

Educational Outcomes of Children with English as an Additional Language

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The Bell Foundation is a charity working to overcome exclusion through language education by working with partners on innovation, research, training and practical interventions. Through generating and applying evidence, we aim to change practice, policy and systems for children, adults and communities in the UK disadvantaged through language.

The Foundation works in two key areas:

- The EAL Programme aims to improve the educational outcomes of children with English as an Additional Language in the UK to benefit the individual child and society as a whole. It works across the education system in partnership with a range of organisations, to provide training and resources in order to build capacity, develop and evaluate models of good practice and provide thought leadership.
- The Language for Change programme seeks to contribute to reducing the re-offending rates of offenders and ex-offenders who have English as a Second Language through removal of the language barrier to rehabilitation.

This publication includes analysis of the National Pupil Database (NPD)

<https://www.gov.uk/government/collections/national-pupil-database>

The Department for Education is responsible for the collation and management of the NPD and is the Data Controller of NPD data. Any inferences or conclusions derived from the NPD in this publication are the responsibility of the Education Policy Institute and not the Department for Education.

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Foreword

This report entitled “Educational Outcomes of Children with English as an Additional Language” focuses on the attainment of children with English as an additional language (EAL). It is a comprehensive analysis of the current policy and funding regime available to support children with English as an additional language.

Through examining current data and making robust international comparisons, the report shines a much-needed light on the achievement of children with EAL. Perceptions that either children with EAL are a drain on the system or that they systematically outperform other children are incorrect. The reality is more complex and nuanced, as children with EAL as a group are extremely heterogeneous; it includes children who are British citizens who speak another language at home, as well as refugees and migrants. Key dimensions by which children vary include their level of English proficiency, the age at which they arrived in the English school system, their first language, and their prior educational and life experiences. The heterogeneity of the EAL group makes overall average attainment figures potentially profoundly misleading.

The abolition in 2011 of dedicated resourcing and specialist support for this group of learners has meant the absence of any national oversight or provision of professional qualifications, staff development and specialist roles for teachers and other school staff working with children with EAL. A positive development has been the introduction of new codes, regarding a child’s proficiency in English, which schools report on annually. This now needs to be built on to develop a comprehensive approach to assessment and policy, for this group of learners.

England also has much to learn from how other countries support this group of children. Other English-speaking jurisdictions have policies with much greater emphasis on ensuring that there are specialist roles and qualifications to support EAL learners, as well as guidance and minimum entitlements defining what support should be provided. Other countries also value other languages through official certification of proficient bilingualism which is available to both EAL and non-EAL learners.

As Britain enters a new period in its global trading relationships, the need to ensure policies support those learning English as an additional language and the development of other language skills has never been greater. Moreover, no child should be prevented from reaching their full potential because of special educational need, where they live, low income, or lack of support to develop English language proficiency.



David Laws
Executive Chairman, Education Policy Institute



Diana Sutton
Director, The Bell Foundation

Executive Summary

This report examines educational support for children with English as an Additional Language (EAL). Its focus is on national policies for the assessment of English proficiency and EAL additional support needs, for the allocation of funding to support children with EAL through the national funding formula for schools (NFF), and for monitoring and accountability for the attainment of children with EAL at national level. This report was funded by The Bell Foundation and Unbound Philanthropy.

We use administrative data from the Department for Education to examine these aspects of policy, and complement this with international comparisons of the policy for EAL in other selected English-speaking jurisdictions, which enable us to consider wider policies aimed to generate and maintain EAL expertise in schools and to recognise the abilities and achievements of children with EAL. Finally, we present geographical analysis of school-level clusters of need conducted by Cloud Chamber for The Bell Foundation.

The most important findings from our research are as follows:

Average attainment figures for children with EAL are profoundly misleading

- In 2016, EAL pupils had an identical Attainment 8 score to the national average, made greater than average progress during school, and were more likely to achieve the English Baccalaureate than those with English as a first language (28 percent versus 24 percent).¹
- However, the EAL group is extremely heterogeneous; key dimensions by which children vary include their level of English proficiency, the age at which they arrived in the English school system, their first language, and their prior educational and life experiences.
- Measurements of attainment by children with EAL are misleading because assessments undertaken before English proficiency is reached will under-estimate academic attainment; attainment is mediated by the child's English proficiency at the time of the test.
- Many children with EAL have missing attainment data because they arrived after the time of the assessment. We estimate around three in ten children with EAL fall into this category in primary schools, and around one in ten children with EAL in secondary schools.
- At Key Stage 2, six language groups have attainment below the national expected standard even for children who had arrived in English state-funded schools as infants; these are Pashto, Panjabi, Turkish, Portuguese, Czech and Slovak.²
- Three groups (Tamil, Chinese and Hindi) have KS2 attainment that is above the national expected standard for children who arrived as late as year 5.³ Even for these resilient language groups, there is still a penalty for later arrival compared with earlier arrival.
- At Key Stage 4, late-arriving children with Pashto as a first language continue to have extremely low attainment. Those arriving in year 9 achieved an average grade of between F and E in Attainment 8, falling to an average grade of G for year 11 arrivals.

