Article

International migration and the education sector – what does the current evidence show?

Whether it be the number of children requiring school places, the attainment of pupils or the number of teaching and support staff in schools, the impact and contribution of international migration on the education sector is a topic of high public interest. Explore what the current evidence shows for your local area using our interactive tools.

Table of contents

1. Main findings
2. Introduction
3. School place demand
4. English as an additional language and attainment
5. Staff
6. Next steps: what can administrative data tell us about international migration and the education sector?
7. Annex A - Pupil proficiency categories
8. Annex B – Data for Wales, Scotland and Northern Ireland
1. Main findings

International migration and its impact and contribution on the education sector is a complex topic. The data available to investigate it are limited and within the existing data sources, there is not a consistent way to measure international migration. However, using the best available indicators of international migration, covering state-funded primary and secondary schools in England, we can get some insights.

- The main driver of changes in the demand for school places is the number of children being born, rather than the recent international migration of children; however, international migration affects the number of births, and births to non-UK born mothers have increased over the last 20 years.

- In January 2018, approximately 7% of children in state-funded primary schools and 10% in state-funded secondary schools in England were born outside the UK; these data are a useful indicator of the impact of people moving to the UK on pupil numbers, but they do not give the full picture of international migration as there is no information on children who have left the UK.

- Analysis of attainment data from the Department for Education shows that pupils with English as an additional language (EAL) have slightly lower attainment levels than first language English pupils at age 7 years, but this difference no longer exists by age 16 years; the analysis also shows no evidence of a relationship between the proportion of pupils with EAL in a local area and the overall level of pupil attainment.

- International migration contributes to the workforce in schools, with around 12% of school staff in England born outside the UK in 2015 to 2017; this varies greatly across the country, from 4% in the North East to 31% in London.

2. Introduction

The Office for National Statistics (ONS) is transforming the way we produce population and migration statistics, to better meet the needs of our users. Our users have told us that they need more information on the impact and contribution of migrants while they are in the UK, including the sectors in which they work, the communities they live in and the impacts on public services.

In May 2018, we made a commitment to provide more evidence on the impacts of international migration on different sectors. In January 2019, we published an update on our transformation journey, where we set out our plan to publish research in 2019 investigating migration and the health and education sector. This article is the first part of our planned research on the education sector, to be followed later this year with a further article exploring wider data sources.

International migration and its impact and contribution on the education sector is a complex topic. The data available to investigate it are limited and within the existing data sources, there is not a consistent way to measure international migration. This article therefore draws on the best available indicators of international migration and presents the insights that can be obtained from these sources. These indicators include data on births to non-UK born mothers, country of birth of pupils and teachers, and data on pupils with English as an additional language.

A number of other organisations have published reports on topics related to international migration and the education sector. These include a report by the Home Office on the social and public service impacts of international migration, a report on European Economic Area migration (PDF, 2.22MB) and another on teachers by the Migration Advisory Committee, a report on the impacts of international migration on local public services by the Migration Observatory, and an article by Full Fact on immigration and school places.

This article provides further evidence on international migration and the education sector, with more data at the local level. Use our interactive tools to select your local area in the charts and maps and find out more.
This article covers children in state-funded primary and secondary schools, and does not include nurseries, further education, higher education or independent schools unless otherwise stated. The data included are the latest available data from published and survey sources, so time periods may differ between sources. This article focuses on England; as we develop our plans for part two in the series, we will look to include data for the rest of the UK. However, links to data on Wales, Scotland and Northern Ireland are available in Annex B.

3. School place demand

The main driver of changes in the demand for school places is the number of children being born, rather than the recent international migration of children

The demand for school places is influenced by many factors. These include the number of children being born, the number of people moving into and out of an area and the number of people choosing state or private education. International migration – people moving to and from the UK – can also be a factor that increases or decreases demand. These factors will affect each local area differently.

