Education Policy Institute Report to Essex Education Task Force

February 2022

EDUCATION POLICY INSTITUTE

EPI local authority analysis and evaluations

About the Education Policy Institute

The Education Policy Institute is an independent, impartial and evidence-based research institute that promotes high quality education outcomes, regardless of social background. We achieve this through data-led analysis, innovative research and high-profile events.

Education can have a transformative effect on the life chances of young people, enabling them to fulfil their potential, have successful careers, and grasp opportunities. As well as having a positive impact on the individual, good quality education and child wellbeing also promotes economic productivity and a cohesive society.

Through our research, we provide insight, commentary, and a constructive critique of education policy in England – shedding light on what is working and where further progress needs to be made. Our research and analysis spans a young person's journey from the early years through to entry to the labour market.

Our core research areas include:

- Benchmarking English Education
- School Performance, Admissions, and Capacity
- Early Years Development
- Social Mobility and Vulnerable Learners
- Accountability, Assessment, and Inspection
- Curriculum and Qualifications
- Teacher Supply and Quality
- Education Funding
- Higher Education, Further Education, and Skills

Our experienced and dedicated team works closely with academics, think tanks, and other research foundations and charities to shape the policy agenda.

About The Essex Education Task Force

The Essex Education Task Force was established by Essex County Council in April 2021 as an independent body. At the heart of its work across Essex lie **Renewal, Equality** and **Ambition**. The two key aims are:

- To minimize the impact of the pandemic on all children and young people as quickly as possible, with a three to five-year overview of phases of regeneration.
- To capture and promote current innovation and best practice across the education system in Essex.

An initial budget of £1.5 million has already been invested in supporting the work of pre-school and early years settings, schools, further education, governors and the voluntary sector. A major investment has focused on launching the Essex Year of Reading 2022.

This report from EPI marks the first in a series of three commissioned reports (a) to identify 'the learning gaps' the Task Force needs to address, and (b) to evaluate the impact of the Task Force's work over the next three years.

Roy Blatchford CBE, Chair, Essex Education Task Force

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Foreword

The Education Policy Institute welcomes the opportunity to work with Essex County Council's Education Task Force, to help identify some of the key challenges in relation to the education and wellbeing of children within the county.

This report focuses on one of the biggest challenges in English education – the gap in attainment between children from disadvantaged families, and the rest of the student population.

It is concerning that on average across England, disadvantaged students are behind other students by around 18 months of learning, by the time they take their GCSEs. A gap is present right from the early years of education, but it widens progressively as children get older.

Even before the pandemic adversely affected our education system, the long-term trend towards a narrower gap had ground to a halt, and there is evidence that this gap has widened over the last two years.

In this report, we estimate the disadvantage gap by phase for children living in Essex. We show how in many respects the challenges appear to be greater in Essex than in many other parts of the country. We also identify those parts of the county where the gaps are a particular issue. We also identify a positive trend for Essex early years settings, where disadvantaged pupils finishing Reception year in Essex are less behind in their learning than other disadvantaged pupils nationally.

We go beyond an analysis of all disadvantaged children, by looking at the gap for those children who have been persistently disadvantaged – living in poverty for over 80 per cent of their time in education. These children in Essex are more than two years behind non-disadvantaged children in England.

It is clear that schools, colleges and other education partners in the county have some major challenges to address. We hope that this research will help policy makers and practitioners to understand the nature and scale of the challenge and opportunities, and help inform the appropriate, evidence-based, policy responses.

As ever, we welcome comments on the analysis and conclusions presented in this report.

Rt Hon David Laws Executive Chairman, Education Policy Institute

Introduction

This is the first report to Essex County Council's Education Task Force from Education Policy Institute (EPI). The task force was created as an independent body to oversee post-Covid recovery in education and young people's mental health in Essex, and EPI has been commissioned as a research partner to help track how well early years providers, schools and further education settings are supporting young people and closing the gap between the most disadvantaged and the rest. This is set within a wider context of economic recovery in the county and enabling families to get back into or remain in employment.

This report details the state of the disadvantage gap across multiple phases of education in Essex, and how this has changed over the past decade. For early years (end of Reception year) and key stage 2 (KS2, end of primary school), the report summarises the state of the disadvantage gap in Essex prior to the onset of the Covid-19 pandemic (2018/19). Due to the disruption to education caused by this pandemic, national assessments were not carried out in 2019/20 in these phases. Therefore we cannot yet estimate how the disadvantage gap in Essex has been impacted by the pandemic for early years or KS2. For key stage 4 (GCSE, KS4, end of secondary school) and age 16-19, we provide an estimate of the gap in 2019/20 along with commentary on how to interpret these in light of the markedly different approach to exam grading in this year. Further analysis is provided of post-16 outcomes using publicly available local authority data.

In addition, we provide local comparisons within Essex, as well as selecting similar counties and local authorities from across England to provide more context on how well Essex enables disadvantaged pupils to achieve. These comparisons are made for 2018/19 only.

Finally, we provide an analysis of how Essex school performance has improved in recent years, in comparison with other schools with similar starting points nationally.

Summary of findings

For early years and key stage 2, the latest year of data we refer to is 2018/19. For key stage 4 and age 16-19, the latest year of data is 2019/20.

Essex has a lower **proportion of disadvantaged pupils** than England nationally. In all phases of education, fewer pupils in Essex are disadvantaged compared to the national average.

- Early Years: 10.8 per cent of early years pupils (Reception year) in Essex were eligible for free school meals in 2018/19, compared with 14.1 per cent nationally.
- Key Stage 2: 23.9 per cent of pupils finishing key stage 2 in Essex were disadvantaged in 2018/19, compared with 30.5 per cent nationally.
- Key Stage 4: 18.4 per cent of pupils finishing key stage 4 in Essex were disadvantaged in 2019/20, compared with 24.1 per cent nationally.

At KS2 and KS4 we also consider pupils who are *persistently* disadvantaged (eligible for free school meals for more than 80 per cent of their school life). In Essex about seven per cent of pupils are persistently disadvantaged by the time they finish primary school. At the end of secondary school, this figure is about six per cent, compared with nine per cent nationally.

Attainment in Essex is consistently just above or just below the national average for all phases of education.

- Early Years: In 2018/19, the average EYFSP total point score in Essex in this year was 35.0. The national average was 34.6 (on a scale from 17 to 51).
- Key Stage 2: In Essex the average scaled score was 103.3 in 2018/19, which is very close to the national average of 103.2.
- Key Stage 4: In 2018/19, the average GCSE points achieved in English and maths in Essex was 4.6, and in 2019/20 (following exam disruption) this figure was 4.9. This is in line with 4.6 and 4.9 nationally.
- Age 16-19: 19-year-olds in Essex achieve similar levels of qualifications to other students nationally; however, attainment varies depending on which types of qualifications are entered.

Disadvantage gaps in Essex are consistently wider than the national average for every phase of education, except for the gap in early years, which is narrower than the national average. However, in recent years the early years gap has been widening in Essex and is now nearly in line with the national average.

- Early Years: At the end of Reception the disadvantage gap in Essex has consistently been narrower than the national average, meaning that disadvantaged pupils in Essex finish Reception less behind in their learning compared with other disadvantaged pupils nationally. However, since 2016/17, the early years disadvantage gap has widened in Essex and is now nearly equal to the national gap. In 2017 the gap in Essex was 3.9 months. By the most recent year of data (2018/19) it had grown to 4.5 months, just 0.1 months below the national average of 4.6 months. The Essex Task Force should consider why the gap had widened in early years in the three years leading up the pandemic.
- Key Stage 2: The disadvantage gap at the end of primary school in Essex has consistently been wider than the national average. Disadvantaged pupils in Essex tend to finish KS2 further behind in their learning than other disadvantaged pupils nationally, as well as behind their more affluent peers locally. In England nationally in 2018/19, disadvantaged pupils finish primary school 9.3 months behind their peers. In Essex, disadvantaged pupils are a *further* 0.8 months behind, meaning the KS2 disadvantage gap in Essex is 10.1 months. Moreover, there is evidence that even before the pandemic the gap was beginning to widen further in Essex (as was the case nationally). Pupils in Essex who are persistently disadvantaged through their primary school life are more than a year (14 months) behind their peers at the end of key stage 2, and this gap has closed by only 0.5 months since 2011, echoing the minimal progress seen nationally for closing the gap for persistently disadvantaged young people. Nationally, the persistent disadvantage gap at the end of key stage 2 is 12.1 months, nearly two months less than in Essex.
- Key Stage 4: In the year preceding the Covid-19 pandemic (2018/19) the KS4 disadvantage gap in Essex stood at 19.8 months, compared with 18.1 months nationally, following a period during which the gap in Essex widened. In the first year for which qualifications were affected by the pandemic (2019/20) we use our revised *grade gap* method to account for disruptions to education: the disadvantage grade gap in Essex in English and maths GCSE is

1.43, compared with the national average of 1.24. Despite progress in the first half of the 2010s towards narrowing the KS4 gap, which saw the Essex gap fall slightly below the national average, the KS4 gap in Essex has begun to widen in recent years. Our analysis of the grade gap in 2019/20 suggests that this concerning trend continues. For persistently disadvantaged pupils in Essex, we find that they finish their GCSE year about 25 months behind their more affluent peers (2019/20). This is a further two months behind other persistently disadvantaged pupils nationally and is equivalent to being more than two years behind in their learning. In 2019/20, the grade gap between persistently disadvantaged pupils and their more affluent peers is 1.78 in Essex, compared with 1.60 nationally.

- Age 16-19: This disadvantage gap is measured as the difference in average grades achieved by disadvantaged and non-disadvantaged students, as opposed to the months gap calculated for earlier phases of education. For the years covered in this report (2016/17 to 2019/20) the gap in Essex has been consistently wider than the national average. In 2019/20 the national average disadvantage gap for the 16-19 phase was 3.1 A level grades. In Essex the gap was 3.5 grades. Both the Essex and national disadvantage gaps have shown a similar pattern of change over the past four years, slightly decreasing from 2016/17 to 2018/19 then increasing in 2019/20.

In addition to the disadvantage gap, we also provide a **summary of post-16 outcomes** using publicly available data. We find that:

- Between 2018/19 and 2020/21 there was a small increase in the proportion of Essex pupils who remain in education and training at the age of 16 and 17, from 85 per cent to 87 per cent. This is in line with the national average.
- After completing 16-to-18 study, more Essex students go into employment or an apprenticeship (29 per cent employment, 10 per cent apprenticeship) than the national average (25 and 8 per cent respectively). Fewer Essex students progress to university, further education or other education, compared with the national average. In Essex, 33 per cent progress to higher education and 8 per cent to further education against national averages of 35 per cent and 10 per cent respectively.
- If we look at this same measure broken down by disadvantage, we find some differences between the destinations of disadvantaged students leaving 16-to-18 study in Essex compared with disadvantaged students nationally. Comparing disadvantaged students in Essex with *other* disadvantaged students in England, disadvantaged students in Essex are more likely (by seven percentage points) to enter employment after 16-to-18 study and are less likely (by six percentage points) to enter higher education.
- Essex is in line with the national average for the levels of qualification (level 2 and level 3) achieved by the age of 19 between 2016/17 and 2019/20. However, the average grades achieved in level 3 qualifications (A levels, Applied General qualifications, and Tech levels) vary in comparison with the national average depending on the qualification: Compared to the national average, young people in Essex taking A levels or Applied General qualifications typically achieve lower grades. On the other hand, Essex pupils taking Tech Levels tend to outperform the national average.

So far, we have considered outcomes in Essex as a whole. However, we know that Essex is a large and varied county with a diversity of pupils and education outcomes. We therefore draw **comparisons within Essex at parliamentary constituency level in terms of attainment and disadvantage gaps**. We do this for early years, KS2 and KS4 using 2018/19 data. Note that, as for Essex-level gaps, parliamentary constituency gaps compare attainment of local disadvantaged pupils with the attainment of *all* non-disadvantaged pupils nationally. We do this rather than express the rank in terms of the difference between disadvantaged and non-disadvantaged pupils within the area to allow for a consistent reference point across areas. This avoids representing disadvantage gaps as being especially large in certain geographic areas based on very high attainment of non-disadvantaged children in the area, rather than low attainment by disadvantaged children. We find that:

- In all phases, some Essex parliamentary constituencies have disadvantage gaps that are narrower than the national average (for example Thurrock) and there are others where gaps are substantially wider than the national average (for example Clacton).
- For many constituencies, the gap is narrower than average in some phases and then wider than average in others. For example, Harlow has smaller than average gaps for both early years and KS2, but then has the third highest gap at the end of KS4.
- While the gaps are calculated as the difference in attainment between local disadvantaged pupils and all non-disadvantaged pupils nationally, it is still useful to consider disadvantage gaps in context with overall attainment in each parliamentary constituency. We provide scatter plots which allow us to identify the Essex constituencies with larger or smaller than average gaps *and* higher or lower than average attainment. For example, Clacton typically has a large disadvantage gap and lower than average attainment. In contrast, Chelmsford has above average attainment but also a larger than average disadvantage gap across all three phases (early years, key stage 2 and key stage 4). Brentwood and Ongar is the only constituency with higher attainment and a smaller than average gap in both KS2 and KS4.

Having conducted a geographic comparison *within* Essex, we move on to conduct **comparisons with similar areas *beyond* Essex**. We identify seven local authorities, of which two are county councils, that are similar to Essex on a number of characteristics that are relevant to education outcomes. The comparator LAs are Bury, Dudley, Southend-On-Sea, Stockport, and Telford and Wrekin. The county councils are Cumbria and Hertfordshire.[1] In comparing Essex disadvantage gaps and attainment with these selected comparators, we find that they follow a similar pattern as Essex, with most having higher than average attainment but wider than average disadvantage gaps (with the exception of Essex having a narrower than average gap at early years). We identify Telford and Wrekin, and

[1] For this report, we identify similar local authorities based on (1) level of persistent disadvantage and (2) neighbourhood characteristics as summarised by Office of National Statistics' area 'pen portraits'. Pen portraits are the residential-based area classifications produced by the Office for National Statistics (ONS). The ONS has placed each of the 391 UK local authority districts into clusters based on their 2011 census characteristics. Similar local authorities are grouped together, and more detailed clusters are identified at LSOA-level, based on five main census dimensions: demographics, household composition, housing tenure, socio-economic status and employment. We use these lower-level LSOA clusters to identify the mix of social characteristics making up a larger diverse area like Essex, and to identify other local authorities with a similar mix of characteristics.

Hertfordshire as areas that achieve higher than average attainment *and* narrower than average gaps (in KS2 and KS4 respectively), which the Essex Task Force may find useful to investigate further.

Finally, we analyse **the rate of primary and secondary school improvement in Essex between 2015/16 and 2018/19**, compared with other schools nationally and with schools in our selected comparator LAs and county councils.

- Primary and secondary school improvement largely follows the national trend, in that those with the lowest performance in our baseline year (2015/16) tend to improve the most, whilst those with the highest baseline performance tend to deteriorate slightly.
- However, average improvement in Essex primary and secondary schools tends to lag behind its comparators. This is the case both when we compare with all schools nationally, and also schools in our selected comparator LAs and county councils. Differences tend to be small for KS2 outcomes, while Essex secondary schools lag further behind their comparators at KS4.
- The Essex Education Task Force might find further research useful as to why Essex secondary school improvement appears to lag behind improvement observed in similar localities.
- For KS2 outcomes, the largest lag for Essex schools is observed in maths progress measures, and the Task Force may wish to enquire as to whether learning can be drawn from other subject areas like reading and writing to improve progress in maths.
- The areas in which Essex schools are slightly more improved than similar LAs and county councils are the KS2 attainment of disadvantaged pupils (percentage of disadvantaged pupils achieving the expected standard in reading, writing and maths) and writing progress of disadvantaged pupils.

In summary, this report has highlighted that:

- Disadvantage gaps in Essex are consistently wider than the national average, except for at the end of early years, where disadvantaged pupils are less behind in their learning in Essex compared with other pupils nationally.
- Nevertheless, the early years disadvantage gap in Essex has widened in recent years and is now only marginally smaller than the national average.
- In key stage 2, the disadvantage gap is wider in Essex than among disadvantaged pupils nationally. In recent years this gap has followed a similar trend to the national average, wherein progress towards closing the gap has slowed and now appears to be widening.
- In key stage 4, the disadvantage gap is also wider in Essex than among disadvantaged pupils nationally. Over the course of the previous decade, progress was made in Essex to narrow the KS4 disadvantage gap towards the national average (which nevertheless stood at about 18 months). However, in recent years the gap has begun to widen at a great rate than is observed nationally.
- The persistent disadvantage gaps at both KS2 and KS4 are wider in Essex than nationally, and little change is observed towards narrowing these gaps either in Essex or nationally over the last decade.
- The 16-19 disadvantage gap in Essex is wider than is observed nationally, meaning that disadvantaged pupils in Essex achieve lower A level grades on average than other disadvantaged pupils nationally.

- Following 16-18 education, disadvantaged students in Essex are more likely (by seven percentage points) to enter employment and less likely (by six percentage points) to enter higher education, compared with disadvantaged students in England. On attainment in the 16-19 phase, young people in Essex typically achieve lower grades when taking A levels or Applied General qualifications.
- Looking at school improvement between 2015/16 and 2018/19, average improvement in Essex primary and secondary schools tends to lag behind their comparators. This is the case when we compare all schools nationally and schools in our selected comparator LAs and county councils. For KS2 outcomes, the largest lag for Essex schools is observed in maths progress measures.

Figures 1.1 and 1.2 present headline data on how the disadvantage gap has changed over time and how it varies across Essex.

Figure 1.1: Disadvantage gap timeseries for Essex compared with national average

	Early Years		KS2		KS4		
year	Essex	National	Essex	National	Essex	National	
2011			11.9	10.6	21.7	19.7	Gap in months
2012			11.2	10.1	20.9	18.9	
2013	4.1	4.7	11.5	10.0	20.8	18.6	
2014	4.4	4.7	10.5	10.0	18.2	18.2	
2015	3.9	4.6	10.1	9.7	19.1	18.1	
2016	3.9	4.5	10.3	9.6	17.6	18.1	
2017	3.8	4.5	10.1	9.5	19.5	17.9	
2018	4.2	4.6	9.9	9.2	20.1	18.1	
2019	4.5	4.6	10.1	9.3	19.8	18.1	
2020					1.4	1.2	Gap in grades

Note that gap data is not available for 2019/20 for early years and key stage 2 as assessments were cancelled due to the Covid-19 pandemic.

Figure 1.2: Disadvantage gap in months by Essex Parliamentary Constituency, 2018/19

	Early Years	Key Stage 2	Key Stage 4
Essex average	4.5	10.1	19.6
National average	4.6	9.3	18.1
Basildon and Billericay	4.3	9.1	21.6
Braintree	4.9	9.9	18.6
Brentwood and Ongar	4.6	6.8	17.8
Castle Point	4.5	9.5	19.7
Chelmsford	4.9	11.6	19.6
Clacton	5.6	14.6	24.0
Colchester	4.1	11.3	13.7
Epping Forest	4.4	10.5	14.7
Harlow	3.3	9.0	23.2
Harwich and North Essex	3.8	9.1	19.7
Maldon	4.5	11.1	20.6
Rayleigh and Wickford	4.8	7.8	18.3
Rochford and Southend East	3.2	10.2	21.0
Saffron Walden	4.5	11.1	17.4
South Basildon and East Thurrock	4.0	8.6	24.0
Southend West	4.6	7.6	19.2
Thurrock	4.0	7.1	17.1
Witham	6.0	10.8	18.1

Definitions and how we calculate the attainment gap

Below is a summary of key definitions and methods for this report.

Disadvantaged and persistently disadvantaged pupils

We define a pupil as disadvantaged if they have been eligible for free school meals at any point in the last six years, and non-disadvantaged if they have not, using the same definition as the Department for Education. For early years we do not have a six-year history of FSM eligibility so instead we measure disadvantage by whether they are eligible for FSM in the current academic year.

We define a pupil as persistently disadvantaged if they are eligible for free school meals for more than 80 per cent of their school life. This measure is not available in the early years.

National disadvantage gap (see below for how we adjust for exam disruption in 2020)

We measure the disadvantage gap by comparing the attainment of disadvantaged pupils and their peers. Using data on pupils' assessment results for each key stage, we order pupils by their results and assign them a rank. We calculate the average rank of the disadvantaged and non-disadvantaged pupil groups, and then subtract the latter from the former (this is the rank mean difference). Finally, we convert this into months of developmental progress, enabling us to reach a measure of how far behind poorer pupils are from their peers.

Local authority disadvantage gaps, and other geographic breakdowns (see below for how we adjust for exam disruption in 2020)

We also report the gap on a geographic basis, covering local authorities (LAs) and parliamentary constituencies. In each **we construct the gap by ranking the (persistently) disadvantaged pupils in the area relative to the national mean rank of those who are not (persistently) disadvantaged (see national disadvantage gap for further explanation).** We do this rather than express the rank in terms of the difference between disadvantaged and non-disadvantaged pupils within the area to allow for a consistent reference point across areas. This avoids representing disadvantage gaps as being especially large in certain geographic areas based on very high attainment of non-disadvantaged children in the area, rather than low attainment by disadvantaged children.

We classify geographical breakdowns based on pupil residence instead of the location of the school they attend. We do this because local authorities are not accountable for all schools within their area. This makes attainment more comparable across phases and between local authorities, as the geographical breakdowns are not influenced by differential secondary school admissions policies which can result in transfers of pupils across LA boundaries, thereby risking the introduction of bias into our estimates of the disadvantage gap. See more details in the Technical Appendix of our 2020 Annual Report for how pupils are allocated to parliamentary constituencies.[2]

School disruption in 2020 and controversy around exam grading

The year 2020 was an exceptional year in education. National lockdown and restrictions to in-person teaching due to the global Covid-19 pandemic led to the announcement on 18 March 2020 that assessments would be cancelled for that year in early years and key stage 2, and that there would be no exams for GCSEs and A-levels.