¹ Attainment 8 measures a student's average grade across eight qualifying GCSE subjects.

² The national expected standard is a score of 100 points on a scale from 80 to 120. Those arriving in year 2 were between 2 points (Turkish) and 11 points (Slovak) below the expected standard, on average, on a scale where the lowest possible score is 30 points below the standard.

³ Children arriving in year 5 (the penultimate year of primary school) with Chinese as their first language had average attainment of 102 points on a scale from 80 to 120, where 100 points is the national expected standard; those with Hindi or Tamil as their first language scored 101 points. Children arriving in year 4 with German or Nepali as their first language scored 102 points on average.

- This is in stark contrast to children with Chinese as their first language, who achieved an average Attainment 8 grade of between a B and a C if they arrived in year 9, falling to D for year 11 arrivals.
- Regional variations in the attainment of *the EAL group as a whole* are largely explained by demographic and language differences between the children living in different regions. However, the capacity to support *late arrivals* among the EAL group effectively appears to vary substantially between regions, with the North lagging well behind the South.

Some progress has been made on assessment of EAL needs but there is much more to do

- Internationally, there are three options for assessing English proficiency and support needs in school. In the United States, standardised tests are used to screen new arrivals for EAL and monitor their progress while receiving language support.
- In New Zealand, New South Wales & Alberta, assessment is conducted by teachers using frameworks which describe stages or levels of language development, differentiated by year group or phase. They rely on less fluid criteria such as the timing of arrival or refugee status to determine access to additional support.
- A third option sometimes used in some US States is a combination of tests and observational assessment leading to an overall judgement by professionals working with the child.
- In 2016, the Department for Education began collecting a new teacher-assessed measure of English proficiency for pupils with EAL. Schools are asked to position each child on a five-point scale according to a judgement of 'best fit' with briefly described categories: *New to English, Early Acquisition, Developing competence, Competent, or Fluent*.
- The new proficiency assessments are not moderated and the official guidance is superficial by comparison with that provided in New Zealand, New South Wales and Alberta. There has been no publicly available assessment of the quality of the new English proficiency data since the collection was introduced.
- If the proficiency data were to be used for school funding allocations, this would create perverse incentives to classify pupils in particular ways. With greater resources available for pupils at a lower proficiency stage, there would be a strong incentive to bias the assessments downwards in order to maximise the support available to that school.
- High-stakes uses such as funding allocation are distinct from the potential research use of the data to analyse and understand national or regional patterns and trends; research use does not present the same threats to data quality because it does not reward or punish individual schools for particular proficiency levels.

The NFF has the right principles but fails to respond to the full range of EAL needs

- The current good GCSE results observed on average for EAL pupils must be interpreted in the light of the fact that recent GCSE cohorts underwent primary education during the era in which the Ethnic Minority Achievement Grant (EMAG) provided local authorities with ring-fenced funds. In 2011, the EMAG funds were absorbed into general school funding, ending the requirement to spend them on black and minority ethnic pupils and/or those with EAL.
- In a small minority of local authorities, EAL central services now receive more funding than they were permitted to under EMAG's rules. However, more significantly, there has been a much broader trend for LAs to reduce or cease funding central EAL support services. The number of LAs with no central EAL spending has increased from 39 to 72 since 2011-12.

- The new national funding formula for schools aims to provide consistent funding from place to place, mainly allocated according to pupil-led factors, i.e. the number of pupils in the school and their characteristics, including EAL status, that are associated with additional educational needs.
- We have analysed the formula to establish what it means for pupils with EAL. In practice, local authorities can vary the formula allocations within certain constraints during a transitional period, but our analysis identifies the direction of travel implied by the overall workings of the formula, and compares this with the baseline funding received in 2017-18.
- Overall, deprived urban schools in areas of high ethnic diversity will face increasing funding pressures. The future of funding for EAL support is therefore deeply intertwined with wider changes, and cannot be properly understood in isolation from these by simply considering the criteria for and value of the EAL premium formula factor.
- Our analysis of the funds following the average pupil with EAL differs from the formula factor values because we include the effects of the NFF floor and minimum and transitional protections, which differ by location and historical funding levels.
- The implicit consequence of the NFF, if applied directly to school funding, would be to gradually reduce the funds following the average primary pupil with EAL, but to increase the funds following the average secondary pupil with EAL. Transitional protections mean that the changes will occur over several years.
- The attainment profile for EAL pupils starting school in England at various ages strongly suggests that it takes longer than the three years provided for in the NFF to become fully proficient in English. This is consistent with research in Canada, California and the London Borough of Lambeth.
- Arrival within the English state school system systematically predicts attainment levels for children with EAL, both at Key Stage 2 and at GCSE level, with a severe attainment penalty for children arriving closest to the time of the tests or exams. There is an urgent unmet need to provide intensive support to children arriving in England late in their schooling.

