



Department  
for Education

# **Outcomes for pupils eligible for free school meals and identified with special educational needs**

**Ad-hoc statistics**

**July 2018**

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## Introduction

This publication provides new insights into the relationship between pupil characteristics and learner outcomes in England. This publication covers two separate pieces of analysis from DfE:

1. Analysis that explores how employment and benefits claims of adults vary dependent on their characteristics in year 11 (the last year of compulsory schooling). Specifically, we look at those who were eligible for free school meals (FSM), and not; and those who were identified with special educational needs (SEN), and not.
2. Analysis that illustrates how the average attainment of pupils in year 11 varies by school-level disadvantage. We define school-level disadvantage in two ways: the proportion of pupils who were eligible for FSM; and the average income deprivation affecting children index (IDACI) score of pupils' residential addresses.

## Main Findings

### Labour market outcomes

- 60% of individuals who were eligible for free school meals in year 11 were in sustained employment at age 27, compared to 77% of their peers who were not eligible for FSM. Therefore, FSM-eligible pupils were 23% less likely to be in sustained employment aged 27 when compared to their peers who were not eligible for FSM.
- 58% of individuals who were identified with special educational needs in year 11 were in sustained employment at age 27, compared to 78% of their peers who were not identified with SEN. Therefore, pupils with SEN were 25% less likely to be in sustained employment aged 27 when compared to their peers who were not identified with SEN.
- 24% of individuals who were eligible for FSM in year 11 were on out-of-work benefits at age 27, compared to 8% of their peers who were not eligible for FSM. Therefore, pupils who were eligible for FSM in year 11 were 3.0 times more likely to be on out-of-work benefits aged 27 when compared to their peers who were not eligible for FSM.
- 26% of individuals who were identified with SEN in year 11 were on out-of-work benefits at age 27, compared to 7% of their peers who were not identified with SEN. Therefore, pupils who were identified with SEN in year 11 were 3.7 times more likely to be on out-of-work benefits aged 27 when compared to their peers who were not identified with SEN.

## Variation in KS4 attainment by school-level disadvantage

- When schools are grouped by quintile of school-level disadvantage, the average key stage 4 attainment for pupils in each quintile falls as the level of deprivation increases.
- The gap between the average attainment for pupils in the least and most deprived schools was wider when schools were grouped based on the proportion of pupils who are eligible for FSM rather than the average IDACI score of pupils' residential addresses.

## Calculating the labour market outcomes at age 27 for individuals who were classified as eligible for FSM or identified with SEN in year 11

### Data

The Small Business, Employment and Enterprise Act 2015 allows the sharing of data between the Department for Education (DfE), the Department for Work and Pensions (DWP) and Her Majesty's Revenue and Customs (HMRC). The resulting matched data is called the Longitudinal Education Outcomes (LEO) dataset.

The LEO dataset links information about learners, including:

- personal characteristics such as gender and ethnicity;
- education, including schools, colleges and higher education institution attended, courses taken and qualifications achieved;
- PAYE and self-assessed employment and income data from HMRC; and
- data on benefits claims from DWP.

By combining these sources, we can look at the progress of school leavers into the labour market.

### Matching individuals from key stage 4 to later labour market outcomes

In this section, we calculate the number of individuals who are in sustained employment and the number of individuals who are claiming out-of-work benefits 11 complete tax years after completing key stage 4 (KS4). These figures are presented according to whether individuals were eligible for FSM in year 11 (Table 4) and whether individuals were identified with SEN in year 11 (Table 5).

'Sustained employment' is defined as being in employment for at least one day a month in at least five out of the six months between October and March in the relevant tax year, or being identified as self-employed at some point in the tax year, according to self-

assessment data. Being on out-of-work benefits is defined as being on any of the benefits listed in Table 1 for at least one day in each of six consecutive months of the tax year.

In order to calculate these figures, data on individuals' FSM and SEN status, collected in the school census during year 11, is matched to employment and benefit records. Two cohorts are observed: those who completed KS4 in academic year 2002/03 and those who completed KS4 in academic year 2003/04. Employment and benefit data are observed 11 full tax years after individuals completed KS4, when the majority of these pupils were aged 27.

Table 2 and Table 3 show the number of individuals who were matched to HMRC/DWP data, based on their FSM or SEN status. Of the 1,258,844 individuals observed across the two cohorts at KS4, 1,165,007 were matched to HMRC/DWP records. This means that approximately 7% of the KS4 cohort could not be consistently matched to HMRC/DWP records.