As a replacement Ofqual devised a grade-allocation algorithm. Teachers were instructed to use their professional judgement, based on a range of data including coursework, mock exams and other evidence, to award indicative grades. These were referred to as Centre Assessment Grades (CAGs). Centres also ranked students. The algorithm used historical performance and attainment data to adjust Centre Assessed Grades in order to avoid grade inflation and maintain standards, both between centres and over time.

A level results were released on 13 August 2020 and it became apparent that the moderation algorithm had drawn controversial results. On 17 August 2020 it was announced that GCSE and post-16 qualification grades would instead be the higher of the Centre Assessed Grade submitted by the school or college or the Ofqual calculated grade.

Ultimately, this means that **pupil-level attainment in 2019/20 is not comparable with previous years.** For example, the national percentage of GCSEs graded at 4 or above (all subjects) rose by 8.9 percentage points between the years 2018/19 and 2019/20. With the release of the 2019/20 results, the Department for Education cautioned that "The increases seen in the headline statistics reflect

[2] Hutchinson, J. *et al.* 'Education in England: Annual Report 2020', EPI, August 2020.

the changed method for awarding grades rather than demonstrating a step change improvement in standards."[3]

How we calculate the GCSE disadvantage gap 2019/20

We have developed a measure to best reflect the disadvantage gap in 2020 while taking account of the major disruption to exams. **Our GCSE disadvantage gap measure for 2020 is the difference in average GCSE grades achieved by disadvantaged pupils, compared with non-disadvantaged pupils.** This grade gap measure contrasts with the months of learning gap calculation we use in previous years as the relationship between grades and months of learning may have been distorted under the 2020 assessment arrangements. The months of learning gap (for 2019 and earlier years) is calculated from the difference in average attainment rank between disadvantaged and non-disadvantaged pupils and then converted to months. In 2020, the mean gap in GCSE grades was 1.2 in English and maths, and 1.3 across all GCSEs. We do not create a disadvantage gap for early years or key stage 2 in 2020 because national assessments were not held for these phases in this year. More detail can be found in our 2022 Annual Report.[4]

Early years attainment

To measure educational progress in the early years, we use the total point score achieved by pupils in the Early Years Foundation Stage Profile (EYFSP), a teacher-led assessment at the end of Reception across a range of social, behavioural and cognitive development goals. In 2019, the average EYFSP total point score was 34.6 (on a scale from 17 to 51). In early years we omit results before 2013, as they are based on the previous EYFSP and therefore not comparable with later years.

Key Stage 2 attainment

For primary school level, we measure attainment using the average scaled score in reading and maths at key stage 2. In 2019, the average scaled score was 103.2. Raw attainment data for primary schools is only available from 2015/16, when the new key stage 2 assessments were introduced.[5]

Key Stage 4 attainment

To assess overall attainment at secondary level we measure pupils' average GCSE grade across English and maths. We use the 9 to 1 grading system, which was introduced in 2017 for English and maths.[6] As for key stage 2, attainment measures from before 2017 are therefore not directly comparable to current measures.

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[3] DfE 'Key stage 4 performance: Academic Year 2019/20', 26 November 2020

[4] Hunt, E. 'Education in England: Annual Report 2021', EPI, forthcoming.

[5] Reforms to the KS2 National Curriculum were introduced in 2014 and the first of the new assessments were sat in 2015/16. In the current assessments, pupils scoring at least 100 have met the expected standard on the test. Previous assessments are not directly comparable. However, we present timeseries of the gap 2011-2019 because they are based on the average rank of students as opposed to their attainment scores.

[6] For years pre-dating the 9 to 1 grading system, we adjust average scores in prior years by mapping across the old score boundaries to the new, and interpolating to produce an adjusted figure. We make no adjustment for the introduction of the new nine grade scale (rather than eight) in 'reformed' GCSE English and maths in 2017, further subjects in 2018, and the final remaining subjects in 2019. Further detail can be found in the Technical Appendix of our Annual Report 2020.

However, we are still able to compare disadvantage gaps pre and post qualification reform as they are based on changes in the rank performance of pupils, not their absolute performance. We are effectively measuring the change of within-year rank of various pupil groups, not absolute scores.

In our full Annual Reports, we also publish gaps calculated using GCSE grades across all GCSE subjects, as well as individual subject gaps.[7]

16-19 disadvantage gap

In 2021, EPI published new analysis developing a measure of the disadvantage gap for students at the end of 16-19 education.[8] The calculation of the post-16 gap is necessarily different to the method used at GCSE and below, because of the multitude of pathways and qualifications open to study after the age of 16. **The 16-19 disadvantage gap is calculated as the mean average, equivalent number of A level grades that disadvantaged students were behind non-disadvantaged students, over their best three qualifications taken at level 1 to 3 in this phase.[9]**

This gap measure includes all students at the end of their 16-19 study at a state-maintained school or college (other than those on apprenticeship programmes). Not included are students that appeared in key stage 4 data but did not appear in data indicating they had completed 16-19 study by age 19 (i.e., those that did not continue in any form of education beyond the age of 16). Disadvantaged students are defined as those who were known to be eligible for and claiming free school meals in any of the six years prior to finishing key stage 4.

[7] Hutchinson, J. *et al.* 'Education in England: Annual Report 2020', EPI, August 2020.
[8] Tuckett, S. *et al*. 'Measuring the disadvantage gap in 16-19 education', EPI, March 2021.
[9] To calculate the average attainment of disadvantaged and non-disadvantaged students, points must be allocated to different qualifications and grades which will form a total point score for each student. EPI's full report on measuring the 16-19 gap (Tuckett 2021), notes that "How points are allocated to different qualifications and grades will depend on what values are ascribed to qualifications, and there is no methodology that serves all purposes. This is especially the case for the 16-19 phase, given the multitude of pathways students progress onto afterwards e.g. apprenticeships, higher education, employment, all of which will have different qualification requirements." A variety of options were consulted on and tested. The method used in this paper allocates equal points to qualifications which require equal levels of teaching hours to complete, referred to as 'method 1' in the full methodology report (Tuckett 2021).

Disadvantage gaps over time

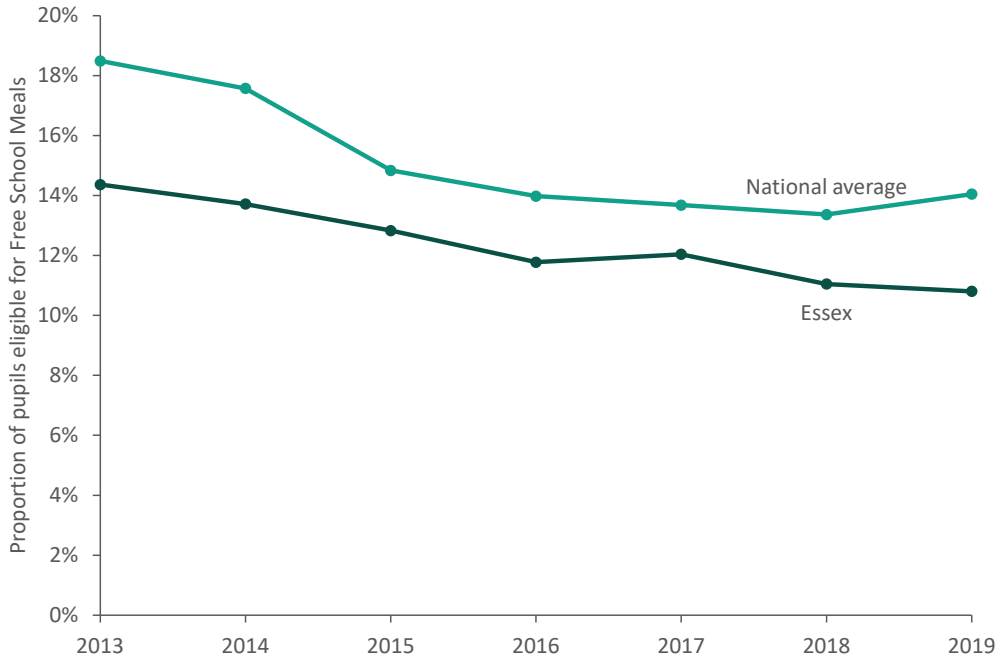
Early years: disadvantage gaps over time

This section looks at attainment and pupil characteristics in the early years Foundation Stage (EYFS) for pupils in Essex, compared with the national average.

The gap measures in this section are based on attainment in the early years Foundation Stage Profile (EYFSP). This is a teacher-led assessment of a child's progress towards the 17 early learning goals (measuring social, behavioural and cognitive development) in the final term of the year in which they turn 5. In 2018/19, the national average EYFSP total point score was 34.6 (on a scale from 17 to 51). The average score in Essex in this year was 35.0. In England the highest scoring LA was Richmond upon Thames with an average score of 39.3 and the lowest was Middlesbrough with an average of 32.3.

For context, figure 2.1.1 shows the share of early years pupils eligible for free school meals (FSM). Essex consistently has a slightly smaller proportion of early years pupils eligible for FSM than the national average. Between 2013-2018 the proportion of early years pupils eligible for FSM fell both nationally and in Essex. There are initial signs this trend is reversing at a national level but not yet within Essex. In 2018/19, 10.8 per cent of early years pupils in Essex were FSM eligible compared with 14.1 per cent nationally. In each year, an average of 1,787 pupils are disadvantaged at the end of the early years phase in Essex.

Figure 2.1.1: Share of EYFS pupils eligible for FSM, Essex and national average, 2013-2019

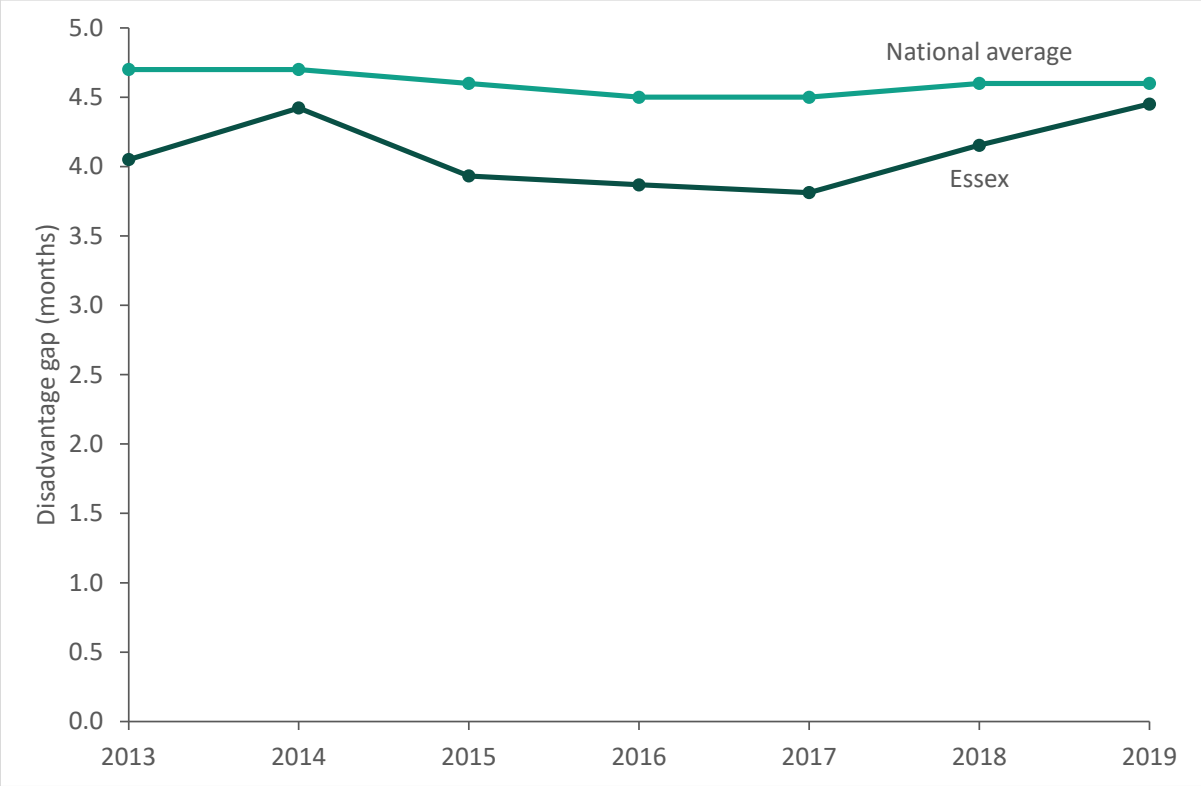


Source: national share of free school meals, DfE, Schools, Pupils and their Characteristics

Figure 2.1.2 looks at the disadvantage gap. That is how far disadvantaged pupils are behind their peers at the end of the EYFS, taking score in the EYFS profile as our attainment measure. We find that Essex has consistently done better than the national average with a smaller gap between

disadvantaged and advantaged pupils. However, since 2017 the gap has been broadly stable at a national level but has been growing within Essex. In 2017 the Essex gap was 3.9 months, 0.6 months smaller than the national average. By 2019 the national gap had grown by just 0.1 months to 4.6, whereas the gap in Essex had grown by 0.7 months to 4.5. The amount by which Essex outperforms the national average has therefore diminished substantially.

Figure 2.1.2: Disadvantage gap, in months, for the EYFS profile, Essex and national average, 2013-2019

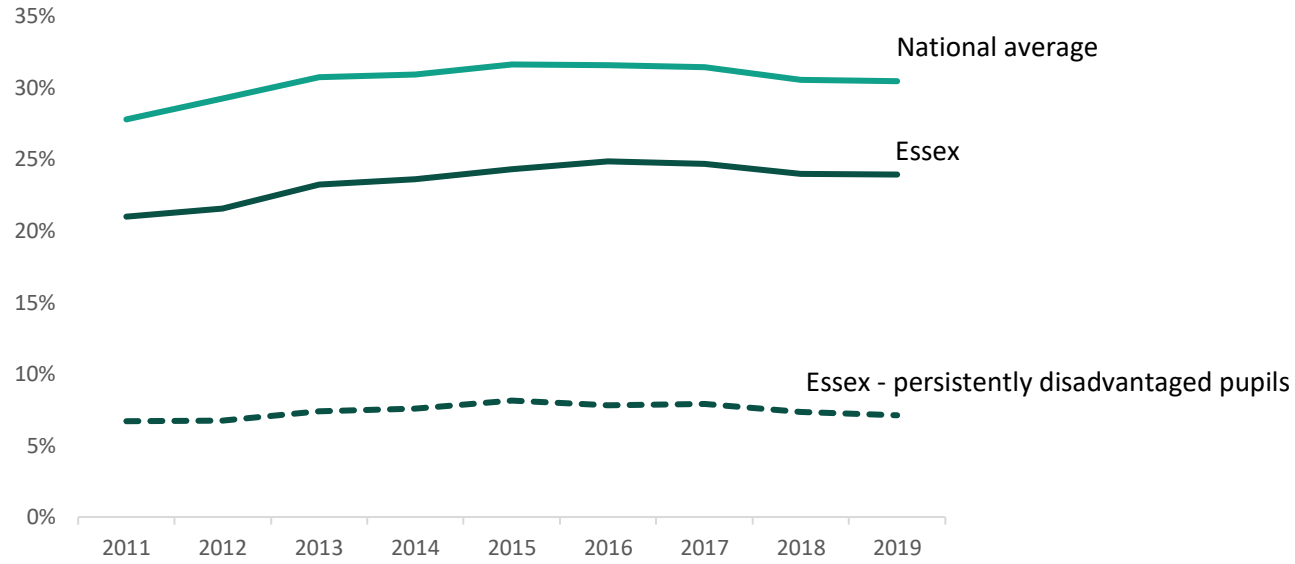


Overall, pupils finishing Reception year in Essex are less likely to be eligible for free school meals than in England nationally. The disadvantage gap in Essex has consistently been narrower than the national average, meaning that disadvantaged pupils in Essex finish Reception year less far behind in their learning compared with other disadvantaged pupils nationally. However, in recent years the early years disadvantage gap has widened in Essex, meaning the Essex gap has grown to become very similar to the national picture: the gap for the most recent year of data (2018/19) stands at 4.5 months in Essex, compared with 4.6 months nationally.

Key Stage 2: disadvantage gaps over time

This section repeats the previous analysis but looks at the disadvantage gap at the end of key stage 2 (end of primary school, KS2). For primary school level, we measure attainment using the average scaled score in reading and maths at key stage 2.[10] In Essex the average scaled score was 103.3 in 2018/19, which is very close to the national average of 103.2. The highest scoring LA was Richmond upon Thames with an average score of 107.9 and the lowest was Hackney with an average score of 100.8.

Figure 2.2.1: Share of KS2 pupils who are disadvantaged, Essex and national average, 2011-2019



National source: DfE, National curriculum assessments: key stage 2, 2019 (revised).

Figure 2.2.1 compares the share of pupils in Essex who are disadvantaged at the end of KS2 with the national average. It also shows for Essex the percentage of pupils who are persistently disadvantaged (eligible for free school meals for more than 80 per cent of their time at school). Essex has a below average level of disadvantage in the primary phase, with 24 per cent of pupils finishing KS2 being disadvantaged in Essex in 2018/19 compared with 30 per cent nationally. This difference has remained stable over time. About seven per cent of pupils in Essex are persistently disadvantaged in this time period.

[10] Reforms to the KS2 National Curriculum were introduced in 2014 and the first of the new assessments were sat in 2015/16. In the current assessments, pupils scoring at least 100 have met the expected standard on the test. Previous assessments are not directly comparable. However, we present timeseries of the gap 2011-2019 because they are based on the average rank of students as opposed to their attainment scores.

Figure 2.2.2: Disadvantage gap, in months, at end of KS2 for pupils in Essex and national average, 2018/19.

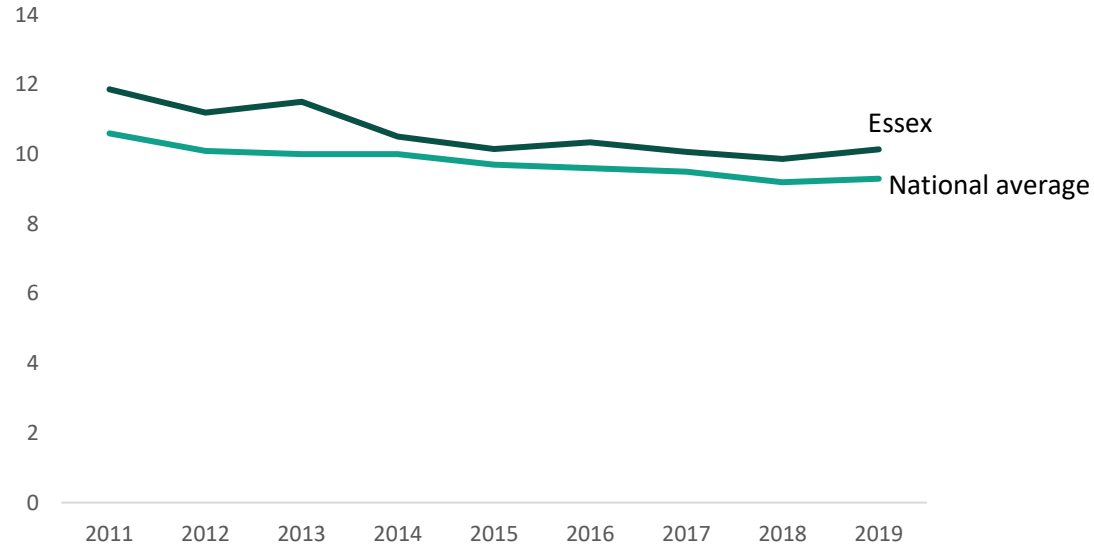


Figure 2.2.2 compares the disadvantage gap at the end of KS2 in Essex with the national average. In each year an average of 3,500 pupils are disadvantaged at the end of KS2 in Essex. We find that the disadvantage gap in Essex is consistently wider than in England: disadvantaged pupils in Essex are 10.1 months behind at the end of KS2 in 2018/19, compared with 9.3 months nationally.

The difference between Essex and the national average narrowed in the first years of this time series, with the smallest difference being 0.4 months in 2014/15, however since this year the progress in closing the gap has slowed in Essex compared with England nationally.

The year 2018/19 was the first year nationally that the KS2 disadvantage gap widened compared with the previous year. A similar trend is observed in Essex: the attainment gap got smaller in most preceding years (except 2012/13 and 2015/16) but in 2018/19 the gap in Essex widened by 0.3 months.

Figure 2.2.3: Persistent disadvantage gap, in months, at end of KS2 for pupils in Essex and national average, 2018/19.

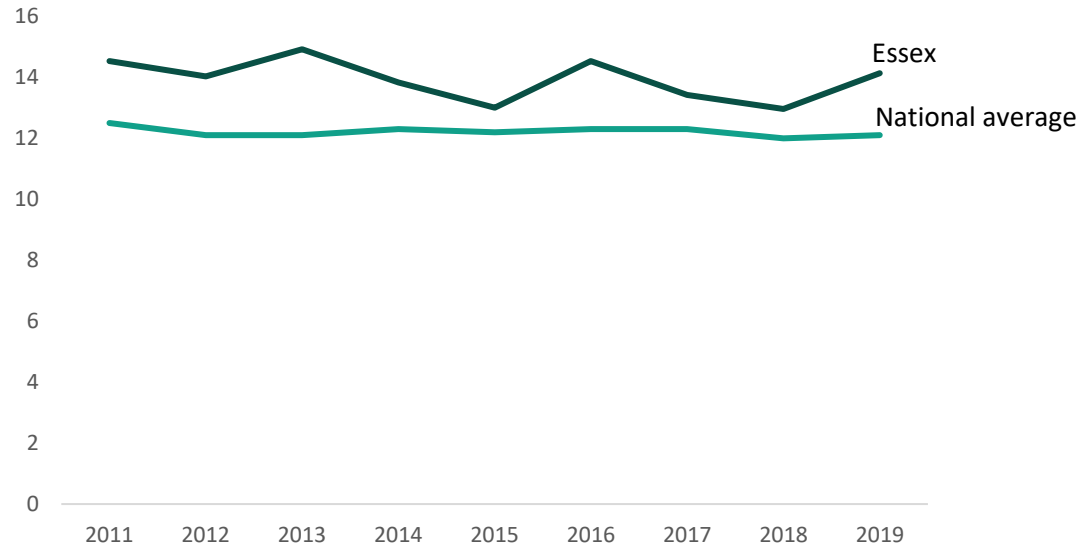


Figure 2.2.3 illustrates the persistent disadvantage gap in months at the end of KS2, comparing Essex and the national average. On average about 1,100 pupils are persistently disadvantaged in Essex at the end of KS2 each year. As with the headline disadvantage gap for KS2, we find that Essex has a consistently higher persistent disadvantage gap than is observed nationally. Pupils in Essex who have been FSM eligible for more than 80 per cent of their school life at the end of KS2 are typically 14.1 months behind their peers in their learning in 2018/19, compared with 12.1 months nationally.

