammar or comprehensive schools similarly did well. Whitty et al. suggest that there is thus no evidence to demonstrate an 'assisted places effect' on progress and attainment. The cost-effectiveness of the scheme was not probed (the authors suggest that the scheme was a form of subsidy for some schools, who might otherwise have drawn on bursary or scholarship funds).

Most research on vouchers comes from the USA where students are assigned to public schools on the basis of where they live. Gill et al. (2001) provide a lengthy and comprehensive review on the impact of both vouchers and charter schools. Voucher schemes with income qualifications have been successful in putting more low income and minority students in voucher schools. Students with disabilities and with poorly-educated parents are underrepresented. Education tax subsidy programs are disproportionately used by middle- and upper-income families. There are some small achievement gains for African-American students in small-scale voucher schemes targeted at low-income families, but no impact on achievement of other students. Parental satisfaction levels are high in virtually all voucher and charter programs studied, substantially higher than those of public-school comparison groups.

There is no systemic evidence which investigates impact on those in voucher schemes and those who remain in publicly funded schools and little demographic information available at school level. This makes it difficult to evaluate the overall impact of voucher schemes.

In a more recent study Wolf (2010), in a study of a voucher scheme in Washington DC, says that about 11% of students in the USA attend private schools and approximately 17% of students exercise some form of choice within the public school system, for example as charter or magnet schooling. In the scheme studies, families at or near the poverty line could apply for tickets in a lottery, through which up to \$7500 annually to high school graduation was available to use at 60 eligible private schools. Because the lottery was oversubscribed, the researchers were able to match students who were successful in the lottery and went to private schools with students who had not been successful and who went to residentially assigned public schools. About 10% of eligible families applied for vouchers. Baseline test scores and demographic profiles for successful students were similar to those of students who stayed in District public schools but data was not available as to parental education and motivation for the voucher applicants. Three years after being randomly assigned to either receive a school voucher or serve in the control group, overall the voucher students were performing at significantly higher levels than the control group students in reading, with no significant impact in maths. Parents were

more satisfied with their child's school if the child had been offered a voucher, though students themselves were about equal in their rating of school satisfaction whether they were assigned to the voucher or the control group.

2.5 The impact of public and private schooling on outcomes

Summary:

- Although pupils attending private schools do well in terms of academic performance, there is no evidence that they do any better than pupils in state-funded schools with similarly high prior attainment and socio-economic background.
- Private school enrolment at age has been linked with the quality of other local secondary schools at ages 11+ and 13+.
- There is evidence that pupils who have attended private schools in England are much more likely to have attended an elite university later in life.
- Parents may choose private education for their facilities, the curriculum offered and their social composition, as well as their academic outcomes.
- Private schools in England benefit from much higher per-pupil income and there is evidence that this is spent on smaller class sizes. There is no empirical evidence which evaluates the performance overall of systems with an elite private system, although there are individual examples which suggest that there may be little difference on average.

The Independent Schools Council (ISC) census (2015) provides information about the current size of the independent sector in the UK. The independent sector educates around 6.5% of the total number of school children in the UK (and over 7% of the total number of school children in England) with the figure rising to more than 18% of pupils over the age of 16. Figures provided by the census state that 5,406 pupils are on full bursaries. Fee assistance grew in 2015, continuing a long term trend and 170,000 pupils now receive help with their fees. ISC schools provide more than twice as much assistance in the form of means tested bursaries as they do scholarships; over 40,000 pupils are currently benefitting from a means tested bursary. Beyond fee assistance, ISC schools undertake a wide range of work with state-funded schools and in the wider community; 93% of schools are involved in such partnerships. 92% of ISC pupils go on to Higher Education with 7% of these attending Oxford or Cambridge. 4% choose to study overseas. There is one teacher for every 9.2 pupils in ISC schools.

Between 2013 and 2014 there was an 18% rise in the number of IGCSE entries from pupils at Independent Schools Council (ISC) schools. In 2014 38.9% the exams taken by Y11 pupils at ISC schools were for IGCSEs rather than GCSEs.

Patrinos (2013) provides an example, the Netherlands, of a system with no elite independent sector, which achieves highly in international comparisons. Evidence of

the overall educational benefits and disadvantages of an independent sector, such as that found in the UK, has been difficult to locate for this review.

Whitty et al. (1998) found that pupils in the Assisted Places Scheme achieved outcomes no better than equivalent pupils in state schools, but this is a rare example of research which matches pupils.

There are clear advantages to pupils attending independent schools, but these are not always linked to academic outcomes. Sullivan et al. (2014) found that attending a private school in England increases the chances of attending an elite university. Using longitudinal cohort data they found that those who attended private secondary schools in the 1980s were about two and a half times more likely to gain a degree from a highly selective Russell Group university than comprehensive or grammar school pupils with the same A-level results. They were also almost one and a half times more likely to graduate from a mainstream university than their state school peers. The authors suggest that higher levels of aspiration in the private sector – both the parents' and the schools' – may provide part of the explanation. The authors further suggest that there are links between the universities and the private schools. The latter factor could be particularly salient in the case of top universities such as Oxford and Cambridge and a small number of elite private schools.

Having a parent with a degree also significantly increased the chances of graduating from an elite university. A person born in 1970 who had at least one graduate parent was more than twice as likely to obtain a degree from a Russell Group university as a pupil with the same A-level results, but whose parents had no qualifications. Fifty-two per cent of privately-educated pupils had at least one graduate parent, compared to 31 per cent from grammar schools, 14 per cent from comprehensives and 8 per cent from secondary moderns.

Dronkers and Avram's (2015) research across the EU suggests that in England, parents primarily choose an independent school because of their high socio-economic composition or the curriculum and facilities they offer. Davies and Davies (2014) point to evidence which suggests that parents do not just consider student achievement when selecting a school, with better facilities, range of activities (such as sports) being a more visible use of resources. Perceived impact of being educated with similar peers and high social capital are also strong influences in choice decisions. They may rely on the judgements of other parents (as evidenced through the willingness to pay school fees) to infer differences in school quality.

Blundell et al. (2010) used school level data from 1993 to 2008 to look at the relative importance of price and quality of state schooling in the area as influences in the demand for private education in England from the ages of 7 until 15 (i.e. the last year of compulsory schooling). To eliminate bias due to other factors influencing choice the authors use a statistical technique designed to eliminate this. They find that the demand for private schooling is inversely related to private school fees as well as the quality of state schooling in the local area at the time families were making key schooling choice decisions at the ages of 7, 11 and 13. An increase in the private school day fee when parents/students are making these key decisions reduces the proportion attending private schools, although this is only significant for choices at age 7. At age 11 and age 13, an increase in the quality of local state secondary reduces the probability of attending private schools and this is significant.

Davies and Davies used data gathered from analysis of the accounts of approximately 350 private schools to discuss the extent to which the additional resources are used on measures that might be considered most likely to increase attainment: small class size; more highly qualified and better- paid teachers; high numbers of support staff. They took into account the different needs of boarders in their calculations. Private schools in England have, on average, about twice the funding per pupil as state schools. They found that class sizes in English private schools are much smaller than class sizes in state schools. In 2009–2010 the average pupil–teacher ratio was 17.3 for state schools in England (DfE, 2011) and 9.4 for private schools. Although Davies and Davies found no evidence that teachers in private schools were better paid than teachers in the state sector, Kirby (2015) found that teachers in private schools were more likely to have degrees in specialist subjects and to have attended prestigious universities.

There was no evidence from Davies and Davies' research that any of the resource variables (number of teachers, number of non-teachers, average staff wages) were associated with contextualized value added (CVA). They found evidence that schools with higher fees or from richer regions had higher CVA. In conclusion they suggest that it makes sense for comparisons between state and independent sectors to be conducted on a cost effectiveness basis.

Example

At system level, the Netherlands provides an example of a system which does not have an elite private sector and which does better than England in international comparisons. Northern Ireland is another system without a significant elite private sector. It is possible that the anomaly in the finding from international PISA tests that performance in Northern Ireland and England is similar, but at GCSE Northern

Ireland does better is explained by a further factor linked to private schools. These have increasingly moved away from the use of GCSEs at age 16 as both Independent Schools' Council census data (ISC, 2015) shows. One school example is Badminton School, in Bristol, where 100% of pupils gained 5 A* to C grades at GCSE in 2011 and 2012 but 0% did so in 2013 and 2014. If there are many schools that do not contribute to overall GCSE outcomes for England, this may contribute to differences in GCSE performance between England and Northern Ireland.

3. Secondary school size

Summary:

- Research evidence strongly suggests that secondary school size has an optimal level of between 600 and 1000, with smaller schools in this range being better for pupils from disadvantaged backgrounds.