## Results

Results are presented in Table 4 and Table 5 below. They are expressed in terms of the number and percentage of individuals in each category.

- Table 4 shows the number and percentage of individuals in sustained employment 11 years after completing KS4, based on their FSM eligibility. Across the two cohorts, 60% of individuals who were eligible for FSM were in sustained employment compared to 77% of those who were not eligible for FSM.
- Table 5 shows the number and percentage of individuals in sustained employment 11 years after completing KS4, based on their SEN status. Across the two cohorts, 58% of individuals who were identified with SEN were in sustained employment compared to 78% of those who were not identified with SEN.
- Table 4 shows the number and percentage of individuals claiming out-of-work benefits 11 years after completing KS4, based on their FSM eligibility. Across the two cohorts, 24% of individuals who were eligible for FSM were claiming out-of-work benefits compared to 8% of those who were not eligible for FSM.
- Table 5 shows the number and percentage of individuals claiming out-of-work benefits 11 years after completing KS4, based on their SEN status. Across the two cohorts, 26% of individuals who were identified with SEN were claiming out-of-work benefits compared to 7% of those who were not identified with SEN.

By using the information from Table 4 and Table 5, we can make the following statements based on the relative risk of being in employment or on out-of-work benefits.

- Individuals eligible for FSM were 23% **less** likely to be in sustained employment at age 27 than their peers who were not eligible for FSM.

- Individuals who were identified with SEN were 25% **less** likely to be in sustained employment at age 27 than their peers who were not identified with SEN.
- Individuals eligible for FSM were 3.0 times **more** likely to be on out-of-work benefits at age 27 than their peers who were not eligible for FSM.
- Individuals who were identified with SEN were 3.7 times **more** likely to be on out-of-work benefits at age 27 than their peers who were not identified with SEN.

## Assumptions and caveats

- **Conditional Outcomes:** A number of factors can influence the employment and benefits outcomes of students beyond FSM or SEN status. The outcomes presented in this release are 'raw' outcomes: they do not control for other differences in the characteristics or attainment of students that might influence employment or benefits outcomes. This should be borne in mind when making comparisons.
- **Cohorts used:** The cohorts who completed KS4 in 2002/03 and 2003/04 were selected for a number of reasons. These cohorts are the first two cohorts after the introduction of the SEN Code of Practice (2002), which enables us to compare outcomes of individuals who were consistently identified with SEN. We have chosen to observe outcomes 11 years post KS4 in order to allow individuals time to enter the labour market allowing for further or higher education participation – this is the oldest age at which we have employment and benefits data for both cohorts. As self-employment data is only available for the two most recent tax years, this currently restricts analysis that includes self-employment data to a maximum of two cohorts.
- **Data match:** 93,837 pupils could not be matched to HMRC/DWP data; either because they do not have a record in that dataset (e.g. there has been no employment or benefits activity in the UK), or because inconsistencies in personal information (such as name changes) prevented a match being made, or inconsistent matches could not be resolved due to incomplete or inaccurate personal information. 86,289 pupils from these cohorts have been matched to HMRC/DWP data, but do not have a record of FSM eligibility in year 11; this will occur if the school they attended did not complete the pupil level school census, for example an independent school. Similarly, 86,294 pupils were matched to HMRC/DWP data but did not have a record of SEN status in year 11.
- **Defining free school meal eligibility:** Those classified as FSM-eligible are children from families who receive qualifying benefits,<sup>1</sup> who have been through the

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<sup>1</sup> In 2002, these benefits were Income Support, income-based Jobseeker's Allowance, and support under Part VI of the Immigration and Asylum Act 1999; from 2003, Child Tax Credits also qualified for FSM.

relevant registration process and recorded as being eligible in the year they completed KS4.