The exact value of the persistent disadvantage gap varies more widely than for the headline disadvantage gap, partly owing to slightly smaller numbers of pupils included in the calculation. We would regard the changes from year year more as 'statistical noise' than evidence of meaningful trends, and therefore we turn our attention to overal average trends. Overall in this time period the gap in Essex averages to about 14 months, and there is little evidence that the gap is either on a widening or narrowing trend. The average change in gap in this whole period is similar to the national average, with each having shrunk by about half a month.

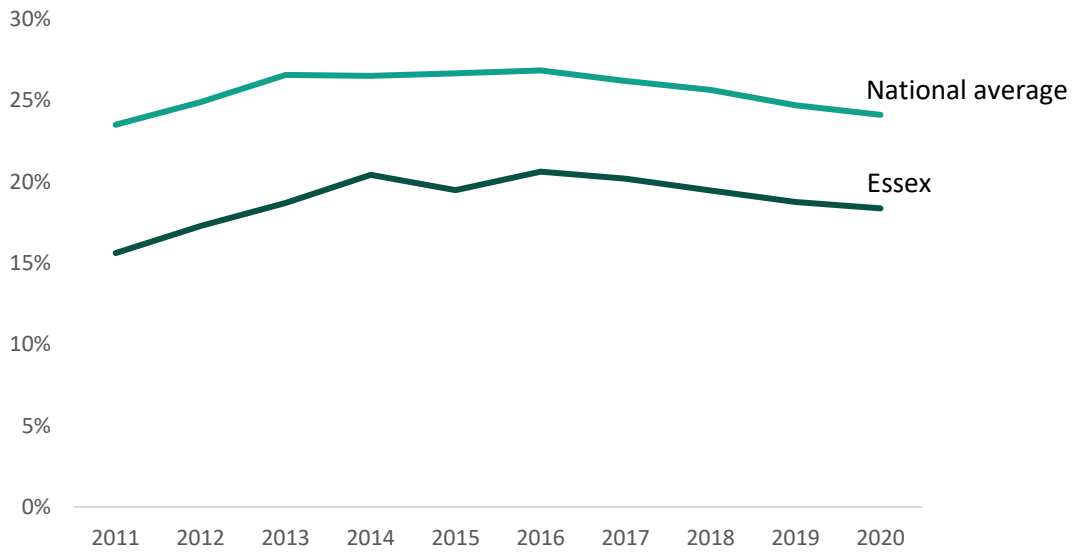
Overall, Essex has a lower share of disadvantaged pupils at the end of KS2 compared with England . These disadvantaged pupils in Essex tend to finish KS2 further behind in their learning than their peers than other disadvantaged pupils nationally. In England nationally, disadvantaged pupils finish primary school 9.3 months behind their peers. In Essex disadvantaged pupils are a *further* 0.8 months behind, meaning the KS2 disadvantage gap in Essex is 10.1 months. This is the picture of the Essex disadvantage gap as 2018/19, the latest year for which we have data prior to the Covid-19 pandemic. Pupils in Essex who are persistently disadvantaged through their primary school life are 14 months behind their peers, and this gap has closed by only 0.5 months since 2011, echoing the minimal progress seen nationally for closing the gap for persistently disadvantaged young people.

Key Stage 4: disadvantage gaps over time

This section repeats the previous analysis for pupils at the end of key stage 4 (end of secondary school, GCSEs, KS4). In 2018/19, the average GCSE points achieved in maths and English in Essex was 4.6, and in 2019/20 (following exam disruption) this figure was 4.9. This compares with 4.6 and 4.9 nationally. The highest average attainment in English and maths GCSEs in 2018/19 for any local authority was 5.5 in Richmond upon Thames, and the lowest was 3.9 in Blackpool.

Whereas data is reported only up to 2018/19 for earlier phases, here we report data for the period 2010/11 to 2019/20. This includes an estimate of the disadvantage gap following extraordinary disruption to education brought about by the Covid-19 pandemic. The introduction section of this report gives context for how exam results were impacted by the pandemic, and how we have adjusted our gap calculation to reflect this. The key points are that the grades awarded to students in 2019/20 are not comparable with previous years. Consequently, we have adjusted our gap measure so that, instead of expressing the gap in months of learning, the gap refers to the difference in average GCSE grades achieved by disadvantaged pupils in comparison with their peers.

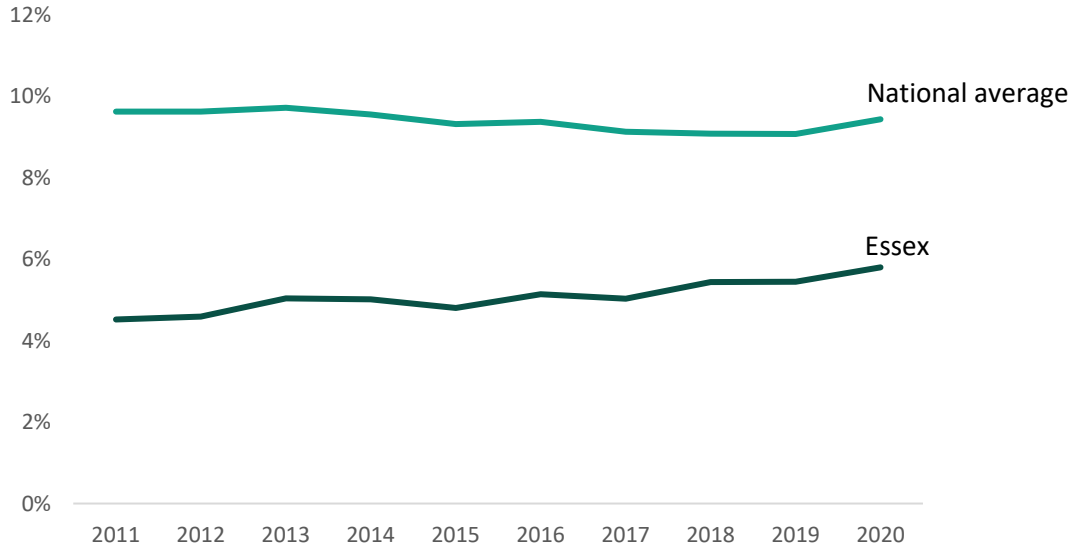
Figure 2.3.1: Share of KS4 pupils who are disadvantaged, Essex and national average, 2011-2020



First, for context we examine the level of disadvantage and persistent disadvantage in Essex compared with England nationally. As in early years and KS2, we find that a smaller than average proportion of Essex pupils are disadvantaged at the end of their GCSEs. In 2019/20, 18.4 per cent of pupils finishing KS4 in Essex were disadvantaged, compared with 24.1 per cent nationally.

Trends over time in Essex have echoed the national picture: the level of disadvantage increased between 2011 and 2015, reaching a peak in 2016 at 20.6 per cent in Essex and 26.9 per cent nationally. Since 2016 the level of disadvantage has fallend by just over 0.5 per centage points per year.

Figure 2.3.2: Share of KS4 pupils who are persistently disadvantaged, Essex and national average, 2011-2020



In Essex, 5.8 per cent of pupils finishing their GCSEs in 2019/20 had been disadvantaged for more than 80 per cent of their school life. By comparison, the level of persistent disadvantage in England nationally was 9.4 per cent in this year.

In terms of trends over time, the national level of persistent disadvantage steadily fell throughout the decade of 2010, with the exception of the final year which saw an increase of 0.4 percentage points. By contrast, the share of persistently disadvantaged pupils in Essex has steadily climbed over this period, rising from 4.5 per cent in 2011 to 5.8 in 2019/20, which is the highest value in this period for Essex.

Figure 2.3.3: Disadvantage gap, in months, at end of KS4 for pupils in Essex and national average, 2011-2019

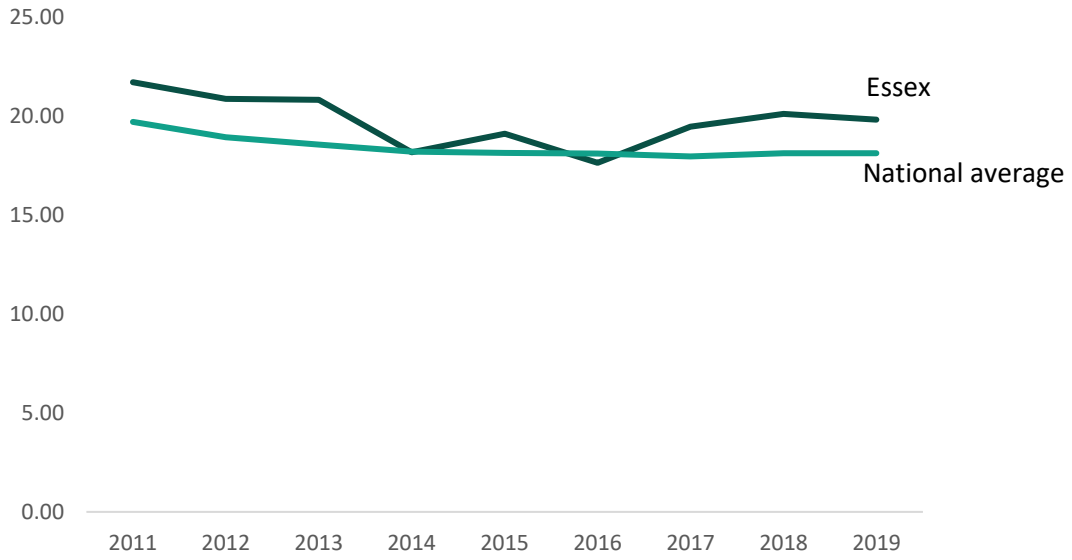
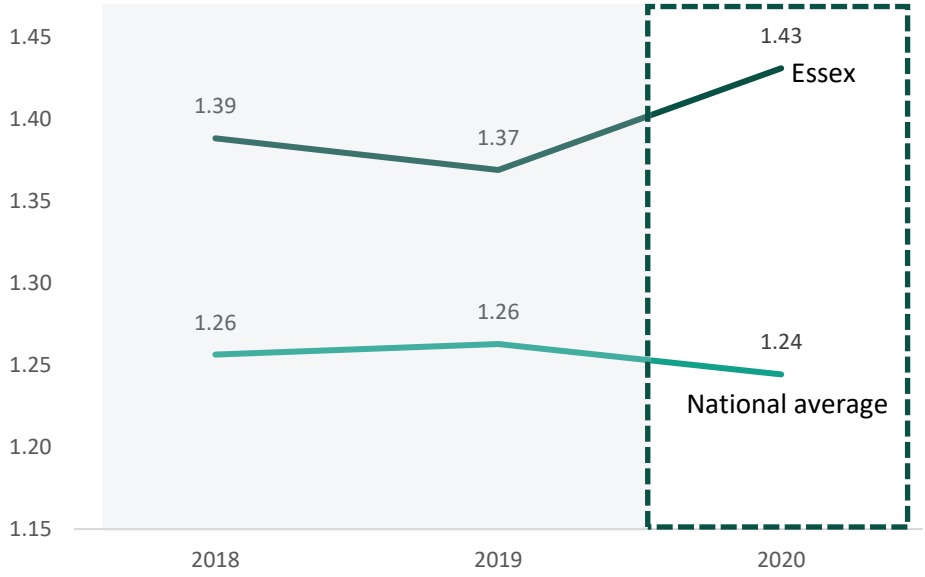


Figure 2.3.3 illustrates the gap in months at KS4 between 2011 and 2019. Figure 2.3.4 uses our new *grade gap* measure to estimate the disadvantage gap after the disruption to GCSE exams in 2019/20 (2017/18 and 2018/19 grade gaps are provided for comparison only). On average there are about 2,900 disadvantaged pupils in Essex in each year of this gap analysis.

Observing how the gap has changed between 2011 and 2019, in first half of the decade the gap was closing but the rate at which it closed was decreasing. Between 2016/17 and 2017/18 the gap began to widen and then held steady between 2017/18 and 2018/19. This is similar to what we observe in the KS2 disadvantage gap, which shows a slow reduction until 2019 when it increased for the first time since at least 2007.

The gap in Essex over the same time period has seen more distinct changes: In 2010/11 Essex had a larger than average KS4 disadvantage gap, with disadvantaged pupils in Essex an additional two months behind in their learning compared with other disadvantaged pupils nationally and a gap standing at 21.7 months. Between 2010/11 and 2015/16 progress was made to bring Essex's gap in line with the national average. Even though the national disadvantage gap was also narrowing in this period, the gap in Essex narrowed at a greater pace. However, this trend reverses for Essex from 2016/17 onwards and gap is once again bigger than average. In the year preceding the Covid-19 pandemic (2018/19), the KS4 disadvantage gap in Essex stood at 19.8 months, compared with 18.1 months nationally.

Figure 2.3.4: Disadvantage grade gap (mean difference in average grades achieved in English and maths 9-1), at the end of KS4 in Essex and national average, 2020 (2018 and 2019 for comparison only)



The disadvantage grade gap in Essex in English and maths GCSE in 2019/20 was 1.43, compared with the national average of 1.24. If we compare this with how the grade gap would look if we applied the same method to previous years, this represents a widening of the gap in Essex and a smaller narrowing of the gap nationally.

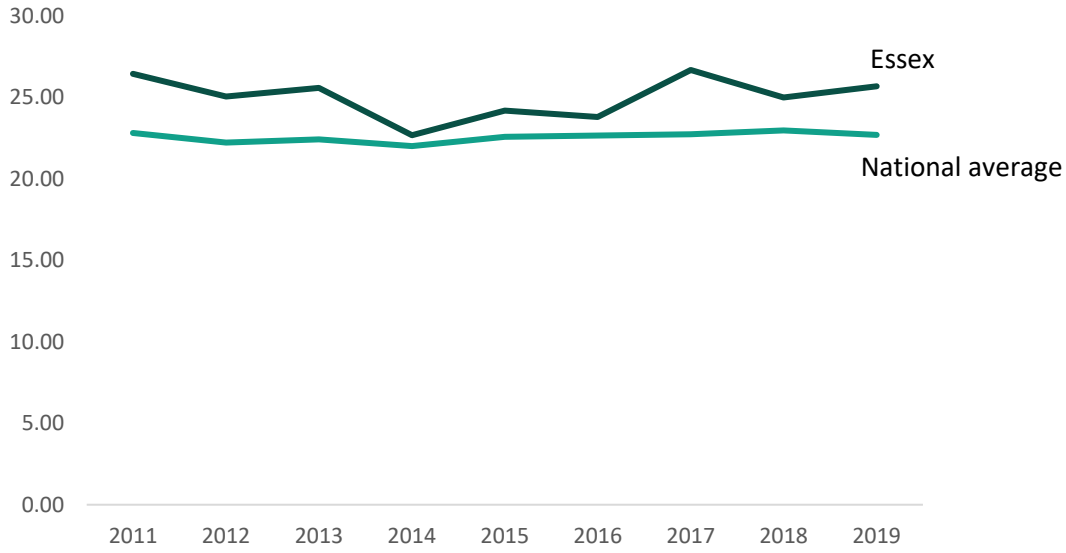
Despite being an extraordinary year, the national KS4 disadvantage gap in 2020 is similar to recent years. We do not find evidence that the national disadvantage gap has substantially changed in terms of the grades awarded to pupils through the combination of (the highest of) centre-assessed and Ofqual-determined grades.

The change in the KS4 gap in Essex between 2018/19 and 2019/20 is an increase of 0.06, meaning that, on average, disadvantaged pupils were awarded a *further* 0.06 of a grade less in each of their English and maths GCSEs than their more affluent peers compared to the previous year. This difference is equivalent to about 3/50ths of a GCSE 1-9 grade. This is a small change in real world

terms and we would regard comparisons with caution given that grades were awarded on such different bases in 2018/19 compared with 2019/20.

Nevertheless, the finding that the Essex disadvantage gap remains above the national average and appears to have slightly increased should be taken as a caution that the KS4 disadvantage gap in Essex may now be widening, continuing the concerning trends observed in 2011-2019 that earlier progress made towards narrowing the gap is now being reverse.

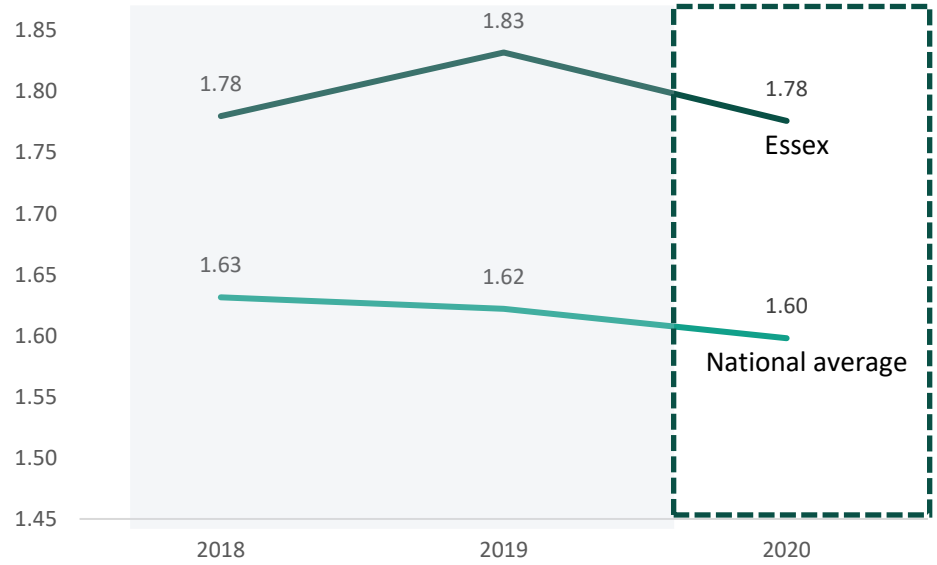
Figure 2.3.5: Persistent disadvantage gap, in months, at end of KS4 for pupils in Essex and national average, 2011-2019.



On average there are just under 800 persistently disadvantaged pupils in Essex in each year of this gap analysis. The national persistent disadvantage gap has remained steady throughout the decade of 2010 at about 23 months.

Essex pupils who are persistently disadvantaged finish their GCSE year about 25 months behind their more affluent peers. This is a further two months behind other persistently disadvantaged pupils nationally and is equivalent to being **more than two years** behind in their learning.

Figure 2.3.6: Persistent disadvantage grade gap (mean difference in average grades achieved in English and maths 9-1), at the end of KS4 in Essex and national average, 2020 (2018 and 2019 for comparison only)



The persistent disadvantage grade gap in Essex is 1.78 in 2019/20, compared with 1.60 nationally. The difference between these gaps in Essex and England nationally is similar to the difference between the headline disadvantage grade gaps. It signifies that, on average, persistently disadvantaged pupils in Essex and in England nationally were awarded over 1.5 of a GCSE grade lower than their more affluent peers in 2019/20 in each of their English and maths GCSEs.

Key Stage 4: How persistence of disadvantage contributes to the change in gap over time

EPI's 2020 Annual Report found that, since 2011, there has been minimal progress in closing the gap for persistently disadvantaged pupils (those who are disadvantaged and eligible for free school meals for at least 80 per cent of their school life). It also found that, more recently, increases in persistent poverty among disadvantaged pupils have contributed to the halt in progress for the wider disadvantaged group.[11]

This section analyses persistence of disadvantage in Essex, how it has changed over time and its relationship with the overall disadvantage gap at the end of key stage 4.

To do this, we recreate analysis conducted at national level in the 2020 Annual Report (which used 2018/19 data), and calculate GCSE disadvantage gaps for five distinct groups: those who are disadvantaged and eligible for free school meals for:

- up to 19 per cent of their school life (low persistence)
- 20-39 per cent of their school life (low-medium persistence)
- 40-59 per cent of their school life (medium persistence)
- 60-79 per cent of their school life (medium-high persistence)
- 80-100 per cent of their school life (high persistence, ie persistently disadvantaged)

All of these pupil groups experience disadvantage, having been eligible for free school meals at some point in the last six years. However, the lower persistence groups have experienced disadvantage

[11] Hutchinson et al., 'Education in England: Annual Report 2020', 4.

more fleetingly than those in the higher persistence groups; they may be eligible for FSM for one or two years, but they are not claiming FSM for the majority of their school life.