There is high consensus in research evidence on school size, both in research conducted in the UK and elsewhere. The review commissioned by Leithwood and Jantzi (2007) is thorough and comprehensive in relation to studies before that date and comes to firm conclusions. No more recent evidence has been identified which contradicts Leithwood and Jantzi's findings. They selected 59 studies for review, from over 200 identified, based on clarity of research methods and on peer review. 40 studies were of secondary schools. Although most of the reviewed work comes from the USA with a small number of studies from the UK, the review notes that findings are consistent, both among research from different jurisdictions and with findings from earlier reviews. Leithwood and Jantzi present a number of conclusions based on strong evidence, summarised as follows:

- Smaller schools are an advantage for most types of student outcomes, including performance, but also attendance, engagement, behaviour and participation in extra-curricular activities.
- Larger schools may be able to offer academically successful students a wider choice of subjects. However, there is strong evidence that a wide choice can be a threat to the academic progress of most students. Curriculum breadth can be achieved in a school as small as 500-600 students.
- Students who may struggle with school and children from disadvantaged backgrounds do better in smaller schools. More advantaged/high achieving students are not disadvantaged, provided that they 'have access to appropriate learning resources' (pii).
- Taking retention rates into consideration, smaller schools are more cost effective.

Overall they recommend that an optimum size for secondary schools serving disadvantaged communities is 600 or fewer. For schools in relatively advantaged areas, school size should be limited to 1000. Corresponding figures for primary schools are half those for secondary schools, i.e. 300 and 500. Other reviews of evidence such as that included in Hattie (2009) and Newman (2006) make similar conclusions to Leithwood and Jantzi.

The empirical study by Foreman-Peck and Foreman-Peck (2006) may be seen as particularly relevant to the UK and it is included in the Leithwood and Jantzi review. The study was undertaken in response to the Welsh Government's policy of encouraging good schools to expand. The authors use a range of indicators to develop a model for the impact of school size – including the proportion of pupils gaining 5 A* to C grades, the proportion gaining no GCSE passes and attendance. They found that exam performance goes up as size increases, with an optimal size of around 650 pupils. When very large schools (over 1300 pupils) were removed from analysis they found similar results for schools with and without sixth forms. Class size, proportion of pupils with SEN and proportion of pupils eligible for free school meals were also found to have small effects. Attendance was found to have a relatively high impact on exam performance. Reducing school size was found to increase attendance with a consequent impact on performance.

The authors conclude that reducing very large schools in Wales to around 600 pupils could produce significant gains in GCSE performance, both directly and through improved attendance. There was no evidence of an increasing social segregation effect in enlarging smaller schools, as measured by the impact of free school meals eligibility on changing school size in Wales.

No recent research has been identified which considers the relationship between school size and teacher recruitment and retention. Leithwood and Jantzi (ibid) identified two studies from Scandinavia which indicated that both recruitment and retention are better in smaller schools. Leithwood and Jantzi identified three US studies about curriculum breadth. One study argued that the larger schools which had a greater number of courses available to students ensured greater equity of access to students. However the other studies found that more within-school variability in course taking patterns was negatively related to student outcomes. Smaller schools had a more constrained variety of courses with greater academic emphasis and had higher academic achievement for all students. Gallagher and Smith (2000) found that the comprehensive schools they studied in Scotland needed to be larger than grammar schools in Northern Ireland to offer an academic curriculum to more able students and to use setting for some subjects. Even so, they found that Northern Irish pupils took more subjects to GCSE level.

More recent studies on school size have considered the effects of 'schools within schools' where very large schools are divided into smaller units. Levine (2011) provides two case studies where larger high schools had been divided into, respectively, 4 or 5 sub-units of about 300 pupils. In one of the cases, the overarching faculty structure had been retained. Within each sub-unit a team of teachers was responsible for the teaching and pastoral care of students, meeting in

year teams to collaborate and to share strategies. Faculty meetings continued to include subject staff from all of the sub- units. Levine found that as well as being able to share subject- specific curriculum and pedagogical approaches through faculty meetings, year meetings frequently referred to pastoral practices in other units that might be beneficial. In the contrasting case, each sub- unit operated completely independently within the same campus, with no structure to support interaction. Staff felt more stressed and isolated, particularly in relation to their subject specialism. New staff felt that there was less support available to them. Ready and Lee (2008) considered examples of cases of school which had divided into units each with their own specialised curriculum, into which students could opt. Ready and Lee found that units were segregated by student race, ethnicity, social class and with large differences in student performance. Both social and structural pressures influenced students' choice of curriculum. In Chicago, Kahne et al. (2008) found that although there was more personalised support and improved attendance in the newly formed small schools, there was no evidence of improved student achievement or of improvements in the quality of the curriculum and teaching and learning. Based on interview data with principals, they found that the challenges of establishing a new school had restricted their ability to act as instructional leaders and to lead school improvement.

Example:

In Northern Ireland, guidance on local areas plans suggested that 500 was the minimum viable size for a secondary school to provide a curriculum of sufficient breadth. Schools smaller than this are strongly encouraged to work in partnership with neighbouring schools in order to provide an Entitlement Curriculum.

4. Academies and Free Schools

Summary:

- It is considered too early to evaluate the impact of converter academies and free schools on performance.
- Evidence from sponsored academies shows that these had a positive impact on pupil performance.
- There is no evidence that free schools are more likely to recruit pupils with higher prior attainment or with lower levels of disadvantage than the national average.

According to Green (2014) it is too soon to evaluate free schools by performance, but using data from those free schools that had opened by September 2013, they were able to investigate the social composition of these schools. They found that free schools opened in neighbourhoods where the proportion of children entitled to free school meals was a little higher than the national average and that they are more likely to be in areas with high proportions of pupils from non- white groups and non- Christian faiths. The proportions of pupils entitled to free school meals within secondary free schools is around the national average, and thus a little lower than in the immediate surrounding area. They found no differences in prior attainment in secondary free schools than in other non- selective schools, although there was higher prior attainment in primary free schools.

Equivalent to free schools, charter schools in the USA have operated for a number of years. Gill et al. (2001) and Hattie (2008) reported that evidence showed a mixture of positive and negative effects with much variation across different states, leading to the conclusion that little is known about their impact.

Worth (2015) recently provided a succinct report for NfER which summarises what is known about the impact of the academies programme in England. Originally established to replace underperforming schools in 2002-9, the number of academies grew rapidly from 2010, as they began to include higher-performing schools as well as those needing improvement. Academies now comprise 60 per cent of secondary schools and 13 per cent of primaries. The first academies were opened with new leadership and new investment, with freedom to change the school's policy on staffing structure, alter the school day and develop new curriculum and pedagogical models and was designed to put underperforming schools on the path to sustained improvement. There is good quality evidence that these early sponsored academies had a positive impact on pupil performance with academies open for between four and six years showing the most significant improvement only partly explained by

having more higher ability pupils. Despite a drop in their intake ability, results in neighbouring schools also improved slightly.

Worth claims that the policy principle that school autonomy was the driving force behind school success encouraged the coalition government to make it possible for all schools to become academies. OECD (2012) state that the most successful school systems are ones which combine school autonomy with strong accountability. Academy status is intended to enable a school to take innovative approaches to the way the school is run, including governance, resource deployment, and curriculum development. It is too early to say what the pupil performance benefits of academy conversion among high-performing schools are, but research has found the attainment benefits of academisation for pupils in converter academies are limited in the short term (Worth, 2014).

Worth also comments on the collaborative arrangements found in multi- academy trusts (MATs) and more generally. There is little hard evidence of school-to-school collaboration having an impact on students' educational outcomes, though there is some qualitative evidence that partnering can have benefits. More research is needed to understand the contribution that school-to-school collaboration makes, particularly whether collaboration is effective in supporting underperforming schools to improve, and how the governance structure interacts with opportunities to collaborate.

Bibliography

- Allen, R., Burgess, S. and McKenna, L. (2013) The short-run impact of using lotteries for school admissions: early results from Brighton and Hove's reforms. *Transactions of the Institute of British Geographers*. 38, 149-166.
- Atkinson, A., Gregg, P., & McConnell, B. (2006). *The result of 11 plus selection: An investigation into opportunities and outcomes for pupils in selective LEAs* (No. 06/150). Department of Economics, University of Bristol, UK.
- Birrell, D., & Heenan, D. (2013). Policy style and governing without consensus: devolution and education policy in Northern Ireland. *Social Policy & Administration*, 47(7), 765-782.
- Blundell, Richard; Dearden, Lorraine; Sibieta, Luke (2010) The demand for private schooling in England: The impact of price and quality, *IFS working papers*, 10:21. Available from <http://hdl.handle.net/10419/47511>
- Borooah, Vani; Knox, Colin (2014) Access and performance inequalities: post-primary education in Northern Ireland. *Journal of Poverty and Social Justice*, 22:2, 111-135.
- Borooah, V. and Knox, C. (2015) Segregation, inequality, and educational performance in Northern Ireland: Problems and solutions. *International Journal of Educational Development* 40 (2015) 196–206
- Brown, J. (2015) The flow of higher qualified new teachers into challenging UK high schools, *Research Papers in Education*, 30:3, 287-304.
- Burgess, S. M., Dickson, M., & Macmillan, L. (2014). Selective schooling systems increase inequality. *IZA Discussion paper 8505* available from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2505367
- Coe, R., Jones, K., Searle, J., Kokotsaki, D., Kosnin, A.M. and Skinner, P. (2008) *Evidence on the effects of selective educational systems*. The Sutton Trust. Available from <http://www.suttontrust.com/wp-content/uploads/2008/10/SuttonTrustFullReportFinal.pdf>
- Connelly, R., Sullivan, A. and Jerrim, J. (2014) *Primary and secondary education and poverty review*. Centre for Longitudinal Studies, Institute of Education, University of London. Available at <http://www.cls.ioe.ac.uk/librarymedia/documents/Primary%20and%20secondary%20education%20and%20poverty%20review%20August%202014.pdf>
- Cribb, J., Jesson, D., Sibieta, L., Skipp, A., Vignoles, A. (2013) Poor Grammar: Entry into Grammar Schools for disadvantaged pupils in England. The Sutton Trust available at <http://www.suttontrust.com/wp-content/uploads/2013/11/poogrammarreport-2.pdf>
- Davies, P. and Davies, N.M. (2014) Paying for Quality? *British Educational Research Journal*, 40: 3, 421–440
- De Waal, A. (ed.) (2015) *The Ins and Outs of Selective Secondary Schools: A debate*. Civitas. Available at <http://www.civitas.org.uk/pdf/theselectiondebate>
- Dronkers, J. & Avram, S. (2015) What can international comparisons teach us about school choice and non-governmental schools in Europe? *Comparative Education*, 51:1, 118-132