- **Definition of sustained employment:** Sustained employment is defined as being in employment for at least one day in five out of the six months between October and March in the relevant financial year. If no spell satisfied this criteria for March (but did for all other months), and if there is an employment spell recorded for the following April, then this criteria will still be satisfied. Individuals are also defined as in sustained employment if they have a record of self-employment in the tax year. As such, not being in sustained employment does not mean an individual is 'unemployed' – for example, this individual could be undertaking an educational qualification. This definition of sustained employment is consistent with the definition used for experimental statistics on graduate outcomes,<sup>2</sup> 16-19 accountability<sup>3</sup> and the outcome-based success measures published for adult further education<sup>4</sup>. The definition of sustained employment for longitudinal analysis will be subject to further review and alternative measures may be included in future publications.
- **Definition of being on out-of-work benefits:** Being on out-of-work benefits is defined as being on any of the benefits listed in Table 1 for at least one day in each of six consecutive months of the tax year. However the benefits included are not exhaustive – in particular, Universal Credit data is not currently part of the LEO dataset. Therefore, some individuals claiming out-of-work benefits such as Universal Credit may not be counted in these figures. Claiming out-of-work benefits does not mean that the individual is 'unemployed' – some benefits allow a small amount of income to be earned.
- **Categories are not mutually exclusive:** the definitions of sustained employment and being on out-of-work benefits used here are not mutually exclusive – for example, individuals could receive certain out-of-work benefits if their income is below a certain threshold, or have a period of employment and a period receiving benefits within the same tax year.

## Calculating the average KS4 attainment for pupils grouped by school-level disadvantage

This analysis shows that as school-level disadvantage increases the average attainment of pupils in these schools decreases. This is true for pupils eligible for FSM and pupils not eligible for FSM.

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<sup>2</sup> <https://www.gov.uk/government/statistics/graduate-outcomes-for-all-subjects-by-university>

<sup>3</sup> <https://www.gov.uk/government/collections/statistics-destinations>

<sup>4</sup> <https://www.gov.uk/government/statistics/adult-further-education-outcome-based-success-measures>

## Data

This analysis is based on DfE data from academic year 2016/17 only and covers all state-funded schools that had at least one year 11 pupil with an attainment 8 score. This includes secondary schools, all through schools, special schools and pupil referral units (PRUs)/alternative provision (AP).

## Methodology

Pupil characteristics data from the January 2017 school census is matched to 2016/17 KS4 attainment data to create the pupil-level dataset. Table 6 in the Tables and Figures annex provides details of the filters we applied to the source data.

The next step is to aggregate the pupil-level data up to school-level and calculate the following variables for each school:

- the average attainment 8 score for pupils eligible for FSM and pupils not eligible for FSM in year 11;
- the number of pupils eligible for FSM and pupils not eligible for FSM in year 11;
- the proportion of pupils eligible for FSM and the average pupil-level IDACI score; and
- two disadvantage groups for each school:
  - IDACI – schools split in to five evenly sized groups (quintiles), based on each school's average IDACI score of pupils' residential addresses.
  - FSM – schools split in to five evenly sized groups (quintiles), based on the proportion of pupils eligible for FSM in each school.

Finally, for each of the disadvantage groups we calculate the average attainment 8 score for pupils eligible for FSM and pupils not eligible for FSM.

## Results

Grouping schools by deprivation shows that as school-level deprivation increases the average attainment of pupils eligible for FSM in these schools falls.

The size of the attainment gap between pupils in the least and most deprived schools changes depending on how disadvantage is defined. The gap is much wider when we use the proportion of pupils eligible for FSM to define school-level deprivation.

The attainment gap between pupils in the least and most deprived schools is not limited to pupils eligible for FSM. Grouping schools by disadvantage also shows an attainment gap for pupils not eligible for FSM. In fact, the gap appears to be wider for pupils not eligible for FSM than for pupils eligible for FSM.



Figure 1 shows the change in average attainment when we use IDACI to define school-level disadvantage. Under this definition, the average attainment 8 score for pupils eligible for FSM in the most disadvantaged schools (33.2) is 3.3 points lower than the average attainment 8 score for pupils eligible for FSM in the least disadvantaged schools (36.4). Similarly, the average attainment 8 score for pupils not eligible for FSM in the most disadvantaged schools (41.1) is 11.4 points lower than the average attainment 8 score for pupils not eligible for FSM in the least disadvantaged schools (52.5).