Data published by the Department for Education (DfE) and the Office for National Statistics (ONS) show that at the national level, pupil numbers have fluctuated over the last 16 years, with births being the main driver of changes rather than the recent international migration of children. However, international migration affects the number of births, and births to non-UK born mothers have increased over the last 20 years.

At the local level, it is very difficult to directly measure the impact that international migration has had on the demand for school places due to the movement of people around the UK. However, we can see that some areas, such as parts of London, have a higher proportion of non-UK born pupils and a higher proportion of births to non-UK born mothers than others.

In this article, you can find a number of interactive tools to explore the data for your local area on how pupil numbers have changed over time, what proportion of pupils were born outside the UK and what proportion of births were to mothers born overseas.

In this article we only look at school place demand and do not cover supply. For data on school capacity including number of places, unfilled school places and pupils in excess of school capacity, see the latest figures published by the DfE.

How are pupil numbers changing and what is driving this?

At a national level, the number of children in the state education sector has fluctuated over time, in line with trends in the number of children born. Since 2009, the main change has been in the number of children in state-funded primary schools, which increased from 3.9 million in January 2009 to 4.6 million in January 2018. The number of primary school children is now projected to remain stable up to 2027.

Looking back to 2002, the number of children in state-funded secondary schools (up to age 15 years) was at a low of 2.7 million in January 2015. The primary driver behind this was a dip in the number of births in the early 2000s. As the larger cohorts of primary-aged children move up into secondary school, a 15% increase is projected between 2018 and 2027 in the number of pupils in state-funded secondary schools (Figure 1).
Figure 1: The number of pupils in state-funded schools has fluctuated over time

Full-time equivalent number of pupils (aged up to and including 15 years), 2002 to 2018 and pupil projections for 2019 to 2027, by type of school, England

Source: Department for Education (DfE) – School Census; DfE Pupil Projections Model 2018

To explore the change in pupil numbers and pupil forecasts at the local level, select your local area in Figure 2.

Figure 2: Changes in pupil numbers over time have varied across England

Percentage changes in pupil numbers by local authority in England, academic year 2013 to academic year 2018, and forecasts for academic year 2018 to academic year 2023

Download the data
International migration of children

The direct impact of international migration on the demand for school places works in both directions: decreased demand for school places due to children leaving the UK to live in another country and increased demand for school places due to children moving to the UK.

Comparing the numbers moving to the UK with those leaving over the period 2002 to 2017, it is estimated that the population of 5- to 15-year-olds in England in 2017 was 300,000 higher than it would have been had there been no international migration of children since 2002. To put this in context, there were just over 7 million births between 2002 and 2012 (the birth years of the current 5- to 15-year-olds). The direct impact of migration of children on the demand for school places is therefore small compared with the number of children born each year.

At the local level, the direct impact of international migration is also affected by internal migration (the movement of people between local authorities). This means that it is not possible to estimate how much higher or lower the number of children in each local authority would be had there been no international migration of children. We can, however, look at some indicators of international migration to see how it may affect local areas differently.

In 2017 and 2018, DfE published a set of tables containing new information from the School Census on pupils' country of birth. Responding to the questions on country of birth was optional. In January 2018, country of birth information was provided for 84% of pupils in state-funded schools, with better coverage for primary schools (90%) than secondary schools (75%). These data are a useful indicator of the impact of people moving to the UK on pupil numbers, but they do not give the full picture about international migration as there is no information on children who have left the UK. They will also include small numbers of UK residents born abroad, such as children born to armed forces personnel posted overseas.

The data showed that in January 2018, around 7% of children in state-funded primary schools and 10% in state-funded secondary schools were born outside the UK. Of these, just over half were from EU countries.

The proportion of pupils who were born outside the UK varies greatly across England, highest in London (15%) and lowest in the North East (4%). Select your local area in Figure 3 to see what proportion of pupils are non-UK born.

Figure 3: The proportion of pupils who were born outside the UK varies across England, but is highest in London and other cities

Proportion of pupils in state-funded schools born outside the UK by local authority in England, January 2018

Download the data

Data on country of birth were only collected as part of the 2016 to 2017 and 2017 to 2018 School Censuses so information is not available about changes over time. The collection of data on country of birth has been removed from the School Census collection for autumn 2018 onwards so we will be unable to use it to look at international migration and the education sector in the future.