Figure 2.4.1: Persistence of disadvantage among disadvantaged pupils in Essex, 2011 to 2019

Year	Low persistence (n=408)	Low-medium persistence (n=573)	Medium persistence (n=637)	Medium-high persistence (n=495)	High persistence (n=778)
2011	11.5%	17.4%	22.3%	19.9%	29.0%
2012	14.8%	19.7%	20.6%	18.2%	26.6%
2013	14.8%	19.6%	21.7%	16.9%	27.0%
2014	16.1%	21.5%	20.4%	17.4%	24.6%
2015	15.6%	20.1%	22.2%	17.5%	24.7%
2016	15.2%	20.5%	21.7%	17.6%	24.9%
2017	15.4%	21.5%	22.1%	16.1%	24.9%
2018	13.1%	19.7%	22.7%	16.5%	27.9%
2019	12.2%	18.6%	24.4%	15.8%	29.0%
2011-2015 change	+4.1 pp (+35.5%)	+2.7 pp (+15.8%)	-0.1 pp (-0.5%)	-2.4 pp (-12.1%)	-4.3 pp (-14.9%)
2015-2019 change	-3.4 pp (-21.6%)	-1.5 pp (-7.6%)	+2.2 pp (+10%)	-1.7 pp (-9.7%)	+4.4 pp (+17.8%)

Figure 2.4.1 shows how Essex's population of disadvantaged pupils breaks down by level of persistence, and how this has changed between 2011 and 2019. The largest group within disadvantaged pupils in Essex are pupils who experience high persistence of disadvantage (29 per cent in 2019), being disadvantaged and eligible for free school meals for at least 80 per cent of their school life. The second largest group is those who experience medium persistence of disadvantage (24.4 per cent in 2019). The smallest group is those who experience low persistence of disadvantage (12.2 per cent in 2019). In the period between 2011 and 2015, the share of disadvantaged pupils who experience high persistence of disadvantage shrank by 14.9 per cent, whilst the proportion of disadvantaged pupils who were more briefly disadvantaged (low persistence) grew by 35.5 per cent. However, between 2015 and 2019 this trend reversed, and the share of disadvantaged pupils who experience high persistence of disadvantage grew by 17.8 per cent in Essex, evidencing a rise in persistent poverty in recent years. These trends are echoed nationally.[12]

[12] Hutchinson et al., 17.

Figure 2.4.2 Persistence of disadvantage, Essex and national, between 2011 and 2019

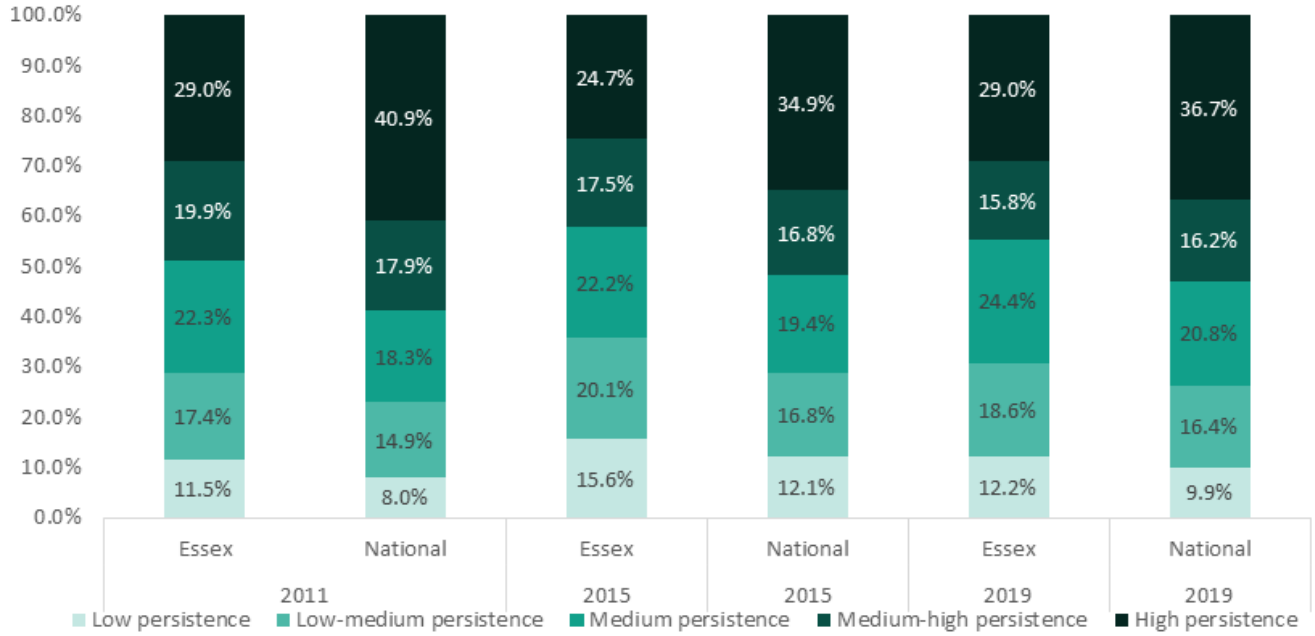


Figure 2.4.2 compares the distribution of levels of persistence among Essex's population of disadvantaged pupils and the national disadvantaged population at three points in time over the past decade. We see that, for both Essex and England, the largest group is those who experience high persistence of poverty. However, Essex has consistently had a smaller proportion of persistently disadvantaged pupils compared with the national average. A higher proportion of Essex's disadvantaged pupils falls into groups that are more briefly disadvantaged during their school life: more than half of disadvantaged KS4 pupils in Essex experience disadvantage for less than 60 per cent of their school life, and about a third experience disadvantage for less than 40 per cent of their school life.

Figure 2.4.3 Essex, persistent disadvantage gap in months 2011-2019, by level of persistence

Year	Low persistence (n=408)	Low-medium persistence (n=573)	Medium persistence (n=637)	Medium-high persistence (n=495)	High persistence (n=778)
2011	16.0	18.4	19.8	22.9	26.5
2012	12.1	19.1	20.9	23.8	25.1
2013	16.4	17.4	20.3	21.6	25.6
2014	10.9	15.5	18.7	21.2	22.7
2015	12.0	16.1	19.1	21.6	24.2
2016	11.3	15.0	15.3	20.3	23.8
2017	14.7	15.1	18.5	19.8	26.7
2018	14.4	14.9	19.1	23.8	25.0
2019	10.9	15.5	18.8	22.5	25.7
2011-2019	-5.1 months	-2.9 months	-1.1 months	-0.5 months	-0.8 months
change	-31.8%	-15.8%	-5.3%	-2%	-2.9%

Figure 2.4.3 shows the disadvantage gap in months for each of the persistence groups in Essex. The relationship is clear between level of persistence and the size of the gap. Young people who live in Essex and who experience higher persistence of poverty finish key stage 4 further behind young people who experience poverty more briefly. In some years in this period the gap for the high persistence group is double that of the low persistence group.

There is also a difference between the groups in terms of the progress towards closing the gap. Between 2011 and 2019, the size of the gap for those who live in Essex and who experience low persistence of disadvantage closed by over 30 per cent, compared with those experiencing higher persistence of disadvantage for whom the gap closed between two and three per cent in this same period.

It is likely that persistently disadvantaged pupils are unevenly distributed across Essex, and this will contribute to explaining differences in the gaps within Essex. Whilst numbers will generally be too small to conduct detailed analysis of their disadvantage gaps, future reports should quantify how persistent disadvantage is distributed across the parliamentary constituencies in Essex.

Post-16 participation and outcomes

This section provides a statistical roundup of post-16 educational outcomes in Essex, compared here with England and the East of England for regional context. These measures are drawn from publicly available figures, and cover:

- Participation of 16- and 17-year-olds in education, employment or training
- Destinations of 16-to-18 students going into apprenticeships, education and employment destinations
- Attainment at different qualification levels by the age of 19
- An analysis of the 16-19 disadvantage gap.

Figure 3.1: Participation of 16- and 17-years olds, 2020/21[13]

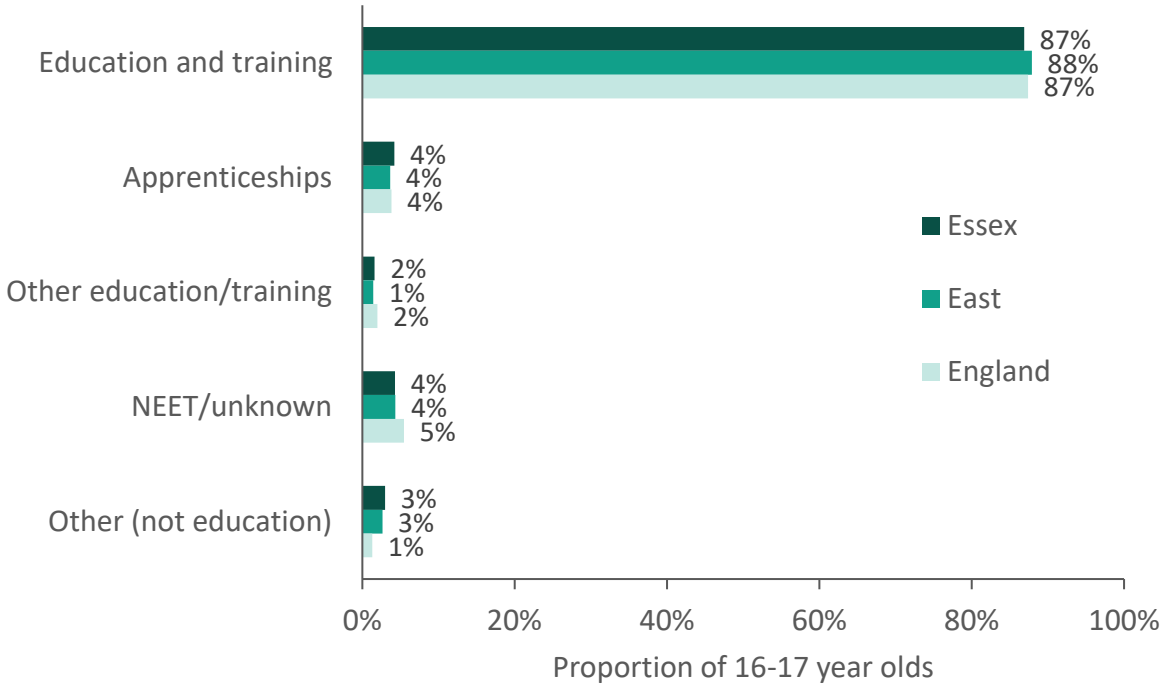


Figure 3.1 shows the participation rates of 16- and 17-year-olds in Essex. This shows where Essex pupils progress to after key stage 4. Data for 18-year-olds is only available at a national, rather than local authority level.

Slightly fewer 16- and 17-year-olds in Essex participate in traditional education and training compared to the national and East of England average. More 16- and 17-year-olds in Essex undertake apprenticeships or fall into the 'Other' category, which includes young people in work but not undertaking training. Both Essex and the East of England have a smaller proportion of young people Not in Education, Employment or Training (NEET) than the national average.

[13] From the DfE "Participation in education and training and employment" statistical release: https://explore-education-statistics.service.gov.uk/find-statistics/participation-in-education-and-training-and-employment/2020

Figure 3.2: Participation of 16- and 17-years olds, 2018/19-2020/21[11]

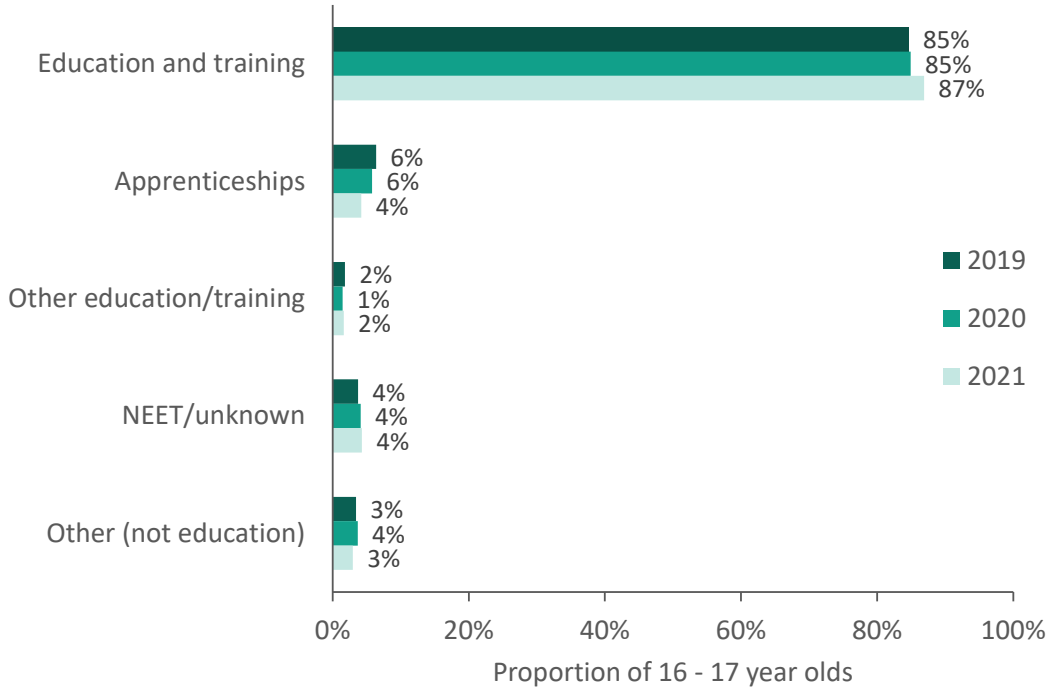


Figure 3.2 shows the how the participation rates of 16- and 17-year-olds in Essex has changed over the last three years. Between 2018/19 and 2020/21 the number of 16- and 17-year-olds participating in traditional education and training has increased and the number undertaking apprenticeships has decreased – these changes are largely in line with the national average (Appendix, Table C). There has been a small but steady increase in the number of young people not in Education, Employment or Training, rising from 3.7 per cent in 2018/19 to 4.3 per cent in 2020/21.

Figure 3.3: Destinations of students leaving 16 to 18 study, 2019/20[14]

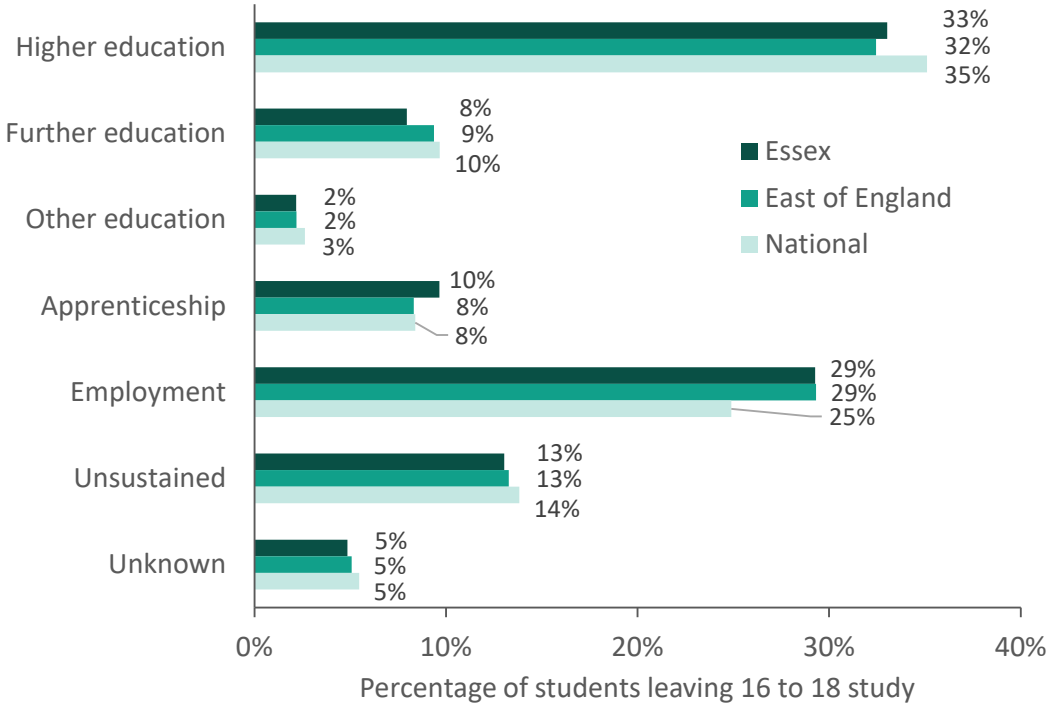


Figure 3.3 shows the destinations of young people in Essex who have completed 16 to 18 study. More Essex students go into employment or an apprenticeship (29 per cent employment, 10 per cent apprenticeship) than the national average (25 and 8 per cent respectively). Fewer Essex students progress to university, further education or other education. This pattern is also generally true for the East of England as a whole. Compared to the East of England, more Essex students enter apprenticeships and fewer are in Further Education.

[14] From the DfE "16-18 destination measures": https://explore-education-statistics.service.gov.uk/find-statistics/16-18-destination-measures/2019-20

Figure 3.4: Destinations of students leaving 16 to 18 study, 2017/18 – 2019/20[5]

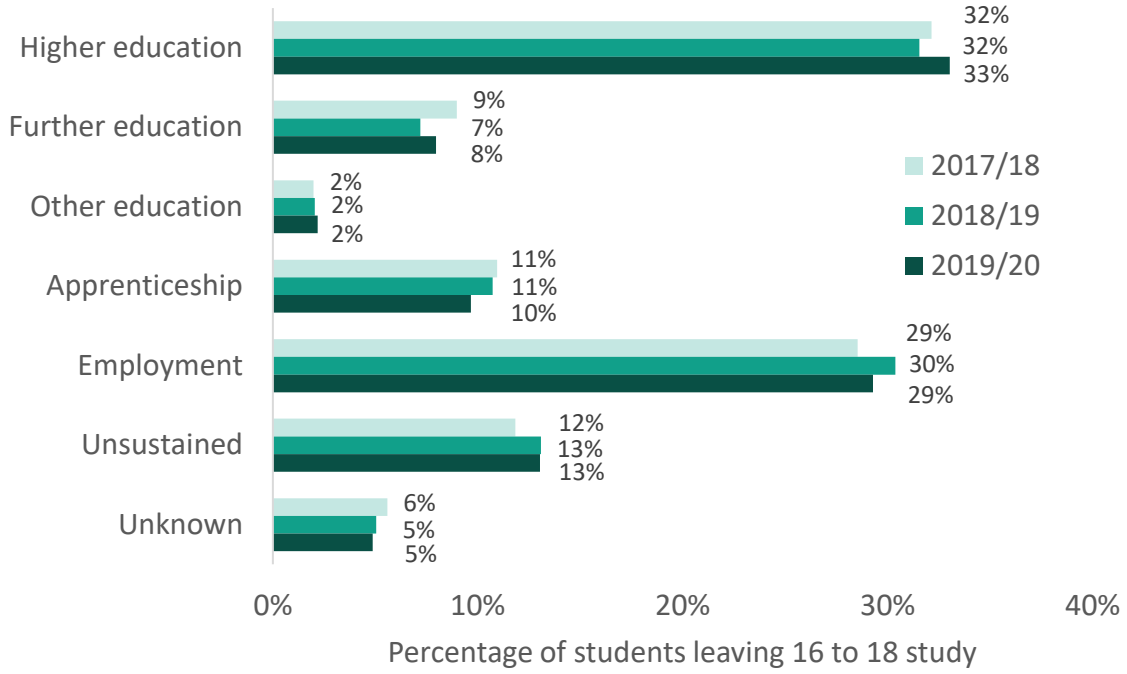


Figure 3.4 shows how the destinations of young people leaving 16-18 study have changed over the past 3 years for which data is available. In the academic year 2019/20 more Essex students progressed to university or other further study than in previous years and fewer progressed to employment or apprenticeships.

Figure 3.5: Destinations of students leaving 16 to 18 study, by disadvantage status, Essex and England, 2019/20[15]

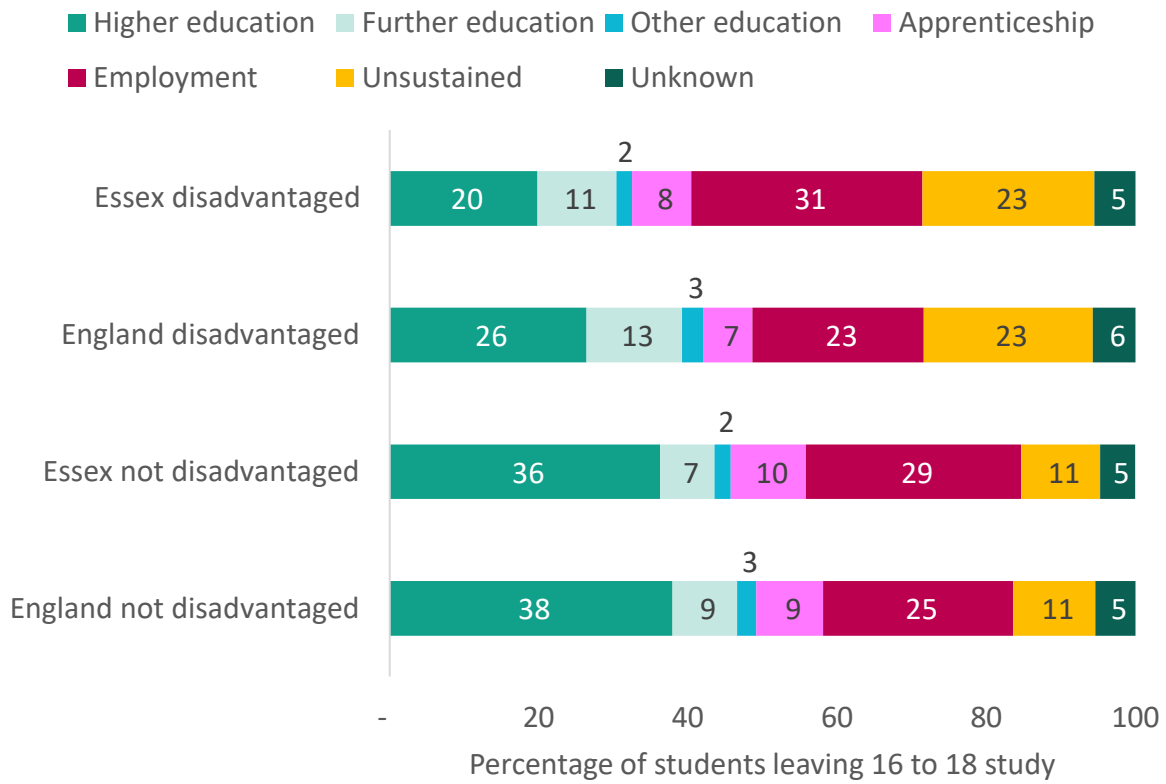


Figure 3.5 shows how the destinations of young people leaving 16 to 18 study varies by disadvantage status. Comparing disadvantaged young people in Essex with advantaged young people in Essex, much fewer disadvantaged young people progress to higher education. More disadvantaged young people progress to employment (the most popular choice for this group). Substantially more disadvantaged young people fall into the 'unsustained' category, meaning they had participated in education, an apprenticeship or employment at some point during the academic year but did not complete the required six months of sustained participation or were known to be claiming out-of-work benefits at some time during the destination year.