**Figure 1: Average attainment 8 scores for pupils eligible for FSM and pupils not eligible for FSM, split by the average IDACI score of pupils in each school (NPD, 2016/17)**

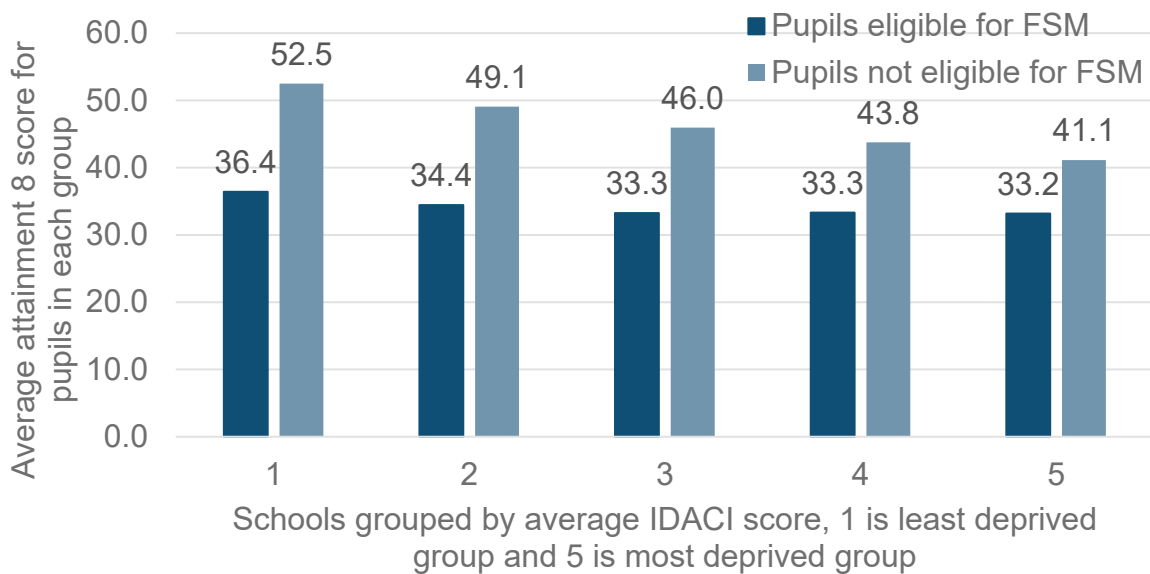
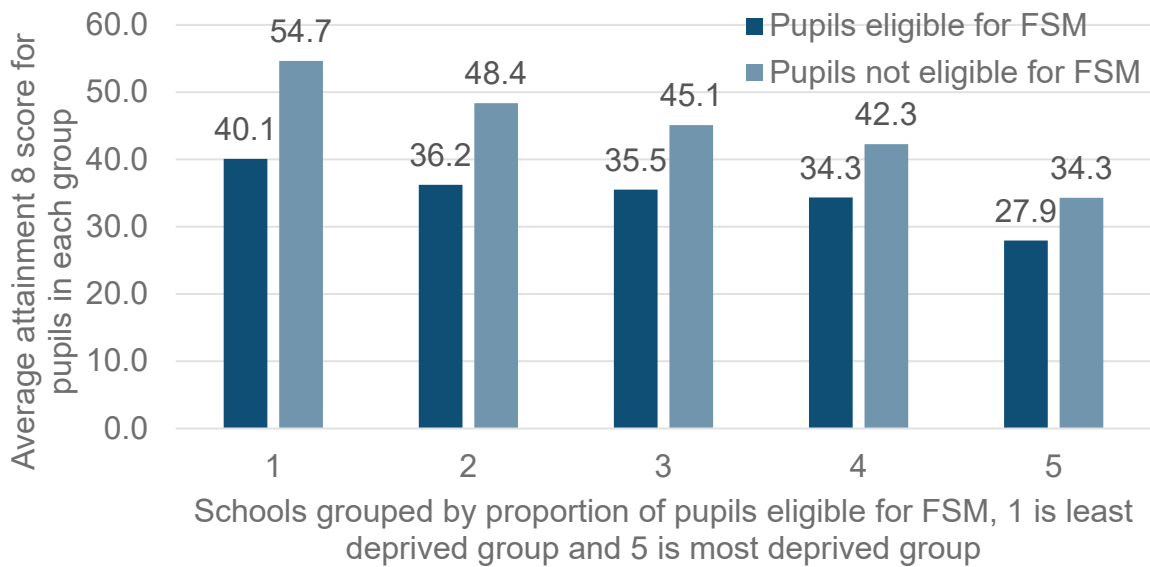


Figure 2 shows the change in average attainment when we use the proportion of pupils eligible for FSM to define school-level disadvantage. Under this definition, the average attainment 8 score for pupils eligible for FSM in the most disadvantaged schools (27.9) is 12.1 points lower than the average attainment 8 score for pupils eligible for FSM in the least disadvantaged schools (40.1). Similarly, the average attainment 8 score for pupils not eligible for FSM in the most disadvantaged schools (34.3) is 20.3 points lower than the average attainment 8 score for pupils not eligible for FSM in the least disadvantaged schools (54.7).