Education and Training Inspectorate (2014) *Summary of the Chief Inspector's Report*

2012-2014. Education and Training Inspectorate for Northern Ireland available at <http://www.etini.gov.uk/index/inspection-reports/the-chief-inspectors-report/ci-report-2012-2014-summary.pdf>

Foreman- Peck, J. and Foreman- Peck, L. (2006) Should Secondary Schools in Wales be Smaller? *Economics of Education Review*, 25:2, 157-171.

Fung, K.H. and Lam, C.C. (2012) The Tension Between Parents' Informed Choice and School Transparency: Consumerism in the Hong Kong Education Voucher Scheme *International Journal of Early Childhood*, 44(1), 31-52.

Gershenson, S. and Langbein, L. (2015) The Effect of Primary School Size on Academic Achievement. *Educational Evaluation and Policy Analysis*, 37:1.

Green. F., Allen, R. and Jenkins, A. *The Social Composition of Free Schools after Three Years*, London, Institute of Education, 2014.

Gallagher, T., & Smith, A. (2000). *The Effects Of The Selective System Of Secondary Education In Northern Ireland. Main Report*. Available at <http://eprints.ulster.ac.uk/19225/>

Gill, B.P., Timpane, P.M., Ross, K.E., Brewer, D. J.(2001) *Rhetoric versus Reality What we know and what we need to know about vouchers and charter schools*. Rand Corporation.

Guyon, N., Maurin, E., & McNally, S. (2012). The Effect of Tracking Students by Ability into Different Schools A Natural Experiment. *Journal of Human Resources*, 47(3), 684-721.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.

Independent Schools' Council (2015) *ISC Annual census 2015*. Available at http://www.isc.co.uk/research/Publications/annual-census/isc-annual-census-2015.htm?wbc_purpose=Basic.rss%22+and+%22x%22

Jesson, David (2013) *The Creation, Development And Present State Of Grammar Schools In England*. The Sutton Trust available at <http://www.suttontrust.com/researcharchive/creation-development-present-state-grammar-schools-england/>

Kahne, J. E., Spote, S. E., De La Torre, M., & Easton, J. Q. (2008). Small high schools on a larger scale: The impact of school conversions in Chicago. *Educational Evaluation and Policy Analysis* 30: 3, 281–315

Kirby, P. (2015) TEACHING BY DEGREES The university backgrounds of state and independent school teachers. The Sutton Trust available at <http://www.suttontrust.com/wp-content/uploads/2015/06/Teaching-by-Degrees.pdf>

Leithwood, K. and Jantzi, D. (2007) Review of Empirical Evidence about school size effects. A Policy Perspective. Report prepared for the Board of Education of the Regina School Division No. 4 of Saskatchewan.

Levacic, R. and Marsh, A.J. (2007) Secondary Modern Pupils: are they disadvantaged? *British Education Research Journal*, 33:2, 155-178.

- Levine, T. H. (2011). Comparing approaches to converting large high schools into smaller units. *Improving Schools*, 14(2), 172-186.
- Nelson, R. and Ehren, M. (2014) *Review and synthesis of evidence on the (mechanisms of) impact of school inspections*. Available at : <http://schoolinspections.eu/wp-content/uploads/downloads/2014/02/Review-and-synthesis-of-evidence-on-the-mechanisms-of-impact-of-school-inspections.pdf>
- Noden, P., West, A., & Hind, A. (2014). Banding and ballots: secondary school admissions in England: admissions in 2012/13 and the impact of growth of academies. London School of Economics and The Sutton Trust. Available at http://eprints.lse.ac.uk/56003/1/Banding_and_ballots_2014.pdf
- Newman, M., Garrett, Z., Elbourne, D., Bradley, S., Noden, P., Taylor, J., & West, A. (2006). Does secondary school size make a difference?: A systematic review. *Educational Research Review*, 1(1), 41-60.
- Patrinos, H. A. (2013) Private education provision and public finance: the Netherlands Education Economics, 21:4
- Pugh, G., Mangan, J. and Gray, J. (2011) Do increased resources increase educational attainment during a period of rising expenditure? Evidence from English secondary schools using a dynamic panel analysis *British Educational Research Journal*, 37:1, 163–189.
- Office for Standards in Education (Ofsted) (2013) *Unseen Children: Access and Achievement 20 years on*. Ofsted. Available at <https://www.gov.uk/government/publications/unseen-children-access-and-achievement-20-years-on>
- Organisation for Economic Cooperation and Development (OECD) (2013), *PISA 2012 Results: What Makes Schools Successful? Resources, Policies and Practices (Volume IV)*, PISA , OECD Publishing. Available at <http://dx.doi.org/10.1787/9789264201156-en>
- Organisation for Economic Cooperation and Development OECD (2015) *What do parents look for in their child's school?* Available at [http://www.oecd.org/pisa/pisaproducts/pisainfocus/PIF-51\(eng\)-FINAL.pdf](http://www.oecd.org/pisa/pisaproducts/pisainfocus/PIF-51(eng)-FINAL.pdf)
- Ready, D.D. and Lee, V. E. (2008) Choice, equity and the Schools- within- schools reform. *Teachers College Record*, 110, 1930:1958.
- Shewbridge, C., Hulshof, M., Nusche, D. and Staehr, L.S. (2013) *OECD Reviews of Evaluation and Assessment in Education NORTHERN IRELAND, UNITED KINGDOM*. OECD available at <http://www.oecd.org/unitedkingdom/Reviews%20of%20Evaluation%20and%20Assessment%20in%20Education%20Northern%20Ireland.pdf>
- Sibieta, L. (2015) *The distribution of school funding and inputs in England: 1993-2013*. Institute for Fiscal Studies. Available at <http://www.ifs.org.uk/publications/7645>
- Skipp, A. and Sadrow, F. (2013) *Access to Grammar Schools for disadvantaged pupils*. The Sutton Trust. Available at <http://www.suttontrust.com/wp-content/uploads/2014/08/natcengrammars.pdf>
- Smithers, A. and Robinson, P. (2010) *Worlds Apart: social variation among schools*. The Sutton Trust. Available at http://www.suttontrust.com/wpcontent/uploads/2010/03/Worlds_apart.pdf

- Strand, S. (2006) Comparing the predictive validity of reasoning tests and national end of Key Stage 2 tests: which tests are the 'best'? *British Educational Research Journal*, 32:2, 209–225.
- Strand S., (2014) School effects and ethnic, gender and socio-economic gaps in educational achievement at age 11, *Oxford Review of Education*, 40:2, 223-245,
- Sullivan, A.,Parsons, S.,Wiggins, R., Heath, A. and Green, F. (2014) Social origins, school type and higher education destinations, *Oxford Review of Education*, 40:6, 739-763
- Vignoles, A.; Cribb, J. and Sibieta, L. (2013) *Entry into Grammar Schools in England*. The Sutton Trust available at <http://www.suttontrust.com/researcharchive/entry-grammar-schools-england/>
- Walford, G. (2013) State support for private schooling in India: What do the evaluations of the British Assisted Places Schemes suggest? *Oxford Review of Education*, 39:4
- Waslander, S., Pater, C. and Van Der Weide, M. *Markets in education: An analytical review of empirical research on market mechanisms in education*. No. 52. OECD Publishing, 2010.
- West, A. (2005) 'Banding' and Secondary School Admissions: 1972-2004. *British Journal of Educational Studies*, 53:1, 19-33.
- Wheater, R., Ager, R., Burge, B. and Sizmur, J. (2014) Achievement of 15-Year-Olds in England: PISA 2012 National Report (OECD Programme for International Student Assessment) Department for Education available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/299658/programme-for-international-student-assessment-pisa-2012-national-report-for-england.pdf
- Whitty, G., Power, S., & Edwards, T. (1998). The assisted places scheme: its impact and its role in privatization and marketization 1. *Journal of Education Policy*, 13(2), 237-250.
- Wolf, P.J. (2010) School vouchers in Washington, DC: achievement impacts and their implications for social justice. *Educational Research and Evaluation: An International Journal on Theory and Practice*, 16:2, 131-150
- Worth, J. (2015) *Academies: It's time to learn the lessons*. NFER.