Comparing disadvantaged young people in Essex to disadvantaged young people across England, again fewer progress to university and more progress to employment. However, the number of students in the 'unsustained' category is the same for both, suggesting this is a national rather than local issue.

All in all, we observe little difference in the destination outcomes of non-disadvantaged young people in Essex compared with non-disadvantaged young people nationally. However, disadvantaged young people in Essex are notably less likely to progress to higher education than disadvantaged young people nationally, and are instead more likely to enter employment immediately after 16 to 18 study.

[15] From the DfE "16-18 destination measures": https://explore-education-statistics.service.gov.uk/find-statistics/16-18-destination-measures

The next two figures report attainment for 16-19 education. Attainment figures broken down by local authority are not yet available for the 2020/21 academic year, hence figures are shown to 2019/20 only.

Figure 3.6: Attainment levels 19 year olds, 2016/17 – 2019/20[16]

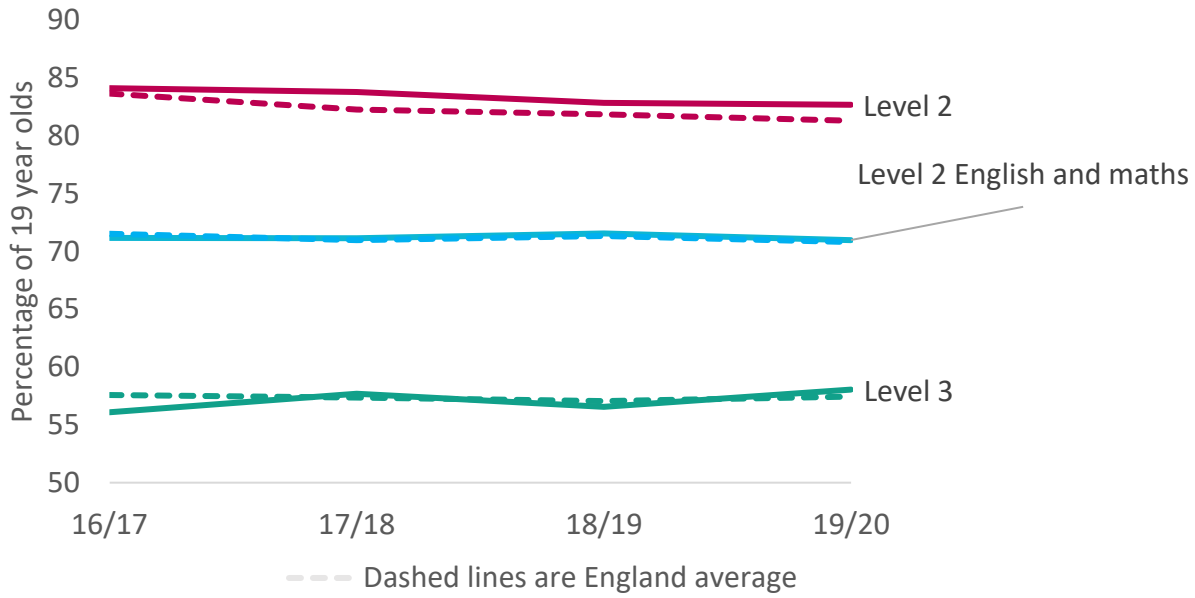


Figure 3.6 looks at the proportion of 19-year-olds qualified at different levels. Essex slightly outperforms the national average for the proportion of 19-year-olds qualified at Level 2 (5 GCSEs or equivalent). The national average in 2019/20 was 81 per cent whereas in Essex 83 per cent of 19-year-olds were qualified at this level. Essex matches the national average for the proportion of 19-year-olds holding Level 2 English and Maths qualifications (71 per cent nationally and in Essex for 2019/20). The same is broadly true for the proportion qualified at Level 3 (holding two A levels or equivalent) where the 2019/20 figures were 57 per cent nationally and 58 per cent in Essex.

[16] From the DfE "Level 2 and 3 attainment by young people aged 19 in 2020": https://www.gov.uk/government/statistics/level-2-and-3-attainment-by-young-people-aged-19-in-2020

Figure 3.7: Average grades in level 3 qualifications, 2017/18 – 2019/20[17]

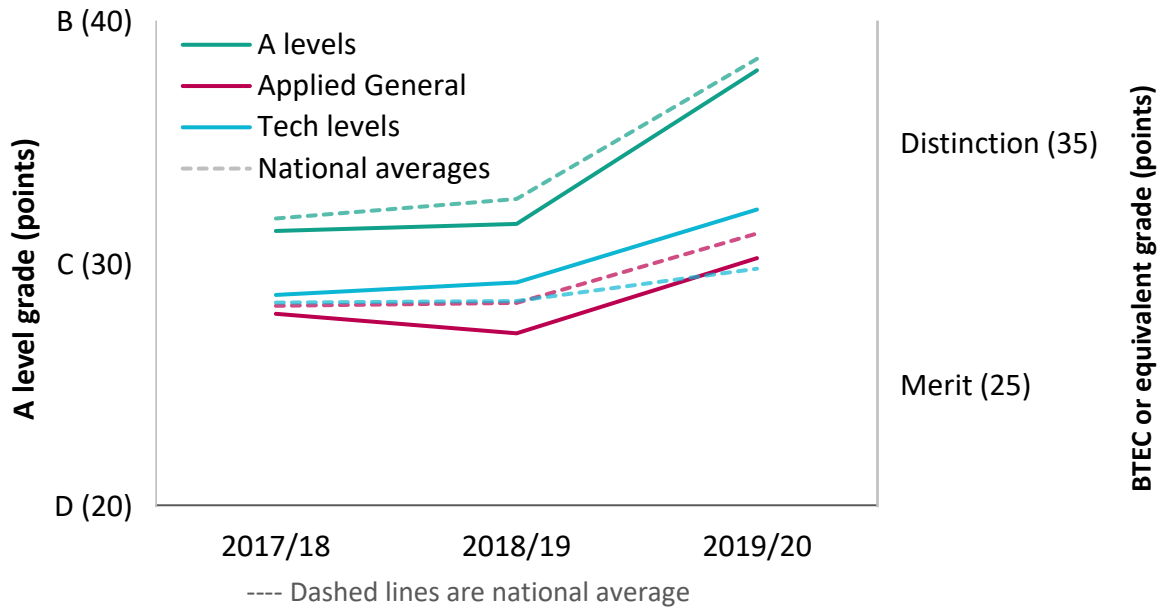


Figure 3.7 looks at the attainment of pupils completing Level 3 qualification in Essex. Compared to the national average, young people in Essex taking A levels or Applied General qualifications typically achieve lower grades (the solid line is beneath dashed line). On the other hand, Essex pupils taking Tech Levels tend to outperform the national average (solid line is above dashed line).

16-19: disadvantage gaps over time

Using data from the National Pupil Database we create a measure of the disadvantage gap for 16-19 education. The methodology is different to that used to determine disadvantage gaps for younger pupils such that this measure is not directly comparable with disadvantage gap measures for key stage 4 or younger pupils. Instead of reporting a disadvantage gap in terms of months of progress, for the 16-19 phase we report the gap as the average difference in equivalised A level grades for disadvantaged and non-disadvantaged pupils. As there is no formal measure of pupil disadvantage beyond 16 we count as disadvantaged those pupils known to be eligible for and claiming free school meals in any of the six years prior to finishing key stage 4. This means there is a slight lag in identifying pupils as disadvantaged at this educational stage.

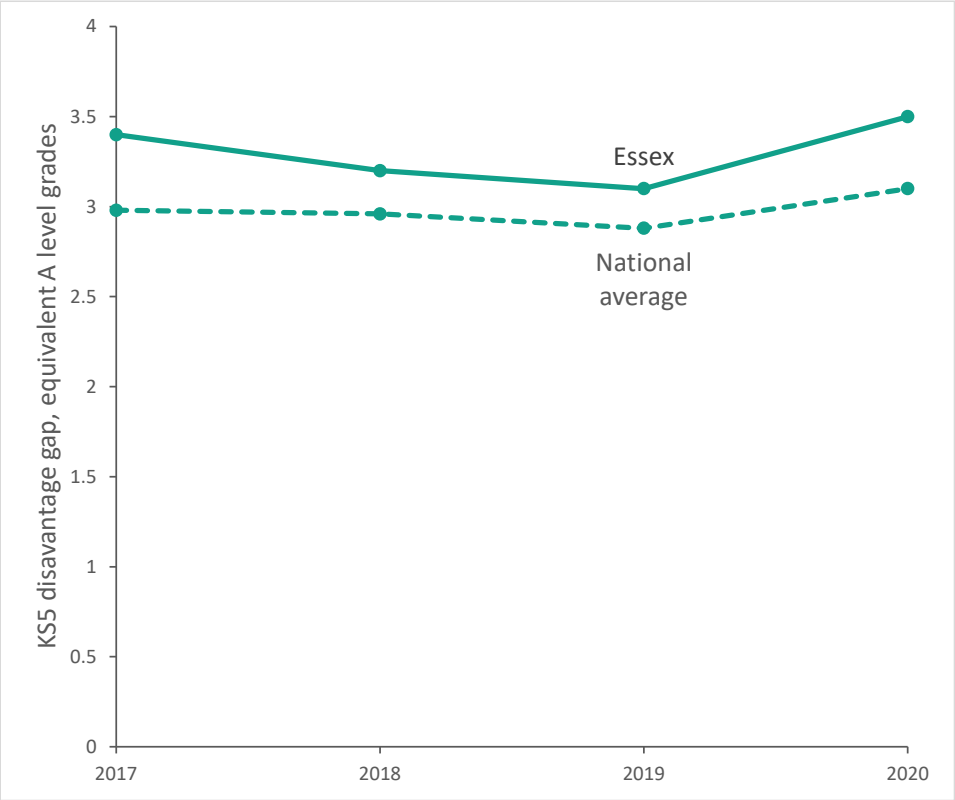
For more details on the methodology used see the EPI report "Measuring the disadvantage gap in 16-19 education".

Figure 3.8 shows how the 16-19 disadvantage gap has changed in Essex over the last four years. Essex consistently has a slightly larger gap than the national average. In 2019/20 the national average disadvantage gap for the 16-19 phase was 3.1 A level grades. In Essex the gap was 3.5

[17] From the DfE "A level and other 16 to 18 results": https://explore-education-statistics.service.gov.uk/find-statistics/a-level-and-other-16-to-18-results/2019-20

grades. Both the Essex and national disadvantage gaps have shown a similar pattern of change over the past 4 years, slightly decreasing from 2016/17 to 2018/19 then increasing in 2019/20.

Figure 3.8: 16-19 disadvantage gap, Essex and national average, 2016/17-2019/20



Exam results for 16-19 year olds were similarly disrupted in 2019/20 as they were for GCSEs. Overall, between 2018/19 and 2019/20, grades increased for most institution types and student characteristic groups, but not all benefited from increased grades to the same extent. In particular, students at colleges (excluding sixth form colleges) received very similar grades to the previous cohort whilst those at other institution types saw an increase.[18] Differences in outcomes in Essex therefore may be driven by a different mix in institution types compared with England and further analysis would be required to determine this. The key conclusion that we can draw from Figure 3.8 is that the 16-19 disadvantage gap is consistently higher in Essex than in England nationally, and that the Essex gap follows the overall trends of the national gap.

[18] Hunt, E., *et al.* 'Annual Report: Education in England', Education Policy Institute, forthcoming 2022.

Geographic comparisons: within Essex

Essex is a large and diverse county with varying levels of disadvantage and education outcomes. In this section we look at how performance on the key measures of attainment and the disadvantage gap varies across the parliamentary constituencies in Essex. We do this for early years, primary and secondary phases.

Note that, as for Essex-level gaps, parliamentary constituency gaps compare attainment of local disadvantaged pupils with the attainment of *all* non-disadvantaged pupils nationally. We do this rather than express the rank in terms of the difference between disadvantaged and non-disadvantaged pupils within the area to allow for a consistent reference point across areas. This avoids representing disadvantage gaps as being especially large in certain geographic areas based on very high attainment of non-disadvantaged children in the area, rather than low attainment by disadvantaged children.

These analyses look at the postcode in which a pupil attends school, rather than a pupil's home postcode. For example, a pupil living in Rochford and Southend East but attending school in Southend West would be shown in the Southend West figures.

In analysing outcomes at constituency level, it is useful to consider the context of local school systems. For example, there are four grammar schools within Essex (two in Colchester and two in Chelmsford) and pupils living in Essex may also apply to grammar schools in neighbouring Southend-on-Sea. Disadvantaged pupils are disproportionately less likely to be accepted to these schools, and pupils who are eligible for free school meals who live in wholly selective areas and who do not attend grammar schools have lower attainment than the national average.[19] Nevertheless, the smaller group of disadvantaged pupils who do attend grammar schools may be atypical of the disadvantage pupil population as a whole, including in terms of their attainment, and they may cross parliamentary constituency boundaries to attend that school. Therefore, the disadvantaged pupils attending grammars may be higher attaining than those who live in the same areas but do not attend grammar schools. All in all, while grammar schools in these areas may cause the disadvantage gap to appear narrower, given that these areas are not wholly selective and there are only two grammar schools in each of these larger constituencies, we would not expect to see a strong distortion in the data. Ultimately, further analysis than is in scope here would be required to judge the impact of the grammars in these areas.

In addition, in Brentwood and Ongar, Epping Forest and Saffron Walden, more than ten per cent of pupils attending school in these constituencies attend independent schools (see Appendix Table B), where we might see a similar effect on disadvantage gaps as in grammars.[20] Overall, it should be remembered that these gap calculations compare attainment of *local* disadvantaged pupils with *all* non-disadvantaged pupils nationally, and have been designed so precisely to avoid the distorting effects of local school systems that are likely to produce higher than average attainment for non-disadvantaged pupils.

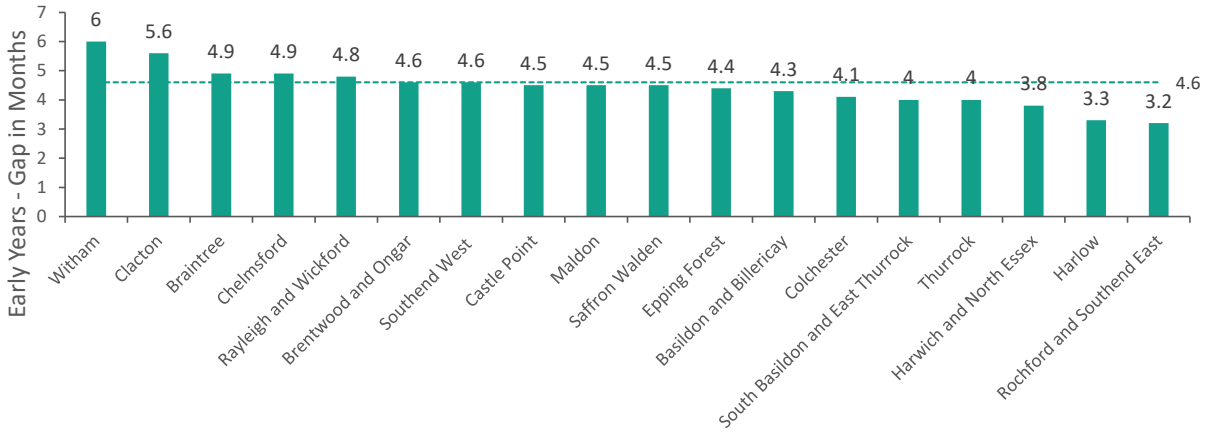
[19] Andrews, J. *et al.* 'Grammar schools and social mobility', EPI, 2016; Social Mobility Commission 'State of the nation 2021: Social mobility and the pandemic' 2021.
[20] EPI analysis of DfE data, available through Get Information About Schools.

Appendix Table B shows the number of pupils included in each category for the analyses which follow. This reflects the number of pupils taking the end of phase assessment, not the total number of pupils in each phase. The smallest number of disadvantaged pupils included in each parliamentary constituency is 66 (early years), 156 (key stage 2) and 91 (key stage 4).

Early Years

Figure 4.1 shows the size of the early years disadvantage gap in different parliamentary constituencies in Essex. The national average disadvantage gap is 4.6 months (dashed line on chart), while the Essex average is 4.5 months. Most constituencies have gaps of similar size to this, although two have substantially larger gaps (Witham, 6.0 months and Clacton, 5.6 months) and two have particularly small gaps (Harlow at 3.3 months and Rochford and Southend East at 3.2 months).

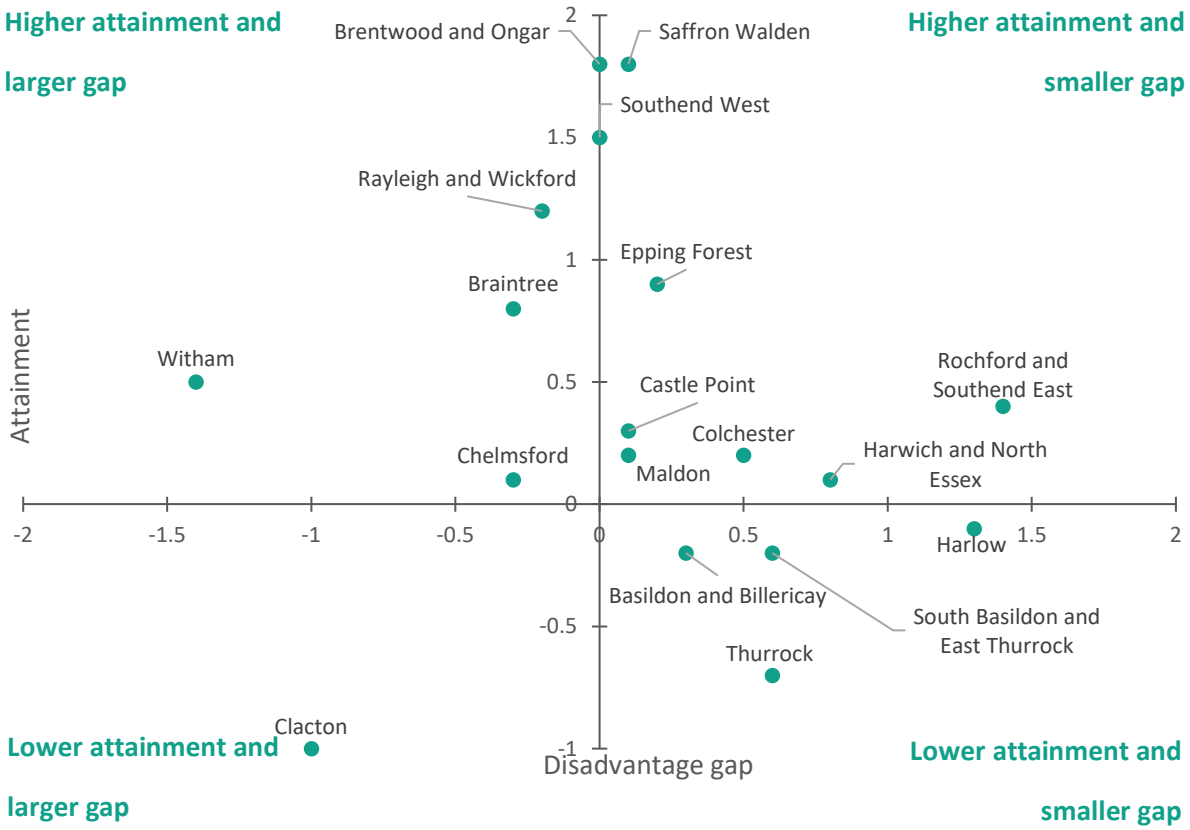
Figure 4.1 Early Years disadvantage gap, by parliamentary constituency, 2018/19



Note on interpreting the scatter plots: The next figure (Figure 4.2) and similar figures for the primary and secondary phases (Figures 4.4 and 4.6) plot the disadvantage gap against average attainment for each parliamentary constituency. We do this by finding the difference between the disadvantage gap in a given constituency and the national average, and the difference between average attainment in that constituency and the national average, and plotting the differences on a scatter plot. If a constituency had the same disadvantage gap and attainment as the national average, it would be located at the centre of both axes. Zero does not indicate zero gap or zero attainment: it indicates zero difference to the national average, which is nonetheless a notable disadvantage gap. Negative values mean a particular constituency is doing worse than the national average, regardless of whether the measure is the disadvantage gap (where lower is better) or average attainment (where higher is better).

For early years (shown in Figure 4.2), Saffron Walden and Brentwood and Ongar both do well. They have the highest attainment scores and disadvantage gaps that are the same size or slightly smaller than average. Rochford and Southend East has the smallest disadvantage gap and performs slightly better than national average on attainment. Witham performs worst when considering just the disadvantage gap, but attainment is above the national average. Clacton has a large disadvantage gap and low attainment overall.

Figure 4.2 Plot showing divergence from national average for average score in the EYFS profile and the Early Years disadvantage gap, by parliamentary constituency, 2018/19



Key Stage 2

Figure 4.3 shows the primary disadvantage gap for parliamentary constituencies in Essex. The national average disadvantage gap is 9.3 months while the Essex average is 10.1 months in 2018/19. As was observed for early years pupils, Clacton is an outlier with a particularly large gap for primary pupils of 14.6 months. Brentwood and Ongar (6.8 months) and Thurrock (7.1 months) have the smallest gaps. Overall, ten constituencies have gaps larger than average and eight have smaller.