**Figure 2: Average attainment 8 scores for pupils eligible for FSM and pupils not eligible for FSM, split by the proportion of pupils eligible for FSM in each school (NPD, 2016/17)**



### Assumptions and Caveats

- Conditional Outcomes:** There are a number of factors that can influence KS4 attainment beyond individual and school-level deprivation. The outcomes presented in this release are ‘raw’ outcomes; they do not control for other differences in the characteristics of students or schools that might influence KS4 attainment.
- Attainment data:** Pupils in year 11 in 2016/17 that have a null attainment 8 score have not been included in this analysis.

**Defining free school meal eligibility:** Those classified as FSM-eligible are children from families who receive qualifying benefits, who have been through the relevant registration process and are recorded as being eligible in 2016/17.

## Tables and Figures

**Table 1: Benefits counted as ‘out-of-work’ benefits**

<b>Out-of-work benefits</b>	
<b>JSA</b>	Job Seeker’s Allowance is an unemployment benefit which can be claimed while looking for work.
<b>JTA</b>	Work programme participants in receipt of JSA are required to move into a training allowance when they are to undertake training of more than 30 hours per week.
<b>ESA</b>	Employment and Support Allowance is an income replacement and contributory benefit for people below state pension age who have a health condition or disability and are unable to work.
<b>IB</b>	Incapacity Benefit is the contributory predecessor to ESA, and similar rules apply. Over time, most people have transferred from IB to ESA.
<b>IS</b>	Income Support is an income replacement benefit for those who meet certain eligibility criteria such as being pregnant, a carer, a lone parent or unable to work because of disabilities (prior to the introduction of Employment and Support Allowance in 2008).
<b>PIB</b>	This is Passported IB which has similar rules to IB.
<b>SDA</b>	Severe Disablement Allowance - the predecessor to IB and similar rules apply.
<b>RP</b>	The State Pension is awarded to those who have reached the State Pension age and who either satisfy the contribution conditions or satisfy certain residency conditions.
<b>PC</b>	Pension Credit is given to pensioners earning below than a certain threshold.
<b>AA</b>	Attendance Allowance is a benefit for people over the age of 65 who are severely disabled so that they need a great deal of help with personal care or supervision. It can be awarded for a fixed or an indefinite period and those requiring constant help receive the higher rate of benefit.
<b>ICA</b>	Carer’s Allowance is paid to carers who look after a severely disabled person for at least 35 hours a week and earn no more than £120 a week after tax and expenses. The severely disabled person must be getting either higher or middle rate Disability Living Allowance (DLA) care component, Personal Independence Payment – daily living component, Armed Forces Independence Payment, Attendance Allowance or maximum rate Constant Attendance Allowance with their War Pension or Industrial Injuries Disablement Benefit.

**Table 2: Numbers of pupils who could be matched to LEO records by FSM eligibility**

<b>KS4 cohort</b>	<b>Combined cohorts</b>			
<b>FSM Status</b>	<b>FSM</b>	<b>Not FSM</b>	<b>Unknown</b>	<b>Total</b>
<b>Total number of learners</b>	162,308	996,963	99,573	1,258,844
<b>Number unmatched</b>	16,490	64,063	13,284	93,837
<b>Number of learners matched to LEO records</b>	145,818	932,900	86,289	1,165,007
<b>Percentage unmatched</b>	10%	6%	13%	7%

**Table 3: Numbers of pupils who could be matched to LEO records by SEN status**

<b>KS4 cohort</b>	<b>Combined cohorts</b>			
<b>SEN Status</b>	<b>SEN</b>	<b>No SEN</b>	<b>Unknown</b>	<b>Total</b>
<b>Total number of learners</b>	188,316	970,950	99,578	1,258,844
<b>Number unmatched</b>	15,351	65,202	13,284	93,837
<b>Number of learners matched to LEO records</b>	172,965	905,748	86,294	1,165,007
<b>Percentage unmatched</b>	8%	7%	13%	7%