Births to non-UK born mothers

In 2017, there were around 189,000 births to non-UK born mothers in England, 20% more than in 2007. The main change has been in the number of births to women from EU countries, as the number of births each year to women from non-EU countries has remained fairly stable over the period 2007 to 2017.
The increase in the number of births to non-UK born mothers has been driven by an increase in the number of women of childbearing age in the population rather than an increase in the number of children that they are having. Between 2007 and 2017, the total fertility rate (TFR)^3 for non-UK born women fell, from 2.48 in 2007 to 1.95 in 2017. However, this was outweighed by the fact that the number of non-UK born women of childbearing age in England increased by 53%, so the number of births to non-UK born mothers increased.

In comparison, births to UK-born mothers decreased by 8% over the same period, from 498,000 in 2007 to 458,000 in 2017. This meant that despite the increasing number of births to non-UK born mothers, the number of children born in England in 2017 was 1% lower than in 2007 (Figure 4).

Figure 4: The number of births to non-UK born mothers has increased over the last 10 years

Births by country of birth of mother, England, 2007 to 2017

The TFR for non-UK born women remains higher than that for UK-born women, which was 1.71 in 2017. However, TFRs for non-UK born women vary greatly by country of birth.

In 2011, when detailed breakdowns by country of birth of mother were last published, of the top 10 most common non-UK countries of birth for women giving birth in 2011, the TFRs ranged from 1.74 for women born in Germany to 4.19 for women from Somalia (the TFR for UK-born women was 1.84 in 2011).

Births to non-UK born mothers made up 29% of births in England in 2017, up from 24% in 2007. This proportion varies greatly across the country.
In 2017, of all births in London, 58% were to mothers born outside the UK, whereas this figure was 11% in the North East. The 10 local authorities with the highest proportions of births to non-UK born mothers in 2017 were all in London, with Brent the highest at 76%. Slough was the local authority outside London with the highest proportion, at 63%.

These variations in the proportion of births to women born outside the UK are due to local area differences in the proportion of women born outside the UK and the fact that the number of children that migrants tend to have differs greatly depending on where they are from.

There are some large differences between local authorities in how the proportion of births to non-UK born mothers has changed over time. In Havering, the proportion of births to non-UK born mothers increased from 17% in 2007 to 32% in 2017. Over the same time period, other local authorities with large increases were Peterborough, Thurrock, Barking and Dagenham, and Swindon. Although some parts of London saw large increases in the proportion of births to non-UK born mothers, others saw decreases, with Hackney, Tower Hamlets, Southwark, Lambeth and Haringey the five local authorities with the largest decreases in the proportion of births to non-UK born mothers.

To find out about the proportion of births to non-UK born mothers at the local level across time, select your local area in Figure 5.

**Figure 5: The proportion of births to non-UK born mothers varies across England, but is highest in London and other cities**

Proportion of births to non-UK born mothers, England, 2007 to 2017

[Download the data](#)

Although looking at births by country of birth of mother can give an indication of the secondary effects of international migration, it does not give the full picture of how international migration affects births and in turn, school place demand. This is because there are UK-born women who would have had children in the UK but have emigrated and instead had their children overseas, thereby reducing school place demand in the UK.

At the local level it is also important to remember that children born to non-UK born mothers in one area may not go to school in that area, either due to emigration, moving to another area before reaching school age (internal migration), or going to school in a different local authority to the one they live in.

**Notes for: School place demand**

1. DfE School Census, ONS population estimates, ONS birth registrations.

2. This estimate is from the net migration component of the ONS mid-year population estimates. It does not take into account children who have immigrated to Wales, Scotland or Northern Ireland and then moved to England, or children who have moved from England to Wales, Scotland or Northern Ireland and then emigrated. Additionally, children who have immigrated to England and then died have not been removed from this estimate. However, the numbers of children in either of these categories are likely to be very small. Additional methodological information about the ONS mid-year estimates is available.