Annex 1: Case study: Kent

Areas considered for case study: Dover, Ashford as defined by parliamentary constituency.

The parliamentary constituencies of Ashford and Dover have been selected as contrasting areas in terms of socio- economic context. Ashford has a population of approximately 118 000, an unemployment rate of 4.1% and an average annual income of £21 800. Dover is smaller (population approximately 112 000), with a higher unemployment rate of 11% and lower average annual income at £18 300.

Parents in Kent make applications for a secondary school place between the beginning of September and the beginning of November in the year preceding entry. They may nominate up to four schools and offers of places are made at the beginning of March. Kent County Council lets schools know which children have applied for places and any information needed to rank children according to oversubscription criteria, but does not tell schools the order of choices. These are used only if a child is offered a place at more than one school, in which case they will be allocated to the higher preference school.

Grammar schools are not allowed to admit pupils who have not reached the required standard on the Kent test. It is possible for parents of children who have reached the required standard not to be allocated a place at any grammar school if they do not fall within oversubscription criteria for any of their named grammar schools. Kent's transfer test has two components, a Reasoning test and a combined Maths and English test, with both multiple choice. Children are also asked to complete a piece of writing which is not formally marked. Primary school headteachers receive results before parents. If they disagree with the result for one or more children, they may submit additional evidence including school assessment records to a local headteachers' panel, who may also use the piece of writing. The panel may change the assessment if they are confident that the child would be best placed in a grammar school. Kent's test is taken by about 13 000 children each year, with census information for 2011 suggesting that the cohort size is about 17 000. Hence approximately 75% of eligible children take the 11+ test.

The majority of schools in Ashford and Dover apply similar oversubscription criteria, using siblings and distance from the school to rank pupils. Secondary schools in Kent were formerly classified as grammar and secondary modern. Several of the former secondary moderns are now academies and, as their own admissions' authorities, may select part of their intake or admit pupils of all abilities. Admissions information from Kent, classifies schools as comprehensive or selective, corresponding to former secondary modern and grammar status. DfE performance tables give the designation of the school for the GCSE cohort, which may be selective, modern or comprehensive. The terminology 'non- grammar' is used here to designate those state- funded schools in Kent which do not require pupils to pass the Kent test for entry. Homewood School (non- grammar) normally requires a supplementary form and this school uses its own test to select part of its intake. Faith schools use various faith criteria, combined with distance, to manage oversubscription. Schools that filled all of their places in Ashford in 2014 were the two Grammar schools, the partially- selective Homewood and the recently opened free school. Of the two schools categorised by DfE as 'modern', The North school took more than its admission number in 2014 whereas Towers school was significantly undersubscribed. The 'inadequate' grading given to the North school in 2013, appears not to have affected its admissions in 2014. One other non- selective school in Ashford is considered to be less than good, with the Towers schools rated as 'requires improvement'.

Both performance and progress in the Ashford grammar schools is very high for all pupils, including those that are disadvantaged. Of the other schools, The John Wallis C of E Academy exceeds national standards for progress in both English and mathematics and the Kent standard for mathematics, with all other schools having lower performance and progress. Average prior attainment at John Wallis is also very low, at 24.0 and levels of disadvantage are higher than nationally and locally, at 32%. This school shows that average progress of pupils at non-selective schools in selective systems can be good, with school factors more likely to be significant than system factors. However there is a large gap in performance of disadvantaged pupils in John Wallis compared with all pupils. One school in Ashford had GCSE performance less than 40% in 2014.

Both grammar schools in Ashford had a much lower proportion of disadvantaged pupils than the local average with that in the partially selective Homewood also significantly lower. This conforms to evidence that suggests that selective schools are more socially advantaged than non-selective schools.

In Dover, only the two Grammar schools filled all of their places in 2014, with some schools, such as Dover Christchurch Academy, having a high proportion of unfilled places. Admissions for all eight Dover schools are shown below. One of the non-selective schools in Dover has been judged to be inadequate by Ofsted and two to 'require improvement'. Dover Grammar School for Boys has also been judged to 'require improvement'. Thus, half the schools fall below Ofsted's 'good' standard, which is well above average national figures. Both Dover grammar schools have very high performance and progress for all pupils as does the non-selective state boarding school. Two schools in Dover had less than 40% of pupils gaining 5 A* to C grades in 2014. Average progress at St Edmund's school was above both Kent and national averages and there was little difference in performance of disadvantaged pupils when compared with all pupils in this school. This illustrates that non-selective schools can achieve good progress and outcomes for all children in selective systems. As in Ashford, the grammar schools (and the state boarding school) have low proportions of disadvantaged pupils when compared with local and national averages, with two of the non-selective schools having more than 40% disadvantaged pupils, well above local and national averages.

Admissions criteria and applications for secondary schools in Ashford (for 2015 entry) together with information about the one independent school in Ashford.

School	School type	Criteria used in order	Admission number	Accepted 2014	Ofsted grading and date
Highworth Grammar School	Girls, selective, converter academy	Must have taken and met standard in Kent test, Statement of SEN, in care, siblings, medical/social need, distance of home from school	184	176	1 (Jun 13)
Homewood School and VIth Form	Mixed, comprehensive, converter academy	20% of intake selected by ability or aptitude using school test with top 72 children admitted, Statement of SEN, in care, siblings, medical/social need, distance of home from school	390	390	2 (Sept 12)
The North School	Mixed, comprehensive, community (DfE modern)	Statement of SEN, in care, siblings, medical/social need, if distance of home from the school is less than to any other	215	225	4 (Dec 13)

		maintained non selective school, distance.			
The Norton Knatchbull School	boys, selective, converter academy	Must have taken and met standard in Kent test, Statement of SEN, in care, siblings, medical/social need, distance of home from school	149	144	2 (Nov 12)
Towers School and VIth form	Mixed, comprehensive, converter academy (DfE modern)	Statement of SEN, in care, siblings, medical/social need, if distance of home from the school is less than to any other maintained non selective school, distance.	243	120	3 (Sept 14)
Wye School	Mixed, comprehensive, free	Statement of SEN, in care, siblings, medical/social need, if distance of home from the school is less than to any other maintained non selective school, distance.	90	90	Not yet inspected
Ashford School	Mixed, selective, independent, day and boarding. Day fees £5400 per term for 11+ Assisted places are available to those in financial need and there are reduced fees for children of the clergy, members of armed forces and some scholarships for academic or specialist excellence.	Pupils admitted to Y7 are above national average academically and 60% are in the top quartile of ability. Admission at 11+ or 13+ from pupils not in the Prep School is by assessment test and report from a candidate's previous school.			

Performance

School	Av KS2 score on entry	% of pupils making expected progress		% achieving 5+ A*-C GCSEs (or equivalent) including English and maths GCSEs			
		Eng	Maths	2011	2012	2013	2014
England average	27.6	71.6(state funded only)	65.5 (state funded only)	59.0 (all schools)	59.4 (all schools)	59.2 (all schools)	53.4 (all schools)
Kent average	27.5	74.3	66.9	59.4	61.3	63.1	58.1
Highworth Grammar School	31.5	94	93	99	98	99	97
Homewood School and VIth Form	26.8	68	67	47	42	53	46
The John Wallis C of E Academy	24.0	73	71	31	44	45	48
The North School	26.2	65	48	39	34	42	36
The Norton Knatchbull	31.5	86	96	99	94	94	93

School							
Towers School and VIth form	26.3	67	65	42	40	46	41
Wye School	No GCSE cohort in 2014						
Ashford School	No data	No data	No data	90	80	86	0

Equity

	% disadvantaged pupils	% achieving 5 A* to C inc Eng and maths, 3 year average	
		All pupils	Disadvantaged pupils
England av. (state funded)	26.9	58.7	38.7
Kent average	20.9	60.8	33.7
Highworth Grammar School	11	98	89
Homewood School and VIth Form	16	47	31
The John Wallis C of E Academy	32	45	24
The North School	25	37	27
The Norton Knatchbull School	8	94	96
Towers School and VIth form	22	42	27

Admissions criteria and applications for secondary schools in Dover (for 2015 entry) together with information about the one independent school in Dover.