**Table 4: Numbers and percentages of pupils who were in sustained employment or on out-of-work benefits 11 years after completing KS4, by FSM eligibility**

<b>KS4 cohort</b>	<b>Combined cohorts</b>			
<b>FSM Status</b>	<b>FSM</b>	<b>Not FSM</b>	<b>Unknown</b>	<b>Total</b>
<b>Number in sustained employment 11 years after completing KS4</b>	86,762	717,014	62,203	865,979
<b>Percentage in sustained employment 11 years after completing KS4</b>	60%	77%	72%	74%
<b>Number on out-of-work benefits 11 years after completing KS4</b>	34,689	73,837	4,810	113,336
<b>Percentage on out-of-work benefits 11 years after completing KS4</b>	24%	8%	6%	10%

**Table 5: Numbers and percentages of pupils who were in sustained employment or on out-of-work benefits 11 years after completing KS4, by SEN status**

<b>KS4 cohort</b>	<b>Combined cohorts</b>			
<b>SEN Status</b>	<b>SEN</b>	<b>No SEN</b>	<b>Unknown</b>	<b>Total</b>
<b>Number in sustained employment 11 years after completing KS4</b>	100,967	702,806	62,206	865,979
<b>Percentage in sustained employment 11 years after completing KS4</b>	58%	78%	72%	74%
<b>Number on out-of-work benefits 11 years after completing KS4</b>	44,747	63,777	4,812	113,336
<b>Percentage on out-of-work benefits 11 years after completing KS4</b>	26%	7%	6%	10%

**Table 6: Filters applied to produce final pupil-level dataset for analysis of KS4 attainment variation by school-level deprivation**

<b>Termly schools census</b>		<b>KS4 results dataset</b>	
<b>Filter applied</b>	<b>Details</b>	<b>Filter applied</b>	<b>Details</b>
AcademicYear = 201617	Only including records from academic year 2016/17.	AcademicYear = 201617	Only including records from academic year 2016/17.
CensusTermKey = 2	Only including records from the January schools census.	Version = 'F'	Only including the final attainment record for each pupil.
LinkUniqueRowNumber is null	Only including the main record for each pupil.	ENDKS = 1	Only including attainment results for pupils at the end of key stage 4.
LA <> '702'	Excluding any records for pupils attending overseas schools.		

**Table 7: Underlying data for Figure 1: Average attainment 8 scores for pupils eligible for FSM and pupils not eligible for FSM, split by the average IDACI score of pupils in each school (NPD, 2016/17)**

School grouping based on IDACI data	IDACI score greater than	IDACI score less than or equal to	Number of schools in group	Average attainment 8 score for pupils eligible for FSM in group	Average attainment 8 score for pupils not eligible for FSM in group	Number of year 11 pupils eligible for FSM in group	Number of year 11 pupils not eligible for FSM in group
<b>1 – least deprived</b>	0.00	0.13	766	36.4	52.5	6,788	127,923
<b>2</b>	0.13	0.17	766	34.4	49.1	9,827	107,127
<b>3</b>	0.17	0.23	766	33.3	46.0	12,944	89,421
<b>4</b>	0.23	0.30	766	33.3	43.8	17,546	76,526
<b>5 – most deprived</b>	0.30	0.55	765	33.2	41.1	25,639	64,695

**Table 8: Underlying data for Figure 2: Average attainment 8 scores for pupils eligible for FSM and pupils not eligible for FSM, split by the proportion of pupils eligible for FSM in each school (NPD, 2016/17)**

School grouping based on FSM data	Proportion of pupils eligible for FSM greater than	Proportion of pupils eligible for FSM less than or equal to	Number of schools in group	Average attainment 8 score for pupils eligible for FSM in group	Average attainment 8 score for pupils not eligible for FSM in group	Number of year 11 pupils eligible for FSM in group	Number of year 11 pupils not eligible for FSM in group
<b>1 – least deprived</b>	0.0%	6.2%	767	40.1	54.7	5,445	129,289
<b>2</b>	6.2%	10.9%	766	36.2	48.4	11,142	122,771
<b>3</b>	10.9%	17.3%	767	35.5	45.1	16,611	105,769
<b>4</b>	17.3%	27.9%	766	34.3	42.3	20,989	77,484
<b>5 – most deprived</b>	27.9%	100.0%	766	27.9	34.3	18,561	30,379



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