Figure 4.3 Primary disadvantage gap, by parliamentary constituency, 2018/19

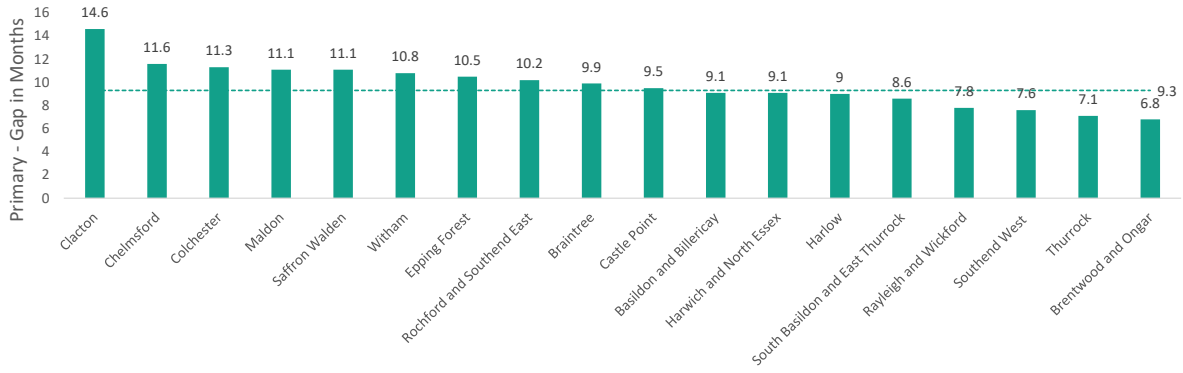
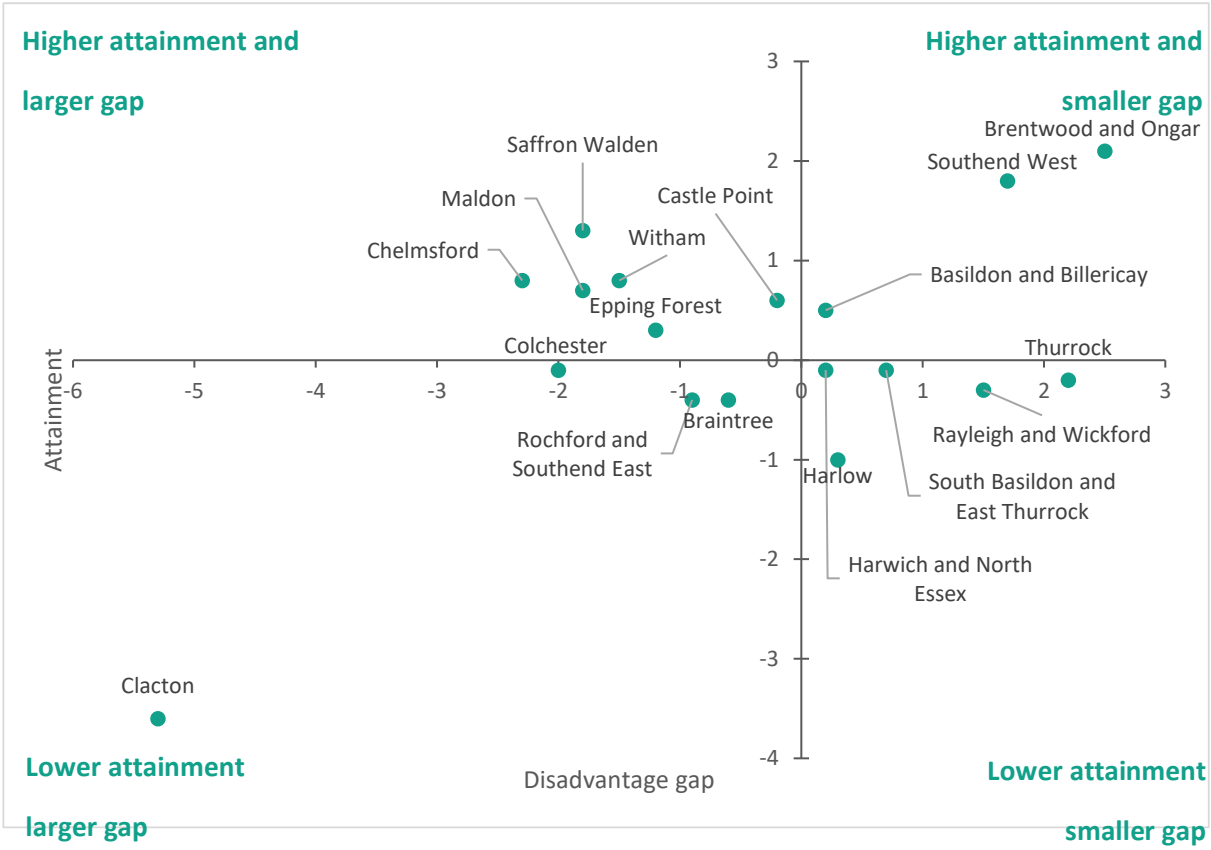


Figure 4.44 plots the KS2 disadvantage gap against average attainment. As for the early years graph the difference in disadvantage gap has been transformed to a negative number. For primary schools the attainment measure used is the average scaled score in KS2 reading and maths assessments.

Clacton performs notably worse than the other Essex parliamentary constituencies on both attainment and disadvantage gap measures. Brentwood and Ongar and Southend West both have higher than average attainment scores and a smaller than average disadvantage gap.

Figure 4.4 Plot showing divergence from national average for KS2 assessment scaled score and the primary disadvantage gap, by parliamentary constituency, 2018/19



Key Stage 4

The national average disadvantage gap by the end of secondary school is 18.1 months, and for Essex as a whole the average is 19.8. Colchester (13.7 months) and Epping Forest (14.7 months) both have substantially smaller disadvantage gaps. Both constituencies had larger than average gaps at the end of primary school. Clacton (24.0 months), South Basildon and East Thurrock (24.0 months) and Harlow (23.2 months) all have large disadvantage gaps. South Basildon and East Thurrock and Harlow both have slightly smaller than average gaps at the end of primary. Across all three key stages, Clacton consistently has one of the widest disadvantage gaps. We do not observe a consistent trend between the two areas with grammar schools (Colchester and Chelmsford).

Figure 4.5 Secondary disadvantage gap, by parliamentary constituency, 2018/19

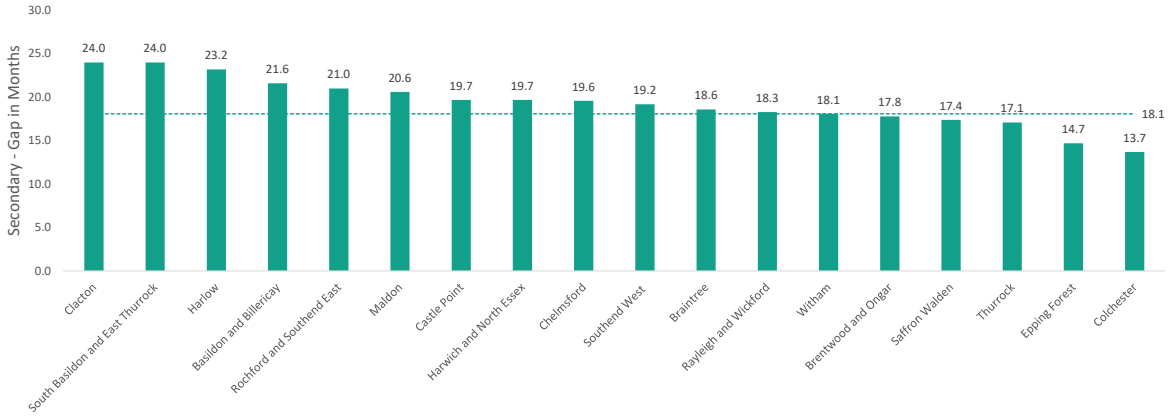


Figure 4.6 Plot showing divergence from national average GSCE grade per entry and the secondary disadvantage gap, by parliamentary constituency, 2018/19

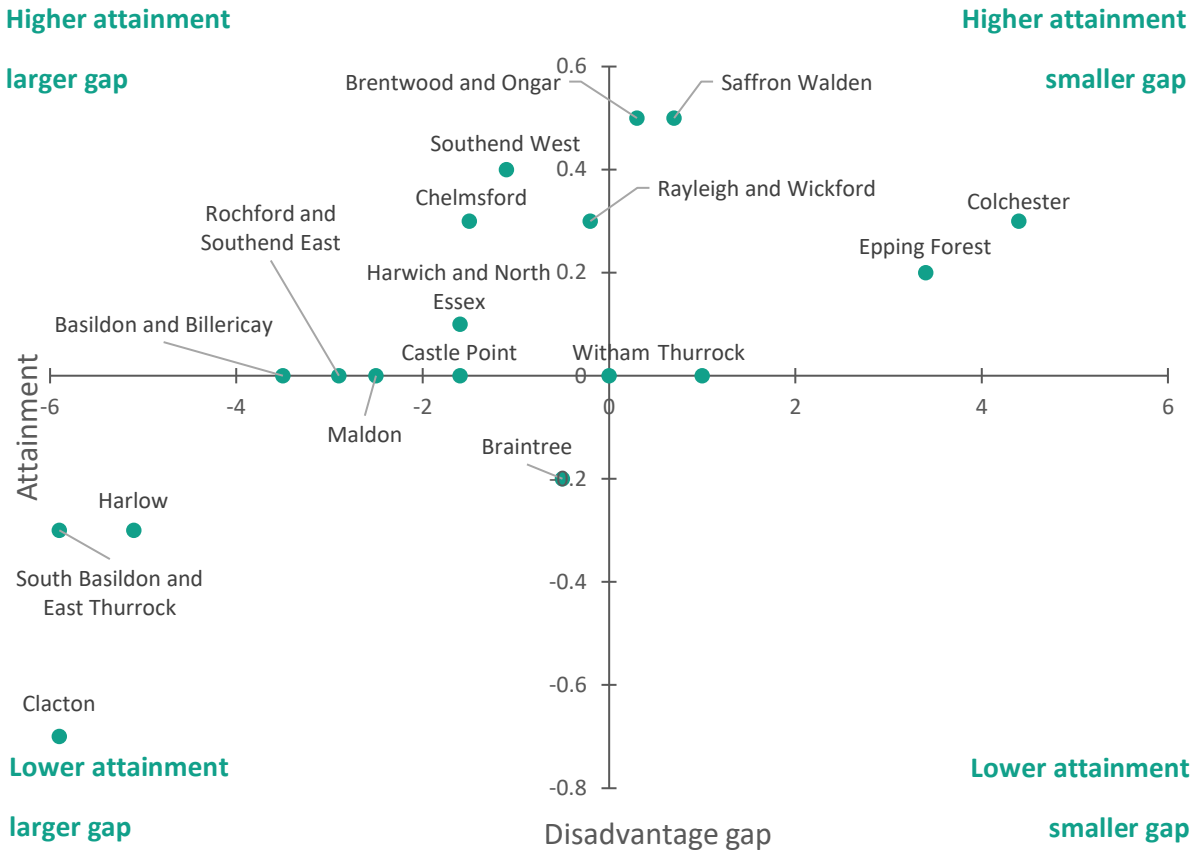


Figure 4.6 plots the disadvantage gap against average attainment for key stage 4. The three constituencies with the biggest disadvantage gaps (Clacton, South Basildon and East Thurrock and Harlow) also have below average attainment. The two constituencies with the smallest gaps (Epping Forest and Colchester) have above average attainment. Brentwood and Ongar, and Saffron Walden both have higher than average attainment and also have disadvantage gaps that are smaller than average.

Geographic comparisons beyond Essex

Method

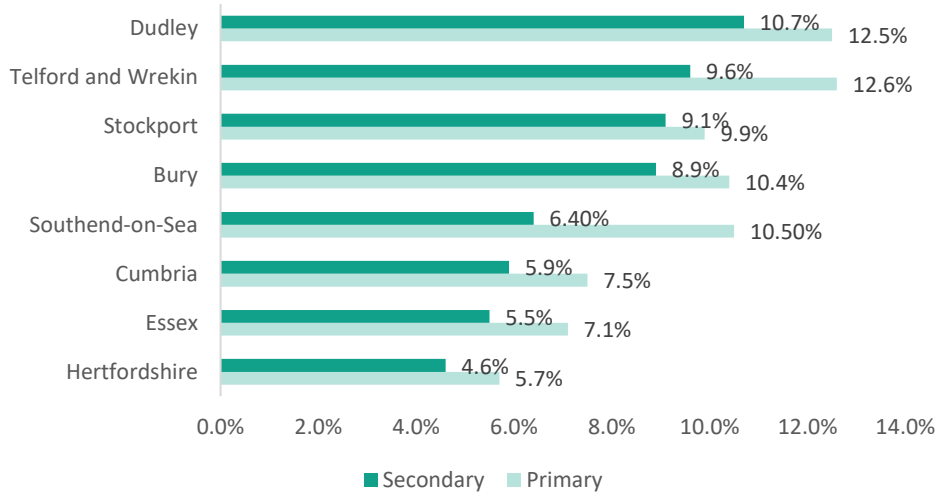
We have identified five local authorities and two county councils to use as comparators in this analysis. The comparator LAs are Bury, Dudley, Southend-on-Sea, Stockport, and Telford and Wrekin. The county councils are Cumbria and Hertfordshire.

Selection of the comparators was based on the following characteristics:

- the share of persistently disadvantaged young people from 2019 records
- dominant ONS neighbourhood classifications or 'pen portraits'.

The percentage of children who are persistently disadvantaged in Essex was 7.1 per cent at primary school and 5.5 per cent at secondary school. We selected local authorities with a similar proportion, allowing the proportion in persistently disadvantaged children young people to be 5.5 percentage points higher or lower than Essex. The proportion of persistent disadvantage in our selected comparators is summarised in Figure 5.1.

Figure 5.1: Percentage of pupils who are persistently disadvantaged in Essex and selected comparators



Of our selected comparators, only Hertfordshire has a lower share of persistent disadvantage than Essex. On average, we are therefore comparing Essex to a relatively more disadvantaged set of comparators.

Secondly, we use pen portraits to develop a more nuanced picture of the characteristics of pupils in local authorities. Pen portraits are the residential-based area classifications produced by the Office for National Statistics (ONS). The ONS has placed each of the 391 UK local authority districts into clusters based on their 2011 census characteristics. Similar local authorities are grouped together, and more detailed clusters are identified at LSOA-level (Lower Super Output Area, a geographic area generated to be as consistent in population size as possible, with the minimum population being 1,000). We use these lower-level LSOA clusters (which are based on five main census dimensions:

demographics, household composition, housing tenure, socio-economic status and employment) to classify the dominant neighbourhood types in Essex.[21]

At LSOA-level, the dominant neighbourhood types in Essex are hampered neighbourhoods (13 per cent), ageing suburbanites (11 per cent) and comfortable neighbourhoods (10 per cent).[22]

The share of KS4 pupils who are disadvantaged in hampered neighbourhoods is 23 per cent. People living in these neighbourhoods are less likely to be university educated and more likely to be unemployed. Illness, overcrowding and social renting are more common than average and people mostly live in flats or terraces. Ethnic diversity is not especially high but most common ethnic minorities include people from Black and mixed ethnic groups.

By contrast, the proportion of KS4 pupils who are disadvantaged in ageing suburbanite neighbourhoods is only four per cent. Ageing suburbanites are particularly unlikely to live in socially rented accommodation and more likely to live in detached housing. There is little ethnic diversity and university education is level with average.

Finally, seven per cent of KS4 pupils living in comfortable neighbourhoods are disadvantaged. Adults in comfortable neighbourhoods are less likely to be unemployed and tend to work in industries such as construction and manufacturing. The most common highest qualification level is Level 1, Level 2 or apprenticeship, which tends to be achieved when leaving schooling aged 16. Ethnic diversity is particularly low. Social renting is still higher than average but residence in semi-detached and detached housing is also common and private rental is particularly low. Unpaid care and illness are more common than average.

Analysis of educational outcomes across these neighbourhood types finds very different outcomes for disadvantaged and non-disadvantaged pupils depending on the neighbourhood type. Furthermore, we find that differences are not fully explained by the proportion of pupils eligible for FSM (Figure 5.2). Other neighbourhood characteristics also seem to have an effect.[23]

[21] Pen portraits and radial plots, ONS, 2018 https://www.ons.gov.uk/methodology/geography/geographicalproducts/areaclassifications/2011areaclassifications/penportraitsandradialplots

[22] In this analysis, we summarise the share of ONS pen portraits in each LA by taking the percentage of LSOAs characterised as each classification.

[23] EPI analysis of National Pupil Database 2018, linked to LSOA-level neighbourhood type by LSOA of pupil home postcode.

Figure 5.2 Distribution of disadvantage and average Progress 8 scores, by area classification

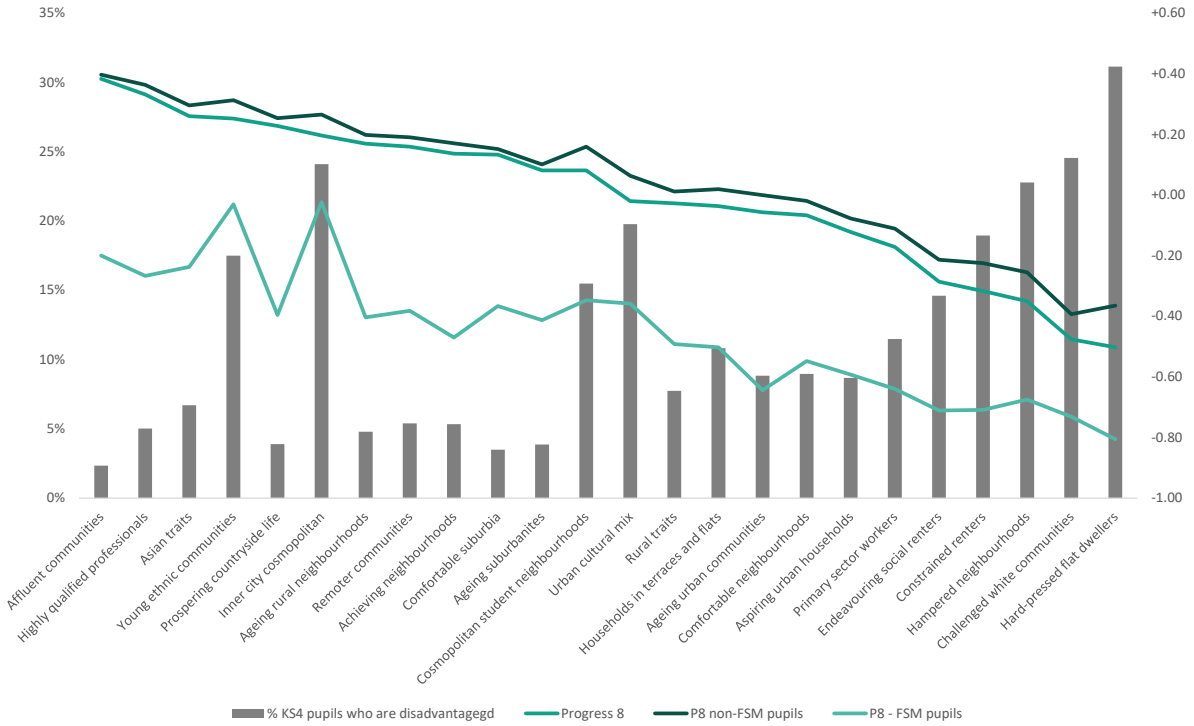


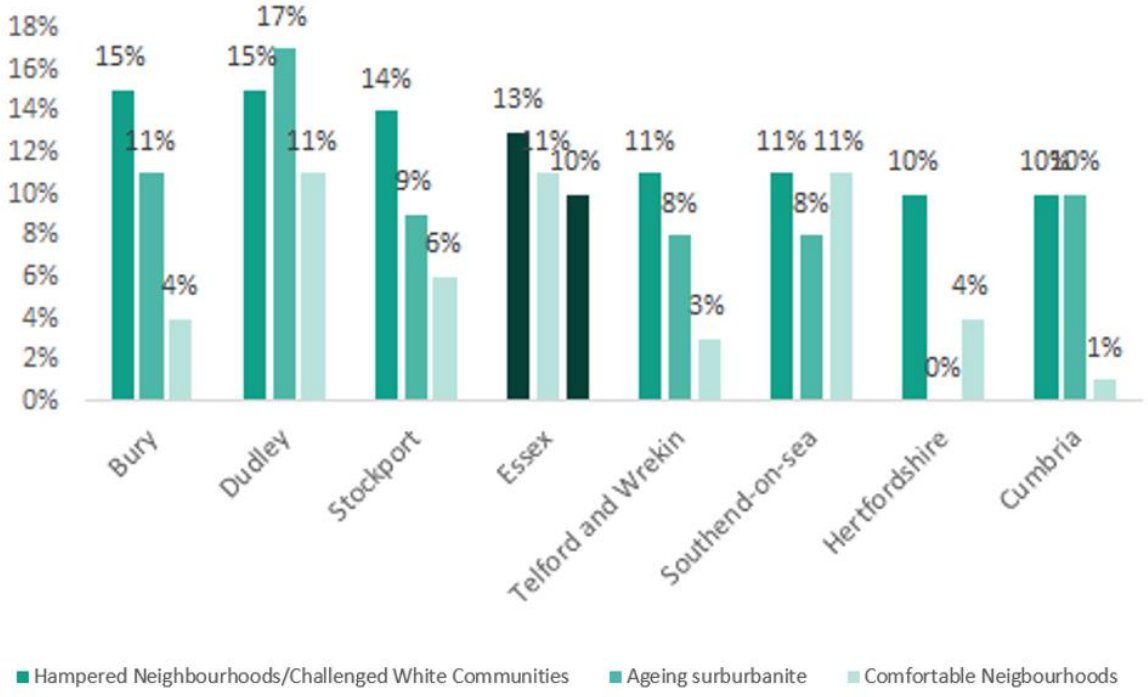
Figure 5.2 demonstrates that educational outcomes (progress 8) interact differently with poverty levels (KS4 pupils who are disadvantaged) in different neighbourhood types. For example, hampered neighbourhoods have high levels of poverty (23 per cent of KS4 pupils who live in hampered neighbourhoods are disadvantaged) and have low educational outcomes, particularly for disadvantaged pupils: the average progress 8 score for disadvantaged pupils who live in hampered neighbourhoods is -0.67. By comparison, inner city cosmopolitan areas (which are located almost entirely in London) have similar levels of poverty to hampered neighbourhoods (24 per cent) but **disadvantaged pupils in these similarly impoverished inner city cosmopolitan areas make significantly more progress (-0.02) than their non-disadvantaged peers who live in hampered neighbourhoods (-0.21).**

We conclude from this that we must compare Essex with local authorities which have a similar social mix of neighbourhoods to Essex, over and above ensuring they have similar levels of disadvantage.