School	School type	Criteria used in order	Admission number	Accepted 2014	Ofsted grade and date
Astor College	Mixed, all ability, converter academy (DfE modern)	Statement of SEN, in care, siblings, medical/social need, distance of home from school	210	185	2, Oct 11
Castle Community College	Mixed, all ability, converter academy (DfE modern)	Statement of SEN, in care, siblings, medical/social need, distance of home from school	180	150	4, Mar 14
Dover Christ Church Academy	Mixed, comprehensive, sponsored academy	Statement of SEN, in care, siblings, medical/social need, distance of home from school	150	85	3, Oct 14
Dover Grammar School for Boys	Boys, selective, Foundation	Must have taken and met standard in Kent test, Statement of SEN, in care, siblings, medical/social need, distance of home from school	120	Not stated (assume 120)	3, Oct 13
Dover Grammar School for Girls	Girls, selective, community	Must have taken and met standard in Kent test, Statement of SEN, in care, siblings, medical/social need, distance of home from school	120	120	1, Nov 13
Duke of Yorks Royal Military School	Mixed, comprehensive, sponsored academy (boarding)	Child of a member of the armed services with high mobility	52 boys, 52 girls	23	2, Apr 14
St Edmunds	Mixed, Voluntary Aided	Statement of SEN, in care and	155	62	3, Oct

Catholic School	Comprehensive	Catholic, Practising Catholic (evidence required), Other Catholic (evidence required), other Christians, other children in care, distance from school.			14
Dover College	Mixed, Independent, day and boarding Day fees £3300 per term for Y7 and Y8, £4750 Y9 to Y11. Means tested bursaries and scholarships provide reduced fees to approximately one third of pupils.	Kent test used although school is not academically selective or common entrance at 13+, Selected through interview and report from previous school,			

Performance

School	Av KS2 score	% of pupils making expected progress		% achieving 5+ A*-C GCSEs (or equivalent) including English and maths GCSEs				Eng Bacc	Per pupil funding
		Eng	Maths	2011	2012	2013	2014		
England average	27.6	71.6(state funded only)	65.5 (state funded only)	59.0 (all schools)	59.4 (all schools)	59.2 (all schools)	53.4 (all schools)	22.9 (all schools)	
Kent average	27.5	74.3	66.9	59.4	61.3	63.1	58.1	26.8	£5904
Astor College	25.7	57	41	37	40	42	35	0	
Castle Community College	26.3	57	42	41	50	20	33	2	
Dover Christ Church Academy	24.8	46	63	28	30	40	34	7	
Dover Grammar School for Boys	30.1	90	76	90	91	92	85	26	£4643
Dover Grammar School for Girls	31	92	92	94	98	99	97	88	£4904
Duke of Yorks Royal Military School	28.6	79	87	91	74	81	67	24	
St Edmunds Catholic School	25.7	76	69	37	37	49	51	5	£6409
Dover	No	No data	No	53	69	62	52	26	

College	data		data						
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Equity

		% achieving 5 A* to C inc Eng and maths, 3 year average	
	% disadvantaged pupils	All pupils	Disadvantaged pupils
England average (state funded only)	26.9	58.7	38.7
Kent average	20.9	60.8	33.7
Astor College	46	39	24
Castle Community College	22	34	26
Dover Christ Church Academy	40	35	17
Dover Grammar School for Boys	14	89	85
Dover Grammar School for Girls	6	99	93
Duke of Yorks Royal Military School	3	73	50
St Edmunds Catholic School	25	46	42
Dover College			

Annex 2: Case study – Northern Ireland

Discussions to end selection in Northern Ireland were initiated in 1997, when a Labour government came into power in Westminster and a report was commissioned (Gallagher and Smith, 2000) to study the effects of the existing system. Wide disparities in outcomes from pupils in grammar and non- grammar schools were identified in that report, together with big gaps in outcomes related to socio- economic circumstances and these have continued to be an issue (Borooah and Knox, 2014; Borooah and Knox, 2015; Shewbridge et al., 2013). Government policy in Northern Ireland is now to end selection on the basis of academic testing and to ensure all secondary- age pupils have access to the same curriculum. 11+ tests are now against national policy. However, the Northern Ireland government is working within severe financial restraints and with a school system that has enjoyed considerable autonomy and with powerful interest groups, particularly those representing dominant faith groups and grammar school trusts. Northern Ireland continues to be, on the whole, a ‘selective system’. This case study provides an overview of admissions arrangements and performance in Northern Ireland as a whole. To illustrate how these play out in a local area, it draws on data about schools in a single council district, Down, located in the former South- Eastern Education and Library Board area.

Since April 2015, state- funded schools come under the jurisdiction of a single education authority (EA). Previously there were five Education and Library Boards (ELBs) which performed the role of local authorities in the rest of the UK, with these further divided by district council areas. Financial pressures, falling rolls and reforms to ensure a high quality curriculum for all pupils in equally good schools led to reviews of local school organisation, with each ELB required to consult and publish plans in 2013, which would show how they intended to ensure sufficient, high- quality school places to 2025. Each plan is constrained by restrictions on capital budgets and the need to work with the existing system and pattern of schooling. Several small schools have closed and partnership working, to ensure a broad curriculum is encouraged. As a general rule, guidance on plans suggests that a minimum viable number for a single school to offer the entitlement framework is a roll of 500.

There are few independent schools in Northern Ireland, with only 0.2% of pupils nationally attending independent schools (Shewbridge et al. (2013). State- funded schools serving 11-16-year- olds are termed ‘post- primary’ with pupils taking GCSE examinations in their last year of compulsory education (Year 12 in Northern Ireland). These schools are divided into ‘grammar’ and ‘non- grammar’ in performance tables, but all schools follow the same curriculum and, since 2013, must show how they provide an ‘Entitlement curriculum, from age 14, either alone or in partnership with other schools. Approximately 40% of pupils currently attend grammar schools. This proportion has been increasing since 2009, when all schools were required to admit up to their admission number, if there were sufficient applicants, and as the secondary age cohort has fallen (Guyon et al., 2012). There are a number of types of school, with many having high degrees of autonomy and historically- conferred influence, as follows:

Controlled schools are managed and funded through school Boards of Governors (BoGs) which usually include representatives of Protestant churches. They may include primary, grammar and non- grammar schools. There is a growing number of controlled integrated schools.

Voluntary maintained schools are managed by BoGs which include members nominated by trustees - mainly Roman Catholic. The employing authority of teachers in these schools is the Council for Catholic Maintained Schools (CCMS)

Voluntary non- maintained grammar schools are managed by a BoG which includes foundation governors. The BoG is the employing authority and is responsible for the employment of all staff in its school.

Integrated grant- maintained schools were established to bring Protestants and Catholics and other traditions together, with an expectation that each school will have at least 30% of its pupils from the minority Christian religion in its local area. Each grant maintained integrated school is managed by a BoG consisting of trustees or foundation governors. The BoG of an integrated school is the employing authority and is responsible for the employment of staff.

Admission to post primary schools.

Under a policy change in 2009, all state- funded schools are required to admit pupils up to their stated admission number, via open enrolment. For applications for a post- primary place in September 2015, parents received a brochure and transfer form from the local ELB in January, with details of local schools and their admissions policies which must state how schools will manage oversubscription. On the Transfer Form parents were asked to list, in order of preference, at least four post-primary schools and return it by the end of February. ELBs process Transfer Forms according to parental preference, initially passing the form to the school named as a first preference so that it can apply its admissions criteria based on the information provided. The form may need to be passed to other schools named as preferences before the process is complete. Parents hear which school has accepted their child by the end of May and, if no place is available at a nominated school, may be asked to nominate other schools.

With regard to the difference between grammar and non- grammar schools, the Department for Education offers the following guidance to parents

(http://www.deni.gov.uk/advice_for_parents_of_children_in_primary_6_pdf_215kb.pdf)

Contrary to the perception of some, schools that admit pupils on the basis of academic selection (contrary to Department of Education policy) do not offer an “academic” education distinct from the type of education on offer at all other schools. Unlike some other countries, where pupils’ educational pathways are set at an early age as they go to different types of schools that deliver specific types of education and curricula, our system is designed to keep as many pathways as possible open until students reach the age of 16. Since the introduction of the **Entitlement Framework** in September 2013 ... all young people at 14 and above are guaranteed access to a minimum number of both general (academic) and applied (vocational) courses, regardless of where they study. The Entitlement Framework ensures that all post-primary schools have the flexibility to offer a wide range of subject choices that both inspire and engage pupils; that have clear pathways to further and higher education, training and employment; and that are relevant to the needs of our 21st century economy. From September 2015 all post-primary schools must offer access to at least 24 courses at Key Stage 4 (age 14-16) and at least 27 courses at sixth form. Schools should readily advise parents about the number and range of courses they are providing access to for their pupils. (p 4)

The selection tests which continue to be used by many grammar schools are in contravention of national policy and are not regulated. Primary schools are not permitted to use core curriculum time to prepare pupils for tests. The transfer form requests information about, at least, siblings and

whether the child is eligible for free school meals. There is an expectation that schools will use their admissions criteria to admit a fair number of children entitled to free school meals.

Performance

An OECD review (Shewbridge, 2013), using results from PISA 2009, found that pupils in Northern Ireland perform very well in assessments at the primary level compared with other OECD countries, and around average at the post-primary level. In the report, concern was expressed in relation to gaps between high- and low- attaining pupils and between those in poor socio- economic circumstances and other pupils. Shewbridge et al. note that post- primary schools fail to build on the successes achieved by pupils in primary schools. According to the Chief Inspector’s report for 2014, the system ‘has unacceptable variations and persistent shortcomings’ (ETI, 2014, p 5).

More recently, in the PISA 2012 tests for 15-year- olds in mathematics, reading and science, post- primary pupils again performed around the average OECD level in mathematics and reading, as did England and Scotland, with all three performing slightly higher than the OECD average in science. Wheater et al. (2014) summarise the findings in comparison with other UK nations noting that gaps between highest and lowest attainers are higher than the OECD average in both Northern Ireland and England, with Scotland having the smallest gap in the UK nations. Across OECD countries as a whole, 15% of the variance in mathematics scores can be explained by socio- economic circumstances, Northern Ireland has a variance in performance greater than the OECD average (at 17 per cent), with England at 12% and Wales at 10%. Unlike the rest of the UK, girls and boys perform equally in Northern Ireland in mathematics and science, although, as in the rest of the UK, girls do better in reading.