England has no policy to support the development of EAL specialist expertise in schools

- We have examined the arrangements for pupils with EAL in five other English-speaking jurisdictions; two of these are in the United States (New York State and Minnesota), one in Canada (Alberta), one in Australia (New South Wales), and New Zealand.
- Other English-speaking jurisdictions have policies with much greater emphasis on guidance or minimum entitlements defining what support should be provided to children with EAL; on policy aimed at adequate provision in areas where EAL populations are sparse; on parental and community engagement; and on valuing other languages through official certification of proficient bilingualism for both EAL and non-EAL learners.
- The most potentially damaging feature of EAL policy in England is the absence of any national oversight or provision of professional qualifications, staff development and specialist roles for teachers and other school staff working with children with EAL.

Recommendations

- **DfE should establish a plan for the future of English proficiency assessment.** In the short term, the integrity of the new proficiency assessment data should be protected by not using these data in funding allocations and by a clear commitment that educational data will not be used for immigration enforcement purposes either routinely or by exception.
- **In the medium term, the new proficiency data should be quality-assessed as part of wider research.** Comparisons with binary EAL indicators and with data on when children with EAL first attended a school in England should be used to test the assessments' reliability and value in predicting attainment outcomes.
- **In the longer term, the review of data quality should be used to decide whether any changes to the assessments are required,** including whether alternative methods such as standardised proficiency tests should be considered.
- **In addition to the basic EAL premium in the national funding formula, a late arrival premium is needed** to boost support for children with EAL arriving in English schools late in the primary or secondary phase.
- **Additional eligible years of less intensive EAL funding (extending its duration) are needed** to support children progressing from basic social interaction proficiency to academic English proficiency, to enable full engagement with the secondary curriculum.
- **Better official data and analysis on the EAL population is needed to ensure that policies are adequate, appropriate, targeted and relevant.** Patterns of immigration and birth rates will continue to change as the government determines new immigration rules and this has potential implications for the numbers of children requiring EAL support, but also for the mix of language backgrounds that schools will need to provide support for.
- **Better official statistics that acknowledge the wide spread of attainment outcomes for children with EAL are needed to inform policy discussions.** Attainment break-downs by first language, statistical benchmarking by time of arrival in English schools, and analysis of the new English proficiency assessments are the best current options.
- **Government, academics and other researchers should consider our proposed benchmark by time of arrival,** and contribute views and alternative proposals to inform decisions about official use of such a benchmark.
- **Government should develop new policies to generate and maintain EAL expertise in schools.** Systems in other English-speaking jurisdictions provide useful options to consider including the establishment of specialist roles, programmes for staff development and graduate level specialist qualifications.

Part 1: Assessment of English language proficiency

The EAL (English as an additional language) definition describes children who speak another language at home other than English. This includes children who are British citizens who speak another language at home, as well as refugees and migrants.

Children with EAL have widely varying levels of English proficiency; some have no English and some are fluent multilingual English-speakers; some have been educated in English throughout their childhood and some have had no prior education, or schooling that has been interrupted. In addition to this linguistic and educational heterogeneity, the social and economic backgrounds of children with EAL are also enormously varied.

The heterogeneity of the EAL group makes overall average attainment figures for the EAL group profoundly misleading; we discuss this in detail in Part 3, but this is the reason why assessment of English proficiency is essential for the planning and monitoring of children's educational progress.

Selected international comparisons for assessment of English proficiency

As a point of comparison for England, we examined official documentation for the assessment of English proficiency in New Zealand, New South Wales (Australia), Alberta (Canada), New York State and Minnesota (United States).

Broadly speaking there are three options for assessing English proficiency and support needs in school. In the US, the use of standardised tests to screen new arrivals for EAL and monitor their progress while receiving language supports is the default position following No Child Left Behind, Title III.

In other English-speaking education systems (New Zealand, New South Wales & Alberta) assessment is conducted by teachers using frameworks which describe stages or levels of language development, differentiated by year group or phase.⁴ Assessments are not typically externally moderated, even though high stakes are often attached in the form of additional funding, access to specialist support programmes, or even school placement decisions.