3. The total fertility rate (TFR) is the average number of live children that a group of women would each bear if they experienced the age-specific fertility rates of the calendar year in question throughout their childbearing lifespan.
4. English as an additional language and attainment

When considering the impact and contribution of international migration on the education sector, one area of interest is educational attainment (how pupils perform in assessments and exams). Do the results achieved by pupils differ depending on whether or not they are an international migrant? Does international migration have an effect on the overall learning of all pupils in the school? Pupils with different characteristics may have different learning experiences and require different types of support. This could have implications for how schools tailor the way they teach pupils or the curriculum they offer.

Data from the Department for Education (DfE) on attainment in state-funded primary and secondary schools are not broken down by country of birth or nationality. This means that it is difficult to directly measure how international migration affects educational attainment. The closest indicator available in the attainment data is English as an additional language (EAL). EAL means that the pupil has been exposed to a language other than English during early development and continues to be exposed to this language in the home or community.

It is important to be aware that English as an additional language includes children who were born in the UK and whose parents were also born in the UK so is not an actual measure of international migrants. It will also include children whose first language is sign language, Welsh or Gaelic (though numbers are likely to be small as we are looking at England only) and exclude those from migrant families who speak English at home (such as children from America or Australia).

Data on language are provided by the parent or guardian, or child. EAL does not mean that the child is not fluent in English. Information about proficiency in English is available later in this section.

In 2018, of all pupils in state-funded schools, 19% had **English as an additional language**, up from 14% in 2010. This is higher for primary schools than secondary schools, with 21% of pupils in state-funded primary schools having English as an additional language in 2018, compared with 17% in state-funded secondary schools (Figure 6).
English language proficiency

In 2017 and 2018, DfE published a set of tables providing information on the English language proficiency level of EAL pupils in state-funded schools in reception year and above. These data are a better indicator of children who may require extra English language support in schools rather than looking solely at the EAL data.

Schools were required to assess their EAL pupils against a five-point scale of reading, writing and spoken language proficiency and make a “best fit” judgement as to the overall English language proficiency stage to which the pupil most closely corresponded. More information on the categories is available in Annex A.

In January 2018, of all EAL pupils in state-funded schools, 93% had been assessed for their English language proficiency level. Of those assessed, 18% of pupils with English as an additional language in 2018 were in the lowest two proficiency levels: new to English and early acquisition. This was much higher for pupils in state-funded primary schools (23%) than those in state-funded secondary schools (7%), which may show the progression in English language ability as children move through the school system.

When EAL pupils with a low-level of English proficiency are considered out of all pupils in state-funded schools, around 3% of all pupils had English as an additional language and had a low level of English language proficiency in 2018. These figures were 5% for primary schools and 1% for secondary schools (Figure 7). This shows that although almost 1 in 5 school pupils have English as an additional language, the overall proportion of pupils needing significant language support to access the curriculum is much lower than this, at close to 1 in 30.
Figure 7: The proportion of pupils with English as an additional language varies across England, as does the English language proficiency of pupils

Proportion of pupils in state-funded schools with English as an additional language and with EAL and a low-level of English language proficiency, England, January 2018

Download the data

Data on English language proficiency was only collected as part of the 2016/17 and 2017/18 School Censuses, so information is not available about change over time. The collection of data on English language proficiency has been removed from the School Census collection for Spring 2019 onwards.

English as an additional language and attainment

EAL pupils have slightly lower attainment levels than first language English pupils at age 7 years, but this difference no longer exists by age 16 years

Using data published by the DfE, we can look at attainment for EAL pupils and compare it with those whose first language is English. In the key stage 1 teacher assessments – completed at the end of year 2 when pupils are aged 6 or 7 years – EAL pupils had slightly lower levels of attainment than first language English pupils.