If GCSE results for Northern Ireland are compared with those of England, overall performance in the key indicator of pupils achieving 5A* to C including English and maths has been consistently higher over the period 2011 – 14. The way that free school meal entitlement is calculated and data is published by the Department for Education Northern Ireland (DENI) does not allow for a direct comparison of overall performance of disadvantaged pupils.

		% achieving 5+ A*-C GCSEs (or equivalent) including English and maths GCSEs					
		2011	2012	2013	2014		
	Total number of secondary pupils						% disadvantaged pupils 2014
England - all schools		59.00%	59.40%	59.20%	53.40%	NA	NA
England - state funded schools only	3181361	58.20%	58.80%	60.60%	56.60%	27.6	26.9%
Bristol	19547	50.20%	51.60%	52.30%	55.20%	26.9	36.0%
Bath and North-East Somerset	12257	64.20%	57.50%	63.60%	61.90%	28.3	15.6%
Kent	99043	59.40%	61.30%	63.10%	58.10%	27.5	20.9%

Northern Ireland - all schools	142553	60.1	60.1	60.9	65.2	NA	19% FSM *
Northern Ireland - grammar schools	NA	93.9	92.9	94	94.5	NA	7.4% FSM *
Northern Ireland - non-grammar schools	NA	34.3	36.2	37.7	44	NA	27.1% FSM*
South Eastern Education and Libraries Board (SEELB) includes Down district	6380	NA	NA	NA	NA	NA	16% FSM
SEELB grammar schools		96.2	98	96.4	95.3	NA	4% FSM
SEELB non-grammar schools		30.9	34.3	30	35.3	NA	24.0%

*FSM entitlement was not available for post primary pupils in NI wrt working tax credit until 2015 when FSM entitlement rose to 25.9% overall, 37.1% in non- grammar and 12.1% in grammar. The 2015 figures may be more comparable with English figures for disadvantage (FSM entitled plus those in public care).

South Eastern Education and Library Board (SEELB) area and Down district

The former SEELB area is a mix of rural and urban areas, with a population of 414 153 (compared to Northern Ireland's 1 810 863). It suffers from less deprivation than some other parts of the province, with only 9 of the 100 most deprived super- output areas. There are 36 post primary schools, 10 of which are grammar schools. 6 of the non- grammar schools are integrated schools, 11 controlled (mainly Protestant) schools and 9 maintained (mainly Catholic) schools. In 2012/13 46% of people in SEELB were Protestant (37% in NI), 34% Catholic (51% NI) with the remainder from other, no or undeclared religions. As can be seen from the data above, average performance in SEELB schools follows a similar pattern to that in Northern Ireland as a whole, with very high performance in the grammar schools and low levels of disadvantage in grammar schools. Performance, on average, in non- grammars, is much lower and levels of disadvantage are much higher.

Down district has 3 grammar schools and 9 non- grammar schools. Some of the high schools work together to provide a broader curriculum, for example, the High School Ballynahinch works in partnership with St Colman's and St Patrick's Grammar. From the admission figures below, it can be seen that all three grammar schools filled all of their places, as did Shimna Integrated College, Saintfield High (Controlled) and St Malachy's (Catholic). The other six schools are very small and

fluctuating GCSE results for the last three years may be linked to cohort factors. The three grammar schools all had a percentage of pupils gaining 5A* to C grades above 90% for all three years, 2011-2014 and three schools had fewer than 40% of pupils gaining 5 A* to C grades. Levels of disadvantage in the three grammar schools, as in Saintfield High, are lower than the Northern Ireland average of 19% and in all of the other non- grammar schools, the proportion is higher than the Northern Ireland average. This is perhaps even more significant when it is considered that approximately 40% of all pupils go to grammar schools.

Northern Ireland as a system, and Down District as a sub- system, illustrate general findings about selective systems, that is that pupils in selective schools all perform very well, but the proportion of disadvantaged pupils in these schools is much lower than in non- selective schools, where average performance is much lower.

Admissions criteria and applications for secondary schools in Down (for 2015 entry)

School	School type	Criteria used in order	Voluntary contribution requested	Admission number	First preference Applications in 2014	Accepted 2014	Education and Training Inspectorate (ETI) grading and date
Assumption Grammar School	Voluntary girls' grammar	Grades A to D on GL entrance assessment, special circumstances, siblings	£60 min	120	125	121	Very good, Jun 2015
Blackwater Integrated College	GM integrated, mixed, non-grammar	Aims for even balance of Protestant, Catholic and other religions. Siblings, eldest child, primary school, employee, children of mixed (religious) relationships,	no	80	13	31	Inadequate, Nov 2011
De La Salle High School	Catholic maintained, boys' non-grammar	Feeder primaries, catchment, siblings	no	86	47	59	Very good, Jan, 2012,
Down High School	Controlled, mixed, grammar	Rank in AQE common entrance assessment, feeder school, siblings	£75	128	172	133	Very good, Oct, 2012
Saintfield High School	Controlled, mixed, non-grammar	Siblings, feeder primary	no	68	55	76	Very good, Jan, 2012
Shimna Integrated College	GM integrated, mixed, non-grammar	Aims for even balance of Protestant, Catholic and other religions. Primary school, Siblings, eldest child	No	100	88	103	Good, Oct, 2014
St Colman's	Catholic maintained	Inner and outer Catchment areas,	no	95	32	40	Satisfactorily, May

High and Vith form	d, mixed, non-grammar	siblings					2011
St Colmcille's High	Catholic, mixed maintained, non-grammar	Inner and outer Catchment areas, siblings	no	90	40	51	Good, Oct 2010
St Malachy's High	Catholic maintained, mixed, non-grammar	Inner and outer Catchment areas, siblings	no	164	118	152	Very good, Nov 2014
St Mary's High	Catholic maintained, girls' non-grammar	Catchment area, feeder primaries	no	125	48	60	Good, May 2013
St Patrick's Grammar	Voluntary boys grammar	Rank order, either GL or AQE entrance	no	96	104	99	Very good, Feb 2014
The High School, Ballynahinch	Controlled, mixed, non-grammar	Siblings, feeder primary		72	10	20	Satisfactory, December 2012

Performance

	% achieving 5+ A*-C GCSEs (or equivalent) including English and maths GCSEs			% FSM 2014
	2012	2013	2014	
NI average	60.1	60.9	65.2	19%
Assumption grammar	97.6	95.8	95.8	10.4%
Blackwater Integrated College	36.5	30.6	34.1	38%
De La Salle High School	43.8	26.3	54.5	40%
Down High School	97.7	97.8	98.5	6.8%
Saintfield High School	31.7	44.3	52.1	12.8%
Shimna Integrated College	43.5	25.3	38.3	26%
St Colman's High and Vith form	48.4	46.9	38.2	39.1%
St Colmcille's High	46.3	59.2	63.2	32.5
St Malachy's High	39.6	41.6	48.5	35.7%
St Mary's	44.6	57.6	48.3	38.7

High				
St Patrick's Grammar	97.9	96.8	91.3	11.4
The High School, Ballynahinch	15.3	35.0	20.7	22.3

Annex 3: Case study – Bristol and Bath and North East Somerset (BANES)

			% 5 A*- C at GCSE including English and maths 2014			
	Av key score stage 2 on entry	% disadvantaged pupils	All pupils	High attainers	Mid attainers	Low attainers
England – state funded	27.6	26.9	56.6%	92.8%	50.9%	5.5%
Bristol	26.9	36.0	55.2%	94.6%	54.1%	6.8%
BANES	28.3	15.6	61.9%	94.3%	50.5%	2.8%
Kent	27.5	20.9	58.1%	94.7%	52.5%	4.8%

Bristol is larger, with a population of approximately 430 000 than the whole of Bath and North- East Somerset (BANES), which has a population of approximately 176 000 and deprivation is higher, with 36% of pupils in Bristol secondary schools classed as disadvantaged, compared with 15.6% in BANES.

In 2008, Bristol was described by in an article in *the Guardian* as epitomising ‘educational apartheid’ (<http://www.theguardian.com/education/2008/jan/29/publicschools.schools>). The article described the contrast between state- funded schools and independent schools in the city. Schools situated in large housing estates in South Bristol, with ‘dull and persistent poverty’ were contrasted with large numbers attending independent schools in ‘cosy, middle- class’ areas. A representative at Bristol City Council was quoted in the article as saying "With parental choice, there is always the possibility that parents who are empowered will work their way into the school they wanted" and “some top- performing state schools in North- West Bristol are considerably over subscribed”.

The city is bordered by South Gloucestershire, North Somerset and Bath and North- East Somerset (BANES) such that for some city children, the nearest secondary school is located in a neighbouring authority. There is net outflow from city schools at age 11. Since 2008, there has been an overall improvement in performance in Bristol schools, both at primary and secondary level. Two multi- academy trusts, Cabot Learning and Oasis Community Learning have taken over some previously under- performing secondary schools. Despite this, levels of poverty are higher overall than in surrounding areas, with deprivation concentrated in particular wards, and this pattern is reflected in the socio- economic make- up of its secondary schools.