The dominant pen portraits in Essex are hampered neighbourhoods (13 per cent), ageing suburbanites (11 per cent) and comfortable neighbourhoods (10 per cent). We specified that selected comparators must have similar shares across these neighbourhood types, within 25 percentage points of levels in Essex (Figure 5.3).[24]

[24] Cumbria has low levels of Hampered Neighbourhoods, however 10 per cent of its neighbourhoods are classed as "Challenged White Communities" which we consider to be sufficiently similar in demographics and education outcomes to substitute in this case.

Figure 5.3: Neighbourhood classification across Essex and selected comparators, proportion of LSOAs in each LA with selected neighbourhood classification.



While the mix of neighbourhood classifications in Cumbria and Hertfordshire are not as similar to Essex as the other LAs, we include them because, given they are county councils, they have more similarities to Essex in terms of governance and population size.

Geographic comparisons beyond Essex: attainment and disadvantage

Figure 5.4 shows how the early years disadvantage gap varies across the comparators. Four comparators have larger early years disadvantage gaps and these are all above the national average (4.6 months). Essex and two others have gaps smaller than the national average.

Figure 5.4: Early Years disadvantage gap in Essex and selected comparators, 2018/19

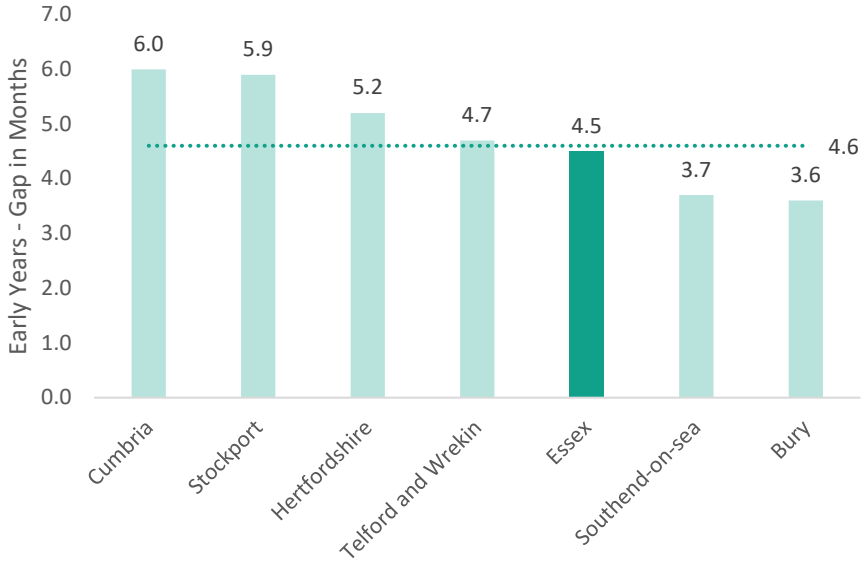


Figure 5.5 shows the early years disadvantage gap plotted against early years attainment for the selected comparators, as for parliamentary constituencies in Essex earlier in the report (see note 'Interpreting the scatter plots' in previous section). Bury and Southend-on-Sea both outperform Essex for early years, having a smaller disadvantage gap and higher average attainment. Nevertheless, Essex has higher than average attainment in early years and a smaller than average disadvantage gap.

Figure 5.5: Early Years disadvantage gap plotted against EY attainment in Essex and selected comparators, 2018/19

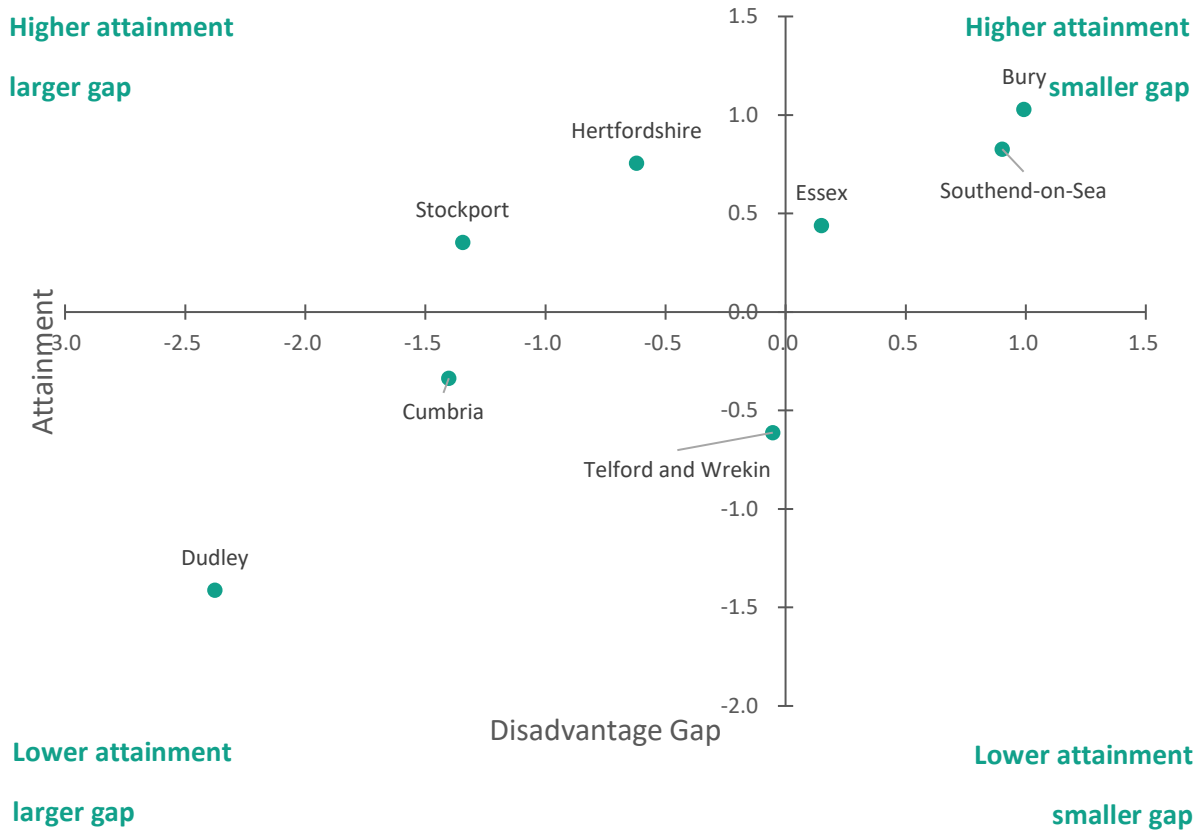


Figure 5.6 shows the same analysis but for the primary disadvantage gap. Essex sits above the national average, as do all of the comparators except Telford and Wrekin. Three of the comparator areas have smaller gaps than Essex. The cross tabulation (shown in Figure 5.7) shows that Telford and Wrekin also has above average attainment. In contrast to what we observed for early years, Essex has higher than average attainment but a larger than average disadvantage gap at the end of KS2.

Figure 5.6: Key Stage 2 disadvantage gap in Essex and selected comparators, 2018/19

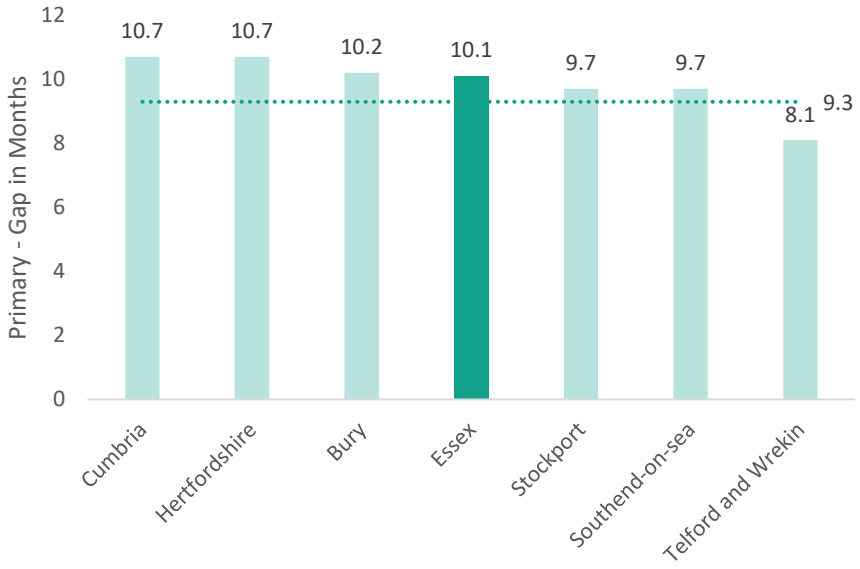
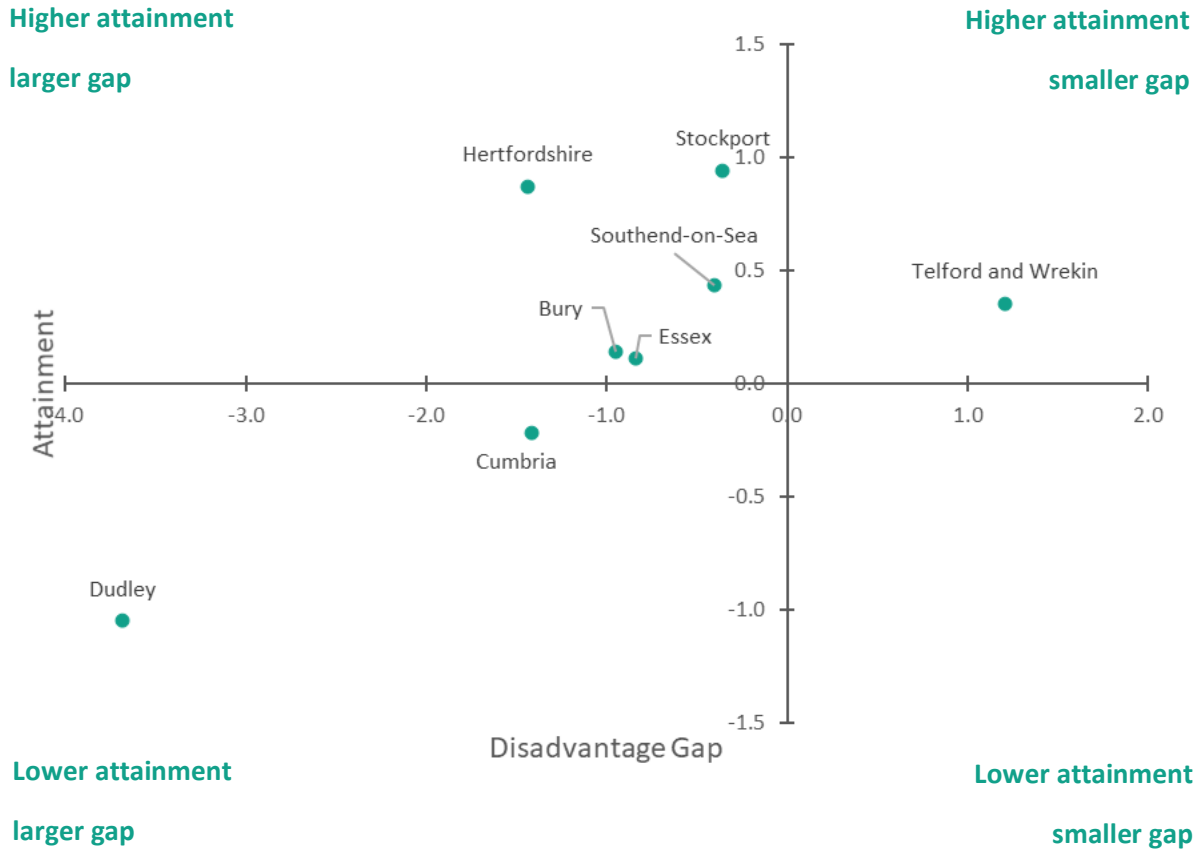


Figure 5.7: KS2 disadvantage gap plotted against KS2 attainment in Essex and selected comparators, 2018/19



Figures 5.8 and 5.9 look at performance at the end of KS4 in 2018/19. Four comparators have a smaller disadvantage gap than Essex. Two have smaller gaps (Bury and Hertfordshire) but only Hertfordshire has a gap below the national average of 18.1 months.

Figure 5.9 shows that in addition to having the smallest disadvantage gap, Hertfordshire also has the highest average attainment. Essex, Stockport and Southend-on-Sea all have above average attainment but larger than average gaps.

Figure 5.8: Key Stage 4 disadvantage gap in Essex and selected comparators, 2018/19

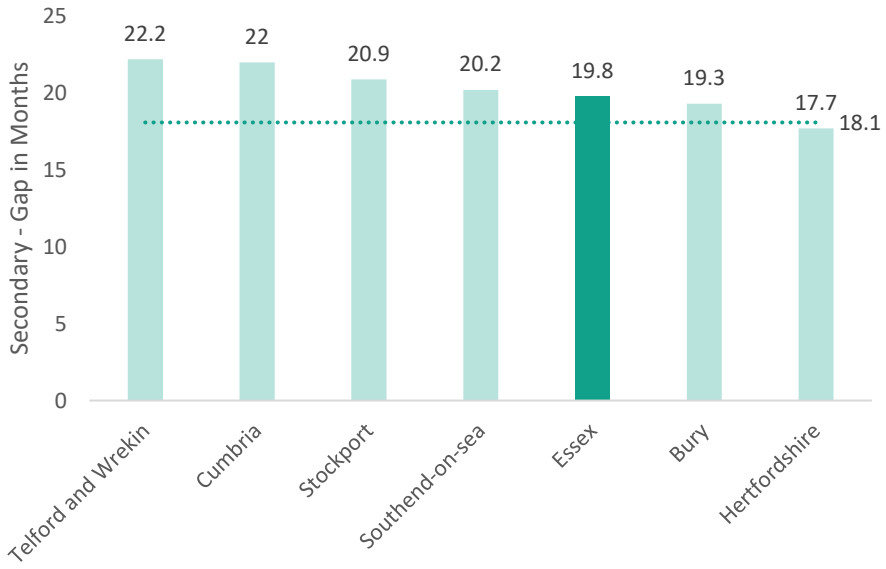


Figure 5.9: Key Stage 4 disadvantage gap in Essex and selected comparators, 2018/19

Across all phases, Essex, Southend-on-Sea and, to a lesser extent, Bury follow similar patterns whereby higher than average attainment and smaller than average gaps are observed at early years, but at the end of KS2 and of KS4 we find higher than average attainment with larger than average gaps. Areas which achieve higher than average attainment and smaller than average gaps in these later phases are Telford and Wrekin (for KS2) and Hertfordshire (KS4). These may be areas that Essex could look at to understand how gaps can be narrowed. While Telford and Wrekin is a much smaller area than Essex, it may be of particular interest to investigate given it has higher levels of persistent disadvantage in comparison to Essex (Figure 5.1), and has a similar social mix of neighbourhood types (Figure 5.3).

Improvement in Essex primary and secondary school performance, compared with national average and similar local authorities

The following figures summarise improvement across selected headline measures between the years 2015/16 and 2018/19 for primary and secondary schools. Where possible, we conduct separate analysis for all pupils and then for disadvantaged pupils. Owing to the Covid-19 pandemic, the year 2018/19 is the most recent year for which school-level data is publicly available.

To summarise trends in school improvement, we examine pupil progress and attainment and for each performance measure we place Essex schools into a quartile for the baseline (2015/16). Quartiles are relative to all state-funded schools nationally. We compare the average change by 2018/19 in each performance measure for Essex schools with other state-funded schools nationally starting in the same quartiles. This gives an indication of how well Essex schools have improved in comparison with schools with similar starting points in 2015/16. We then make the same comparison between Essex schools and schools in our selected comparator LAs.

The first thing to note for interpreting these figures is that average improvement is strongly influenced by starting point. Schools with lower starting points tend to improve the most, whilst those starting in the highest quartile tend to see a drop in performance on average. It should also be acknowledged that progress measures can be strongly influenced by the characteristics of the cohort they apply to, and this may partly explain why progress measures look different from one year to another.

Key Stage 2 outcomes – compared with other schools nationally

Overall trends in school improvement in Essex are in line with the national average, in the sense that Schools with lower starting outcomes in 2015/16 have tended to improve the most by 2018/19, and those with higher starting outcomes in 2015/16 tend to see an average decrease in performance (Figures 6.1 – 6.3). Nevertheless, average improvement tends to be slightly lower in Essex than in other schools nationally for most measures. Improvement in Essex schools in maths progress for both disadvantaged pupils and all pupils is further behind the national average than for other progress measures (Figures 6.2 and 6.3).

There are at least 60 Essex primary schools in each starting quartile in 2015/16 for measures for all pupils, with many starting points including at least 100 Essex primary schools. For disadvantaged measures, where outcomes are sometimes suppressed due to low numbers of FSM pupils, all measures have at least 40 Essex primary schools in each starting quartile in 2015/16, with most having at least 60.

Figure 6.1 KS2 – Proportion of students achieving 'expected standard' in reading, writing and maths (RWM) combined – average school improvement between 2015/16 and 2018/19

Figure 6.2 KS2 – Progress measures, all pupils – average school improvement between 2015/16 and 2018/19

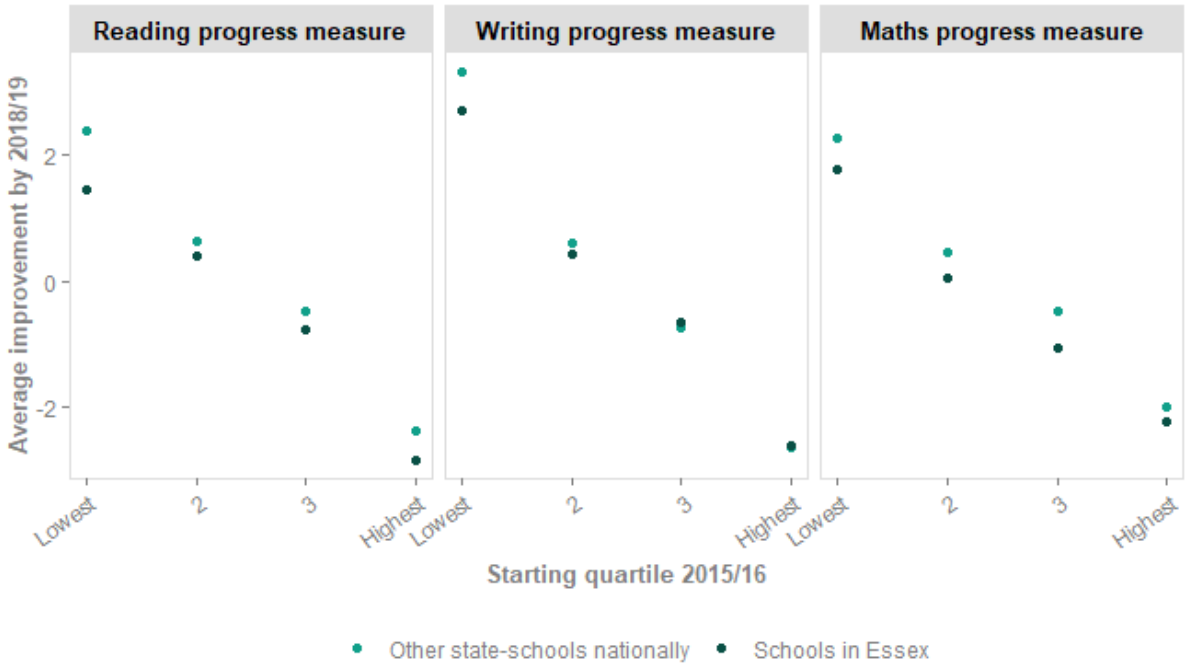
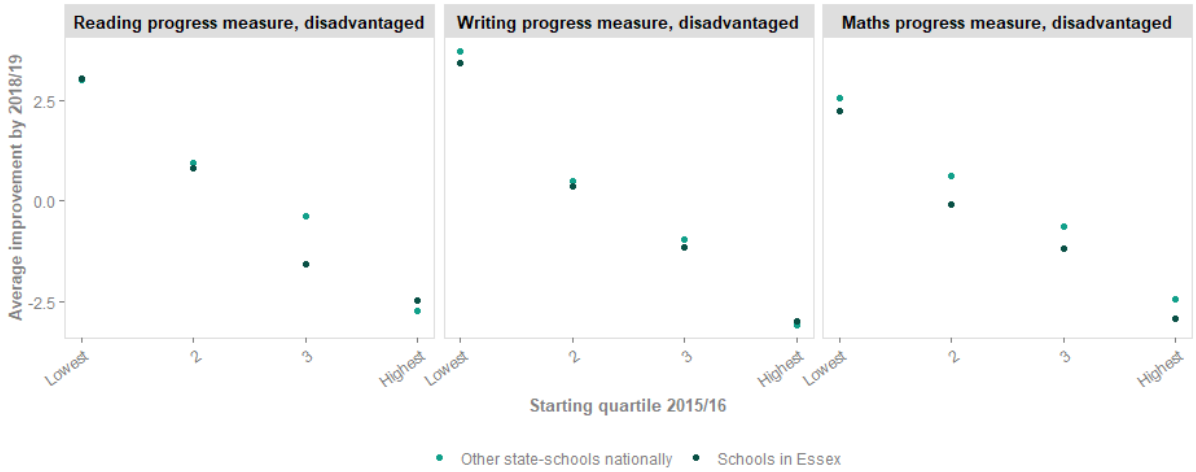


Figure 6.3 KS2 – Progress measures, disadvantaged pupils – average school improvement between 2015/16 and 2018/19



Key Stage 2 outcomes – compared with schools in similar local authorities

As with the comparison with the national average, trends in improvement in Essex schools largely match those observed in similar local authorities. For the percentage of disadvantaged pupils achieving the expected standard in reading, writing and maths, Essex schools have tended to improve their measure slightly more than those in similar local authorities in the period between 2015/16 and 2018/19 (Figure 6.4). While differences are small, progress measures for disadvantaged pupils tend to be more improved in Essex in this period than in schools in similar local authorities (Figure 6.6), while progress measures for all pupils are slightly less improved (Figure 6.5).