The differences were greatest for English reading and science, with similar attainment levels for the two groups for English writing and mathematics. For English reading, 76% of first language English pupils reached the expected standard in the 2018 key stage 1 teacher assessments whereas 73% of EAL pupils did. For science, these figures were 84% and 79% respectively.

At GCSE level, attainment of EAL pupils in 2018 was broadly similar to those with English as a first language. The data by region show that EAL pupils performed slightly better than first language English pupils in 2018 in all regions except Yorkshire and The Humber (Figure 8).
Average GCSE attainment was slightly higher for pupils with English as an additional language in all regions except Yorkshire and The Humber.

Source: Department for Education – Key stage 4 attainment data

Notes:

1. Attainment 8 measures pupils' attainment across eight qualifications including maths, English, their top three scores out of science subjects, geography, history and languages, and three further GCSE qualifications or technical awards from the Department for Education approved list. The maximum score in school year ending 2018 was 90.

2. The proportion of pupils with EAL in the GCSE cohort varied by region, from 6% in the North East to 43% in London.


In addition to the Attainment 8 data, DfE also publish a measure called Progress 8 that shows the progress that pupils have made between age 11 years and age 16 years. This showed that EAL pupils taking their GCSEs in 2018 had made much greater progress since age 11 years than pupils with English as a first language.

Analysis showed no evidence of a relationship between the proportion of pupils with EAL in a local area and the overall level of pupil attainment.

We have looked at educational attainment for EAL and first language English pupils but there is also interest in whether high concentrations of EAL pupils affect the overall learning of all pupils in a local area.
To explore what the latest DfE attainment data show, we looked at the correlation between the proportion of children with EAL in a local area and the overall level of pupil attainment. This showed no evidence of a relationship between the proportion of children with EAL and pupil attainment, either in primary schools or secondary schools (Figure 9)\(^1\). This is consistent with findings in other research reports such as the Migration Advisory Council report on EEA migration (PDF, 2.22MB) and the Home Office report on the social and public service impacts of international migration (PDF, 2.22MB).

**Figure 9:** At the local authority level, there is no relationship between the proportion of pupils with English as an additional language and overall GCSE attainment

Proportion of pupils with English as an additional language and GCSE attainment for state-funded schools, by local authority in England, academic year 2018

Download the data

**Notes for: English as an additional language and attainment**

1. The analysis did not control for other factors that may be linked to educational attainment.

5. **Staff**

International migration contributes to the workforce in schools, with migrants working in a range of teaching, managerial and support roles within the education sector. This section uses country of birth as an indicator of migration but it should be noted that some of those born abroad will have lived in the UK for the majority of their lives so are not recent migrants.

Additionally, country of birth does not show whether or not someone has British nationality, as some of those born abroad will have always been British nationals and others will have acquired British citizenship. Regional breakdowns by nationality are available in the accompanying dataset.

In 2015 to 2017, approximately 12% of school staff\(^1\) in England were born outside the UK, with just over a third of these from EU countries and just under two-thirds from non-EU countries. For primary and nursery school teachers, around 9% were born outside the UK and for secondary school teachers, this figure is around 12%.

The proportion of the school workforce who were born outside the UK varies greatly across the country. In London, 25% of primary and nursery school teachers and 32% of secondary school teachers were born outside the UK, whereas in the North West these figures were 3% and 5% respectively (Figure 10)\(^2\).

**Figure 10:** London has a much higher proportion of staff born outside the UK than other regions of England

Proportion of school staff who were born outside the UK, by region in England, 2015 to 2017

Download the data
It is not possible to look at change over time in the proportion of school staff born outside the UK due to data availability. The best available dataset is the Annual Population Survey three-year pooled dataset but this is only available for 2013 to 2015, 2014 to 2016 and 2015 to 2017. It is also not possible to produce breakdowns by local authority or country of birth groupings by region due to the sample sizes involved in the Annual Population Survey.