There are 13 independent secondary schools in Bristol, attended by approximately 13% of pupils, and 22 state funded secondary schools. As well as independent schools, such as the centrally- located Bristol Grammar School or Redland Girls’ High School, which are likely to attract the ‘cosy middle- class’ alluded to above, the city has Andalusia Academy, a recently- opened Islamic school funded by donation, which attracts children from some of the poorest inner- city communities. 17 of the state- funded schools are academies. This includes one free school and one university technical college, neither of which yet has pupils at key stage 4. State funded academies (and former independent schools) Colston Girls School and Bristol Cathedral Choir School reserve a small

number of places for specialisms of foreign language and music, respectively and both ask all applicants to take a non- verbal reasoning test so that fair banding, combined with random ballot, can be used to allocate the majority of places. The three faith secondary schools manage oversubscription through faith affiliation combined with catchment areas. All of these five schools were over- subscribed for September 2015, together with a further five of the state- funded schools. Otherwise, oversubscription is based on siblings and catchment areas. The school- age population is rising rapidly in Bristol and, although there is still spare capacity at secondary level, competition for places at the most popular schools is likely to increase as larger cohorts move up from their primary schools.

Overall GCSE performance in Bristol, using the key indicator of 5A* to C grades at GCSE including English and maths was 55.2% in 2014. Both high attainers and low attainers perform better than the national average, suggesting that the overall performance is affected by higher proportions of low attainers in city schools than nationally. High attainers perform as well as those in both Kent and BANES, with low attaining pupils attaining better than in either. Despite being a non- selective system, differences between schools are large. On entry to secondary schools, there are four schools where the average key stage 2 score is greater than 29, not as high as the 31.5 in Kent Grammar Schools, but significantly higher than the national and local averages. Three schools have average key stage 2 score on entry lower than 25, well below the national and local averages. Variations in the proportions of disadvantaged pupils are also large, with six schools having fewer than 20% disadvantaged pupils and eight have more than 50% , well above the national and local average. At GCSE level, at four schools more than 75% of pupils gained more than 5 GCSEs at grades A* to C and at three schools fewer than 40% of pupils did so. Bristol thus illustrates the point that, in non- selective systems, there are comprehensive schools which have an intake which is more advantaged than in other schools and where prior attainment is much higher. Progress for all pupils in these schools is high. However, the school with the highest figures for progress from starting points is Bristol Metropolitan Academy, where 59% of pupils are disadvantaged and where average key stage 2 points score is 24.7. Bristol as a non- selective system illustrates the point made by Smithers and Robinson (2010) that there are extreme social and performance differences between individual comprehensive schools in a non- selective system. However, it also has examples of how some schools are able to overcome challenges of low prior attainment and disadvantage. Colton Girls' School had the highest GCSE performance in 2014 but also has 33 per cent disadvantaged pupils, with average key stage 2 performance on entry 29.1. Both examples illustrate the claim that that important factors are likely to be school, rather than system- based.

The neighbouring authority of Bath and North- East Somerset has higher overall GCSE performance than Bristol, with 61.9% of pupils gaining 5 or more A* to C grades including both English and maths in 2014. Overall BANES has less disadvantage than Bristol, with 15.6% of pupils classified as disadvantaged. On average, high attaining pupils in BANES perform as well as those in Bristol and Kent and better than nationally, with low attainers performing less well than in either Bristol or nationally. There are 6 independent and 14 state- funded schools in the LA with approximately 18% of pupils in the LA attending independent schools. Three of the state- funded schools reserve small numbers of places for sporting excellence, and some faith schools manage oversubscription by faith affiliation. Otherwise, oversubscription is based on siblings and catchment areas. Four state- funded schools in BANES applied oversubscription to manage applicants from Bristol City for entry in September 2015, Beechen Cliff (boys), Hayesfield Girls, Chew Valley and Wellsway. All of these schools perform well at GCSE level, with performance consistently above the BANES average, and better than most of the Bristol state- funded schools. In terms of composition, there are differences between schools in BANES but these are less extreme than in Bristol. Two schools had intakes in the

2014 GCSE cohort with average key stage 2 score above 29 and none had average key stage 2 score below 25. Two of the fourteen schools had proportions of disadvantaged pupils at 10% or less, well below local and national averages and two had proportions over 25%. In two schools more than 75% of pupils gained 5A* to C grades at GCSE level in 2014 and in one school fewer than 40% of pupils did so. Progress for pupils in those schools where average key stage 2 level was higher than the national average was better than in schools where this was not the case. BANES provides a further example of a non-selective system with significant social and performance differences in its schools.

Admissions criteria and applications for secondary schools in Bristol (for 2015 entry)

Parents may apply online or on paper form by the end of October and name three schools in order of preference. Prior to this, children must have taken the non-verbal reasoning test used by Colston Girls' and Bristol Cathedral Choir schools, which is used for fair banding of applicants. They are informed of the outcome of this test before the end of October. The information guide tells parents which schools were oversubscribed in the previous year and how oversubscription criteria were applied. Applications are sent to schools, including the order of preference, and offers are finalised by the end of February. Over-subscribed schools publish information about how the oversubscription criteria were applied and this is on the Bristol City website, including that from schools in other authorities which received applications from Bristol City parents.

Oversubscribed schools are included below, together with information from a sample of independent day schools

Ofsted grades and date of most recent inspection are given for the popular schools below, but of the 22 state-funded secondary schools in Bristol City, most are 'good' according to Ofsted, with only City Academy 'inadequate' (Jan, 2015) and Orchard (Sept, 13) 'requires improvement'

School	School type	Overadmissions statement July 2015 for oversubscribed schools	Applications in 2014	Admissions no/ Accepted 2014	Ofsted grade and date
Andalusia Academy Bristol	Other Independent School	Islamic school supported by donations.		GCS E Cohort size 13 in 2014	NA
Bristol Cathedral Choir School	Mixed Academy Sponsor Led (converted from independent in 2008)	Supplementary information form, SEN, in care, choristers, music aptitude, siblings, children of staff, random allocation in accordance with fair banding – applicants take GL non verbal test	785	120	2, Sept 2010
Bristol Free School	Free School - Mainstream	SEN, in care, siblings, catchment area, distance	445	150	2, Feb 2013
Bristol Grammar School	Other Independent School	Fees, £4365 per term. Verbal and non-verbal reasoning and English tests, interviews. Scholarships and means tested bursaries available.		GCS E Cohort size 121 in 2014	NA

Bristol Steiner School	Other Independent School	Fees £2208 per term, non- selective, asks for examples of work, any special needs and for child to visit the school.		GCS E Cohort size 11 in 2014	NA
Colston's Girls' School	Girls Academy Sponsor Led (converted from independent to academy 5 years ago)	Foreign language scholars, SEN, in care, siblings, children of staff, random allocation in accordance with fair banding – applicants take GL non verbal test			1, Nov 2010
Cotham School	Academy - Converter Mainstream	In care, siblings in catchment area, catchment area, siblings non catchment, distance.	662 (170 first preferences)	216	1, Sept, 2010
Oasis Academy John Williams	Academy Sponsor Led	SEN, in care, siblings, distance	356	162	2, Jan 2013
Redland Green School	Academy - Converter Mainstream	SEN, in care, siblings in catchment, catchment by distance	683 (287 first pref)	189	2, Sept 2010
Redland High School for Girls	Girls, Other Independent School	Fees £4320 per term, interview, written examination and primary school reference, Scholarships and means-tested bursaries available.		GCS E Cohort size 50 in 2014	NA
St Bede's Catholic College	Academy - Converter Mainstream	Faith in catchment, siblings, Faith, distance	Not stated	180	2, Jul 2014
St Bernadette Catholic Secondary School	Voluntary Aided School	SEN, faith in catchment, other faith, distance	299 (144 first pref)	150	2, Nov 2014
St Mary Redcliffe and Temple School	Voluntary Aided School	Supplementary form, SEN, faith in catchment, catchment, in care, faith.	Not stated	216	1, Jan 2012
Steiner Academy Bristol	Free School - Mainstream	In care, children of staff, siblings, FSM, distance	54	26	NA

Performance

	av key stage 2 score on leaving primary school	% of pupils making expected progress		% achieving 5+ A*-C GCSEs (or equivalent) including English and maths GCSEs			
		English	Maths	2011	2012	2013	2014
England - all schools	NA	NA	NA	59.00%	59.40%	59.20%	53.40%
England -state funded	27.6	71.60%	65.50%	58.20%	58.80%	60.60%	56.60%