Figure 6.4 KS2 – Proportion of students achieving 'expected standard' in reading, writing and maths (RWM) combined – average school improvement between 2015/16 and 2018/19, compared with similar local authorities

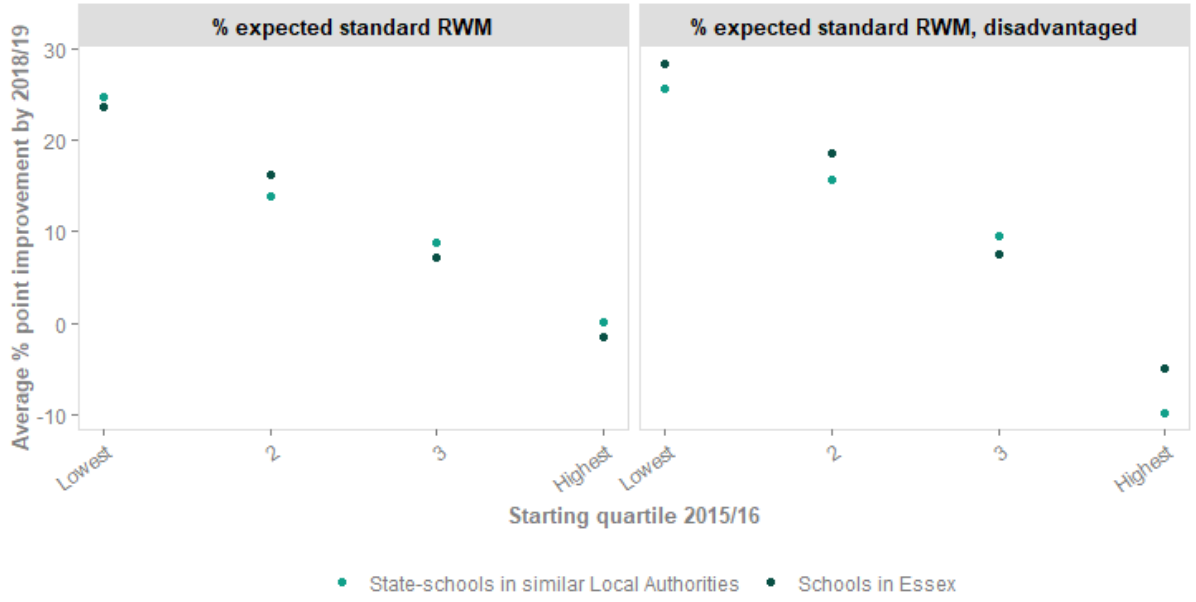


Figure 6.5 KS2 – Progress measures, all pupils – average school improvement between 2015/16 and 2018/19, compared with similar local authorities

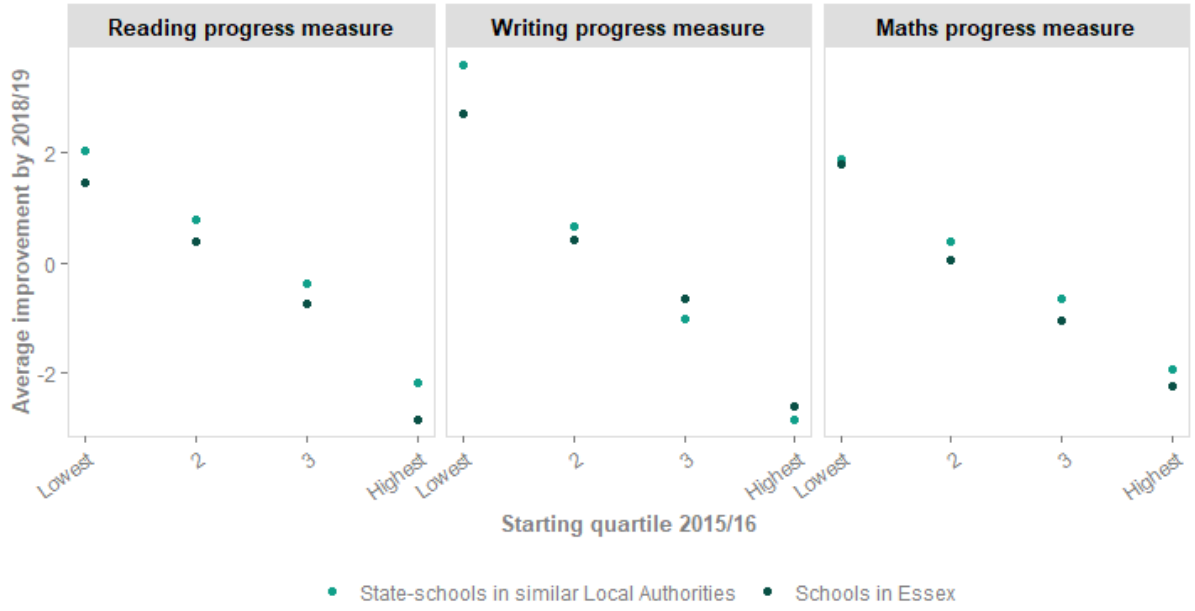
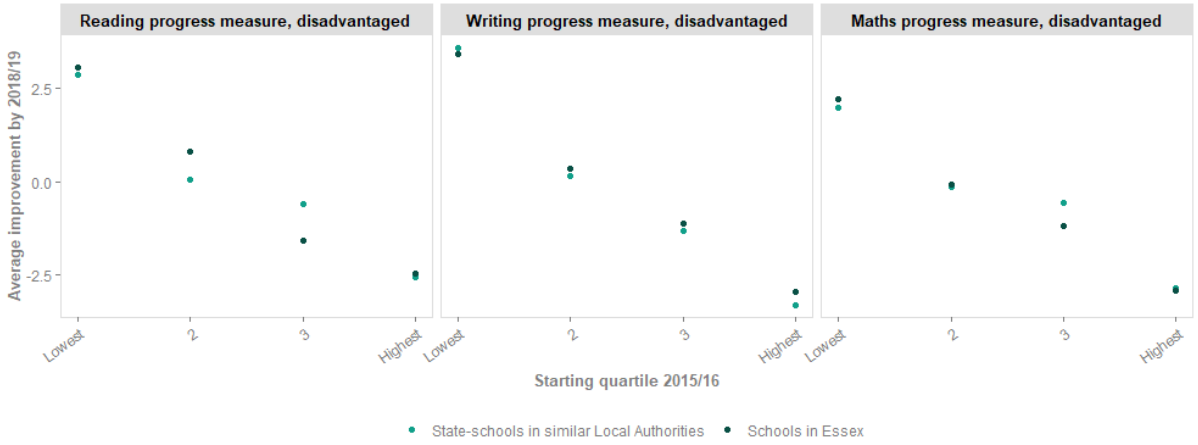


Figure 6.6 KS2 – Progress measures, disadvantaged pupils – average school improvement between 2015/16 and 2018/19, compared with similar local authorities



Key Stage 4 outcomes – compared with other schools nationally

The national average improvement does not follow as uniform a pattern for KS4 Attainment 8 and Progress 8 as it does for KS2 measures. Average Attainment 8 scores have tended to decrease between 2015/16 and 2018/19.[25] With some exceptions (for example the 16 schools that started in

[25] This is due to reforms to GCSEs, specifically the introduction of a new point score scale as GCSEs transitioned to the new 9 to 1 scale. DfE have published analysis to demonstrate that, on average, pupils achieve lower average Attainment 8 scores on the new point score scale in comparison with 2016/17. However, these decreases in overall scores are described as expected and they do not represent a drop in standards. This will have continued into the year 2018/19, as this is when the first exams in many reformed subjects will have been sat at GCSE. Source: DfE, 'Revised GCSE and equivalent results in England 2016 to 2017', January 2018; DfE, 'Changes to GCSEs, AS and A levels that will affect each current school year group', September 2017.

the top quartile for Attainment 8 for all pupils) Essex schools have seen larger decreases than other schools nationally (Figure 6.7).

Progress 8 scores have tended to decrease in Essex for all pupils and for disadvantaged pupils, regardless of starting point in 2015/16 (Figure 6.8). Nationally, the change for most starting quartiles averages to zero, except for the two highest starting quartiles for disadvantaged which have tended to see decreases overall. Overall, Essex secondary schools have seen larger decreases in average progress than other secondary schools nationally.

There are at least nine Essex secondary schools in each starting quartile in 2015/16 for each measure. Half have more than 20 Essex secondary schools.

Figure 6.7 KS4 – Attainment 8, all and disadvantaged pupils – average school improvement between 2015/16 and 2018/19

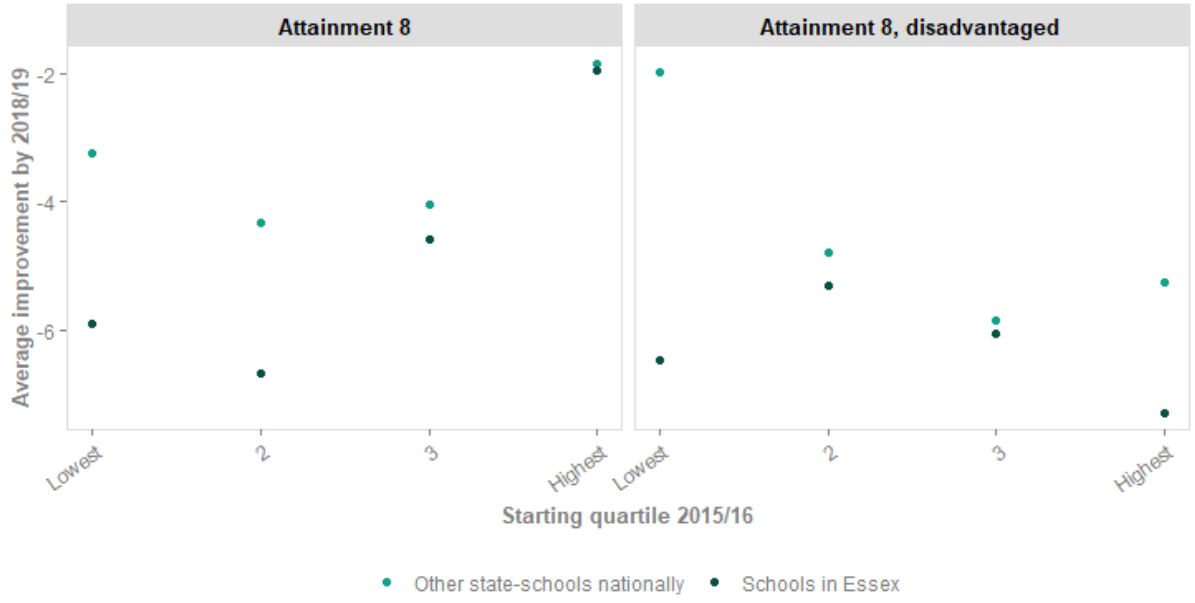
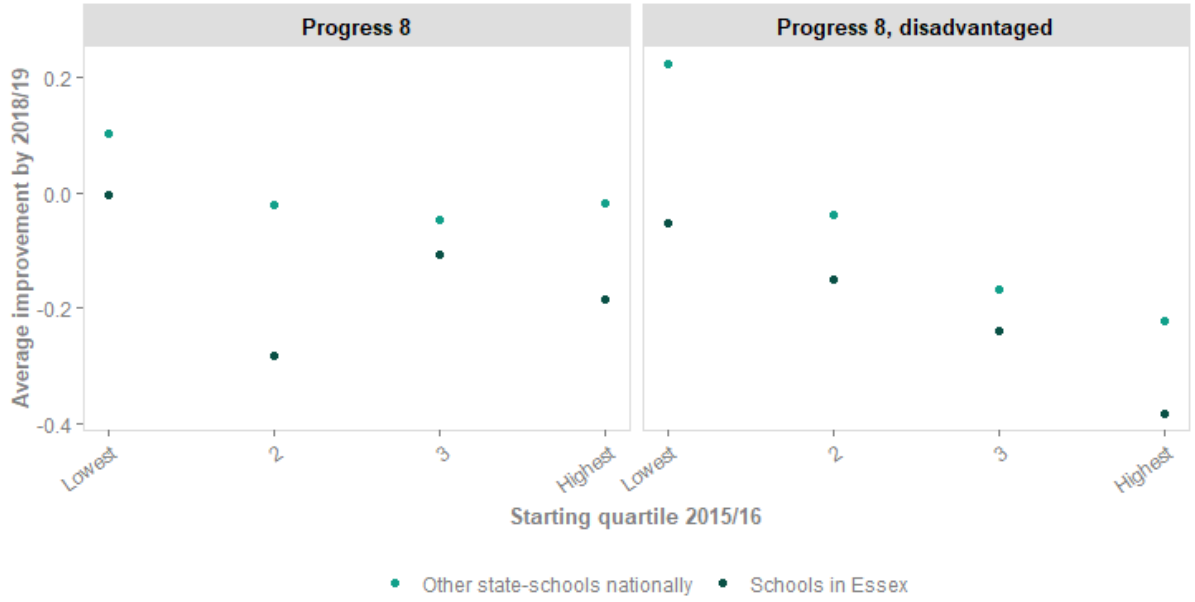


Figure 6.8 KS4 – Progress 8, all and disadvantaged pupils – average school improvement between 2015/16 and 2018/19



Key Stage 4 outcomes – compared with similar local authorities

The picture is broadly similar when comparing Essex secondary schools to schools in similar local authorities (Figures 6.9 and 6.10): All secondary schools have tended to see a decrease in average performance across Attainment 8 and Progress 8 between 2015/16 and 2018/19, and we observe greater decreases in Essex schools than in schools in similar local authorities. Further analysis would be needed as to why Essex schools do not match the improvement in performance observed in other similar local authorities and counties, including comparing characteristics of schools in each of the starting quartiles.

Figure 6.9 KS4 – Attainment 8, all and disadvantaged pupils – average school improvement between 2015/16 and 2018/19, compared with similar local authorities

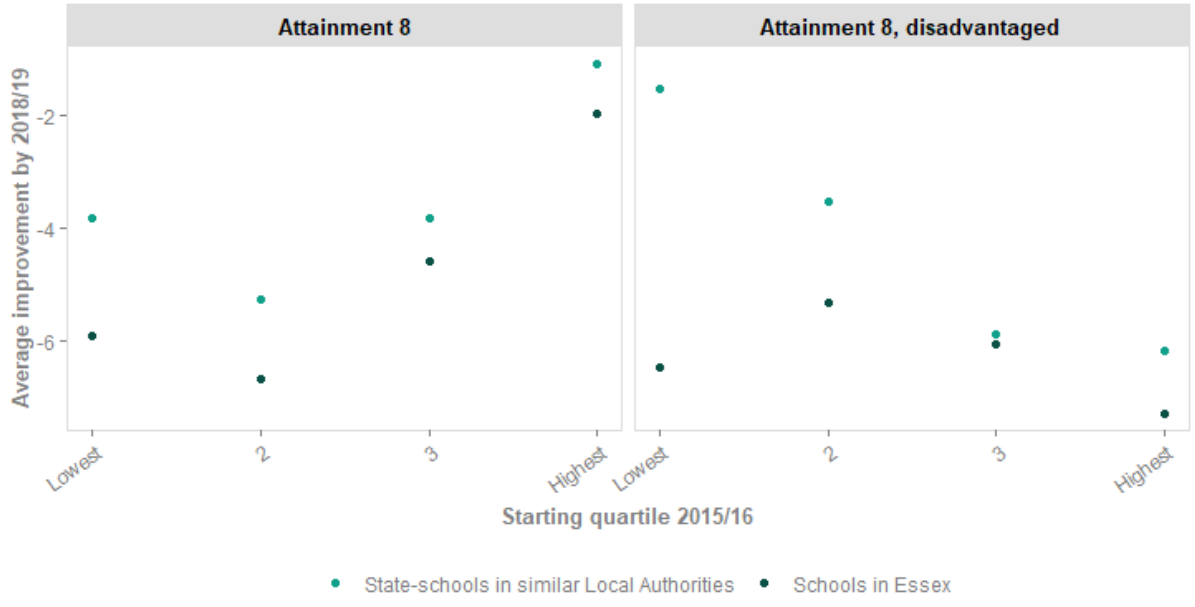
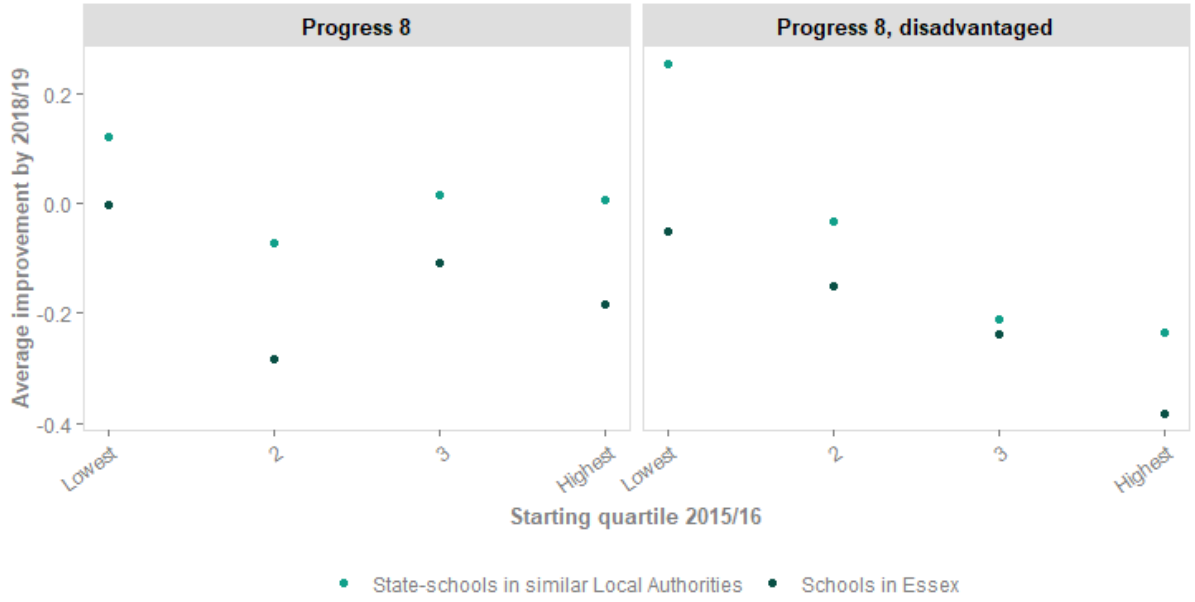


Figure 6.10 KS4 – Progress 8, all and disadvantaged pupils – average school improvement between 2015/16 and 2018/19, compared with similar local authorities



Appendix

Table A: Number of pupils, all and disadvantaged, by Essex parliamentary constituency

Constituency	Early Years		Key Stage 2		Key stage 4	
	Total	N disadvantaged pupils	Total	N disadvantaged pupils	Total	N disadvantaged pupils
Basildon and Billericay	1,272	184	1,258	397	1,134	264
Braintree	1,050	105	1,137	248	1,085	143
Brentwood and Ongar	1,019	66	1,051	173	1,012	96
Castle Point	925	104	999	238	1,104	165
Chelmsford	1,262	117	1,345	283	1,133	133
Clacton	870	168	884	350	975	273
Colchester	1,620	214	1,406	403	1,091	216
Epping Forest	1,012	66	999	220	975	154
Harlow	1,385	152	1,394	410	1,105	225
Harwich and North Essex	933	102	973	209	927	122
Maldon	899	79	954	156	1,018	91
Rayleigh and Wickford	1,123	85	1,137	170	1,175	99
Rochford and Southend East	1,309	289	1,265	500	1,178	344
Saffron Walden	1,237	75	1,186	163	1,069	103
South Basildon and East Thurrock	1,283	163	1,272	410	1,271	260
Southend West	1,013	110	1,115	239	963	179
Thurrock	1942	269	1974	562	1,318	347
Witham	979	100	1044	231	956	133

Table B: Number of pupils in independent schools in Essex as a proportion of total pupils, by parliamentary constituency

Constituency	Pupils in independent schools	Percentage of total pupils educated in constituency
Basildon and Billericay	308	2.2%
Braintree	448	3.2%
Brentwood and Ongar	2309	12.5%
Castle Point	0	0.0%
Chelmsford	725	3.8%
Clacton	113	1.0%
Colchester	1184	5.5%
Epping Forest	2149	13.1%
Harlow	458	2.8%
Harwich and North Essex	320	2.7%
Maldon	457	3.6%
Rayleigh and Wickford	0	0.0%
Rochford and Southend East	0	0.0%
Saffron Walden	2600	14.0%
South Basildon and East Thurrock	0	0.0%
Witham	0	0.0%

Source: EPI analysis of DfE data, available through Get Information About Schools. Figures are not broken down by phase as the age ranges educated in independent schools traditionally do not match those of maintained schools.

Table C: Participation of 16 and 17 years olds, 2018/19-2020/21, Essex and National average[26]

Year	Area	Education and training	Apprenticeships	Other education/training	NEET/unknown	Other (not education)
2019	Essex	84.7%	6.4%	1.8%	3.7%	3.4%
2020	Essex	84.9%	5.8%	1.5%	4.1%	3.7%
2021	Essex	86.9%	4.2%	1.6%	4.3%	3.0%
2019	England	84.8%	5.5%	2.2%	5.5%	2.0%
2020	England	85.4%	5.1%	2.2%	5.5%	2.0%
2021	England	87.4%	3.8%	2.0%	5.5%	1.3%

[26] From the DfE "Participation in education and training and employment" statistical release: https://explore-education-statistics.service.gov.uk/find-statistics/participation-in-education-and-training-and-employment/2020