Notes for: Staff

1. Figures for all school staff include secondary education teaching professionals, primary and nursery education teaching professionals, special needs education teaching professionals, senior professionals of educational establishments, education advisers and school inspectors, teaching and other educational professionals not elsewhere classified, teaching assistants, educational support assistance, school secretaries, and school midday and crossing patrol occupations.

2. As the Annual Population Survey (APS) is a sample survey (only a subset of the population take part in the survey), it is important to remember that it provides estimates of school staff by country of birth, rather than exact measures. The APS quality document provides more information on the uncertainty in estimates from the APS.

6. Next steps: what can administrative data tell us about international migration and the education sector?

This article has examined what insights can be gained from published and survey sources on international migration and the state-funded primary and secondary education sector in England. Later this year, we plan to publish a follow-up piece considering what further questions administrative data can help us answer about migrants and their interactions with the education system. We plan to expand coverage to include Wales, Scotland and Northern Ireland, and include pupils in further and higher education where possible.

Together, this set of articles are part of the Migration Statistics Transformation Programme, which aims to better understand how migrants interact with services and how this information can help build robust international migration statistics when combined with other public sector data. If you have any feedback on this article or would like to feed your requirements into the next phase of research, please get in touch at migstatsunit@ons.gov.uk.

7. Annex A - Pupil proficiency categories

Where “Proficiency in English” is required, schools will assess the position of their English as an additional language (EAL) pupils against a five-point scale of reading, writing and spoken language proficiency and make a “best fit” judgement as to the proficiency stage that a pupil corresponds most closely to.

New to English

- May use first language for learning and other purposes.
- May remain completely silent in the classroom.
- May be copying or repeating some words or phrases.
- May understand some everyday expressions in English but may have minimal or no literacy in English.
- Needs a considerable amount of EAL support.
Early acquisition

- May follow day-to-day social communication in English and participate in learning activities with support.
- Beginning to use spoken English for social purposes.
- May understand simple instructions and can follow narrative or accounts with visual support.
- May have developed some skills in reading and writing.
- May have become familiar with some subject specific vocabulary.
- Still needs a significant amount of EAL support to access the curriculum.

Developing competence

- May participate in learning activities with increasing independence.
- Able to express self orally in English, but structural inaccuracies are still apparent.
- Literacy will require ongoing support, particularly for understanding text and writing.
- May be able to follow abstract concepts and more complex written English.
- Requires ongoing EAL support to access the curriculum fully.

Competent

- Oral English will be developing well, enabling successful engagement in activities across the curriculum.
- Can read and understand a wide variety of texts.
- Written English may lack complexity and contain occasional evidence of errors in structure. Needs some support to access subtle nuances of meaning, to refine English usage, and to develop abstract vocabulary.
- Needs some or occasional EAL support to access complex curriculum material and tasks.

Fluent

- Can operate across the curriculum to a level of competence equivalent to that of a pupil who uses English as his or her first language.
- Operates without EAL support across the curriculum.

Alongside this scale, “Not Yet Assessed” [Code “N”] is available for use where the school has not yet had time to assess proficiency.

8. Annex B – Data for Wales, Scotland and Northern Ireland
Wales

- National pupil projections 2018 to 2034
- Pupil numbers by local authority
- Births to non-UK born mothers
- Pupils with a first language other than English or Welsh
- First language of pupils
- English language proficiency
- GCSE attainment by English language proficiency level
- Staff data from the Annual Population Survey

Scotland

- Pupil numbers
- Pupil projections
- Births to non-UK born mothers
- Local area migration — dataset contains data on births to non-UK born mothers and pupils with English as an additional language.
- Pupil main home language
- English language proficiency
- Educational attainment by EAL status
- Staff data from the Annual Population Survey

Northern Ireland

- Pupil numbers and projections
- Births to non-UK born mothers
- Statistics on newcomer pupils — a newcomer pupil is one who has enrolled in a school but who does not have the satisfactory language skills to participate fully in the school curriculum, and the wider environment, and does not have a language in common with the teacher, whether that is English or Irish. This has previously been referred to as English as an additional language.
- Staff data from the Annual Population Survey