Bristol	26.9	74.10%	66.10%	50.20%	51.60%	52.30%	55.20%
Andalusia Academy Bristol	NP	NP	NP	61%	25%	74%	77%
Ashton Park School	27.4	76%	67%	43%	43%	48%	56%
Badminton School	NP	NP	NP	96%	98%	100%	0%
Bedminster Down School	26.7	82%	59%	46%	40%	36%	49%
Bridge Learning Campus	26.2	73%	48%	NA	NA	0%	37%
Brislington Enterprise College	26.3	64%	59%	38%	37%	40%	44%
Bristol Brunel Academy	26.6	72%	68%	41%	45%	45%	48%
Bristol Cathedral Choir School	29.2	80%	84%	80%	81%	81%	76%
Bristol Free School	NA	NA	NA	NA	NA	NA	NA
Bristol Grammar School	NP	NP	NP	100%	100%	1%	0%
Bristol Metropolitan Academy	24.7	95%	84%	42%	34%	47%	54%
Bristol Steiner School	NP	NP	NP	29%	33%	45%	45%
Clifton College	NP	NP	NP	91%	97%	29%	0%
Clifton High School	NP	NP	NP	97%	80%	89%	88%
Colston's School	NP	NP	NP	97%	79%	94%	93%
Colston's Girls' School	29.1	85%	84%	94%	84%	91%	83%
The City Academy Bristol	24.5	51%	47%	34%	40%	35%	29%
Cotham School	29.1	80%	88%	66%	56%	64%	77%
Fairfield High School	26.9	63%	70%	50%	52%	50%	47%

Henbury School	27.1	58%	62%	46%	52%	41%	46%
Include Bristol	NP	NP	NP	0%	0%	0%	0%
LPW Independent School	NP	NP	NP	NA	NA	0%	NE
Merchants' Academy	25.9	77%	50%	32%	40%	51%	45%
Oasis Academy Brightstowe	26.2	82%	64%	30%	62%	60%	50%
Oasis Academy John Williams	25.3	85%	64%	40%	49%	52%	52%
Orchard School Bristol	24.5	79%	57%	NA	NA	44%	39%
Queen Elizabeth's Hospital	NP	NP	NP	100%	100%	0%	0%
The Red Maids' School	NP	NP	NP	97%	99%	0%	0%
Redland Green School	30	88%	84%	83%	84%	87%	82%
Redland High School for Girls	NP	NP	87%	100%	0%	0%	0%
St Bede's Catholic College	29.1	75%	69%	71%	66%	76%	35%
St Bernadette Catholic Secondary School	27.5	77%	60%	63%	51%	64%	15%
St Mary Redcliffe and Temple School	28.8	70%	77%	68%	72%	70%	22%
Steiner Academy Bristol	NA	NA	NA	NA	NA	NA	NA

Equity

	% disadvantaged pupils	% achieving 5 A* to C inc Eng and maths 3 year average all pupils	% achieving 5 A* to C inc Eng and maths 3 year average disadvantaged pupils
England - all schools	NA	NA	NA
England -state funded	26.90%	58.70%	38.70%
Bristol	36.00%	53.00%	33.00%

Andalusia Academy Bristol	NP	56%	NP
Ashton Park School	17%	49%	29%
Badminton School	NP	66%	NP
Bedminster Down School	28%	42%	27%
Bridge Learning Campus	50%	37%	23%
Brislington Enterprise College	38%	41%	23%
Bristol Brunel Academy	42%	46%	31%
Bristol Cathedral Choir School	14%	79%	70%
Bristol Free School	NA	NA	NA
Bristol Grammar School	NP	37%	NP
Bristol Metropolitan Academy	59%	45%	34%
Bristol Steiner School	NP	43%	NP
Clifton College	70%	35%	31%
Clifton High School	NP	39%	NP
Colston's School	NP	86%	NP
Colston's Girls' School	33%	86%	71%
The City Academy Bristol	70%	35%	31%
Cotham School	26%	66%	43%
Fairfield High School	51%	50%	34%
Henbury School	51%	46%	36%
Include Bristol	NP	0%	NP

LPW Independent School	NP	NE	NP
Merchants' Academy	55%	45%	38%
Oasis Academy Brightstowe	41%	57%	46%
Oasis Academy John Williams	56%	51%	44%
Orchard School Bristol	54%	42%	33%
Queen Elizabeth's Hospital	NP	34%	NP
The Red Maids' School	NP	35%	NP
Redland Green School	11%	85%	57%
Redland High School for Girls	NP	41%	NP
St Bede's Catholic College	9%	71%	41%
St Bernadette Catholic Secondary School	17%	59%	31%
St Mary Redcliffe and Temple School	16%	70%	43%
Steiner Academy Bristol	NA	NA	NA

Admissions criteria and selection process in BANES for secondary school admissions in 2015

Parents in Bristol City apply via the Bristol admissions process. All schools in BANES apply oversubscriptions using sibling, catchment area/school and distance, except for three schools with places for specialisms (including Beechen Cliff and Hayesfield which received applications from Bristol City for 2015).

Oversubscribed state schools with applications from Bristol City only and selected independent day schools are shown below.

Ofsted grading and date is given for the schools below. Most of the secondary schools in BANES are graded 'good' by Ofsted, with three 'outstanding' (Beechen Cliff, Oldfield and St Gregory's Catholic College) and two 'requiring improvement' (Bath Community Academy, Broadlands Academy)

School	School type	Oversubscription Criteria used in order	Applications in 2014	Admission number/Accepted 2014	Ofsted grade and date
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Beechen Cliff School	Boys, Academy - Converter Mainstream	SEN, in care, siblings, children of staff, sporting excellence, catchment, distance	366	175	1, Mar 2014
Chew Valley School	Foundation School	SEN, in care, siblings in catchment, catchment, other siblings, distance	312	196	2, May 2015
Hayesfield Girls School	Academy - Converter Mainstream	SEN, in care, siblings, children of staff, sporting excellence, catchment, distance	352	210	2, Apr 2013
King Edward's School	Other Independent School	Fees, £4290 per term, verbal reasoning, maths and English tests, interview		GCSE Cohort size 93 in 2014	NA
Royal High School GDST	Girls, Other Independent School	£4035 per term, reading writing and reasoning test, interview, child visit 'Candidates would be expected to demonstrate knowledge and skills appropriate to Key Stage 2, Level 4 and 5.		GCSE Cohort size 82 in 2014	NA
Wellsway School	Academy - Converter Mainstream	In care, sibling in catchment, children of staff, catchment, other siblings, distance	404	230	2, Feb 2014

Performance

	% of pupils making expected progress		% achieving 5+ A*-C GCSEs (or equivalent) including English and maths GCSEs				% achieving Eng Bacc.	av key stage 2 score
	English	Maths	2011	2012	2013	2014	2014	
England - all schools	NA	NA	NA	59.00%	59.40%	59.20%	53.40%	NA
England - state funded schools only	27.6	71.60%	65.50%	58.20%	58.80%	60.60%	56.60%	24.20%
Bath and North East Somerset	28.3	73.20%	67.60%	64.20%	57.50%	63.60%	61.90%	30.70%
Bath Community Academy	25.6	72%	50%	NA	NA	18%	38%	6%
Beechen Cliff School	29.2	58%	81%	77%	66%	72%	60%	45%
Broadlands Academy	28.5	78%	37%	NA	NA	0%	53%	7%
Chew Valley School	28.9	68%	63%	69%	64%	65%	60%	32%
Hayesfield Girls School	28.5	85%	72%	57%	61%	71%	66%	28%
King Edward's School	NP	NP	NP	100%	97%	0%	0%	0%
Kingswood School	NP	NP	NP	98%	93%	0%	0%	0%
Monkton Senior School	NP	NP	NP	97%	93%	93%	0%	0%
Norton Hill Academy	28.5	77%	77%	72%	50%	62%	69%	42%
Oldfield School	28.6	84%	74%	70%	73%	77%	69%	18%
Prior Park College	NP	NP	NP	83%	87%	0%	0%	0%
Ralph Allen School	29.1	80%	74%	69%	71%	73%	73%	36%

Royal High School GDST	NP	NP	NP	97%	98%	98%	0%	0%
Saint Gregory's Catholic College	28.5	77%	72%	68%	64%	64%	66%	41%
St Mark's CofE School	27	70%	63%	56%	55%	58%	50%	21%
Somervale School Specialist Media Arts College	27.8	57%	50%	67%	41%	55%	44%	14%
Wellsway School	29.1	81%	83%	73%	70%	74%	76%	45%
Writhlington School	28	66%	60%	67%	58%	60%	53%	24%

Equity

	% achieving 5 A* to C inc Eng and maths 3 year average		
	% disadvantaged pupils	all pupils	disadvantaged pupils
England - all schools	NA	NA	NA
England - state funded schools only	26.90%	58.70%	38.70%
Bath and North East Somerset	15.60%	61.00%	31.40%
Bath Community Academy	30%	28%	16%
Beechen Cliff School	13%	66%	41%
Broadlands Academy	20%	53%	32%
Chew Valley School	12%	63%	32%
Hayesfield Girls School	17%	66%	29%
King Edward's School	NP	33%	NP
Kingswood School	NP	31%	NP
Monkton Senior School	NP	59%	NP
Norton Hill Academy	10%	60%	33%
Oldfield School	11%	73%	48%
Prior Park College	NP	29%	NP

Ralph Allen School	21%	72%	40%
Royal High School GDST	NP	66%	NP
Saint Gregory's Catholic College	13%	64%	44%
St Mark's CofE School	31%	55%	35%
Somervale School Specialist Media Arts College	21%	47%	28%
Wellsway School	9%	73%	34%
Writhlington School	17%	57%	32%