However, these non-testing systems typically rely on harder, less fluid criteria such as the timing of arrival, first/second generation migrant status, or refugee status to determine the level or duration of access to additional support.

A third option is a combination of tests and observational assessment leading to an overall judgement by professionals working with the child.

In the US, extensive use of standardised English proficiency tests is made for the purposes of identifying children with EAL in need of additional support, monitoring their progress, and determining when they are ready to exit the support system.

Reviews of the tests that have been developed typically conclude that evidence on the validity of the tests is patchy and insufficient to date⁵, although some individual assessments have begun to

⁴ Information about international systems is sourced from official government websites of the jurisdictions in question, retrieved in April 2017.

⁵ Takanishi, R. & Le Menestrel, S. (eds) (2017) *Promoting the Educational Success of Children and Youth Learning English: Promising Futures*. National Academies of Sciences.

demonstrate predictive validity for subsequent academic attainment.⁶ It is not yet clear how effective observation alone is, compared with tests alone, or with tests combined with observation.

The National Academy of Sciences recently recommended that test results should be used in combination with other observational methods to form a rounded assessment of need, and that children's proficiency should be assessed in both their first language and English. US federal funding allocations rely on a combination of state proficiency assessments and demographic survey data on dual language prevalence.⁷

Non-US English-speaking jurisdictions typically rely on teacher-assessed observational classifications that place EAL learners into one of a number of proficiency development stages. These are usually exemplified in detail at different age-phases for each of speaking, listening, reading and writing; in Alberta, the age-phase descriptors are also provided for pre-school children so that the system is fully aligned across phases.

The new system for English proficiency assessment in England

In 2016, the Department for Education began collecting a new teacher-assessed measure of English proficiency for pupils with EAL through the school census. Schools are asked to position each child on a five-point scale according to a judgement of 'best fit' with briefly described categories: *New to English, Early Acquisition, Developing competence, Competent, or Fluent*.

Prior to this the only information collected was a binary identification of whether a language other than English is spoken at home, or not. Before considering the limitations of the new data and actions that we recommend for improving them, it is important to state that we believe the new data collection is a step in the right direction, and that these data are an asset that should be assessed, researched and enhanced.

However, official guidance on completing the new proficiency assessment is superficial by comparison with similar stage assessments used in New Zealand, New South Wales (Australia) and Alberta (Canada). These jurisdictions provide specific descriptors for each proficiency level in each of reading, writing, speaking and listening, differentiated by age or grade stages.

The Bell Foundation has published a research-informed assessment framework⁸ designed to support schools to make a consistent interpretation of the new stages of proficiency which is comparable with international equivalents. The new proficiency assessments are not currently subject to any mandatory moderation process.

The DfE guidance document for the school census data collection indicates that the proficiency data may be used to inform policy in relation to EAL learners, the effectiveness of the education they receive, and to identify pupils with the greatest language needs and the schools they attend.⁹ The government has suggested that it may explore whether the new proficiency data can be used to

⁶ Parker, C., Louie, J. & O'Dwyer, L. (2009) *New measures of English language proficiency and their relationship to performance on large-scale content assessments*. Institute of Education Sciences.

⁷ National Academy of Sciences (2011) *Allocating Federal Funds for State Programs for English Language Learners*. Department of Education.

⁸ The Bell Foundation (2016) *EAL Assessment Framework for Schools*, available at: <https://www.bell-foundation.org.uk/eal-programme/teaching-resources/eal-assessment-framework/>

⁹ DfE (2018) *School Census 2017 to 2018: Guide, version 1.6*, available at: <https://www.gov.uk/government/publications/school-census-2017-to-2018-guide-for-schools-and-las>

inform the schools national funding formula in future, in order to better reflect the wide variation in support needs among pupils with EAL.¹⁰

Some observers have raised concerns that the data could also be used for immigration enforcement purposes, following reports that the location of individual pupils had been shared with the Home Office several times since 2012.¹¹ DfE has declined to guarantee that similar requests would not be met in future, but stated that the new country of birth and nationality data would not be ‘shared with the Home Office’, nor routinely published. This has resulted in calls from human rights groups to boycott the new data collections.¹² Whenever any data about pupils collected from schools is used for non-education purposes, this raises ethical questions. Moreover, even the perception of use for any purpose adverse to the child’s interests presents a threat to the future accuracy and completeness of education data.

There has been no publicly available assessment of the quality of the new English proficiency data since the collection was introduced. However, having introduced a relatively weak assessment by international standards, government now needs to manage additional threats to the integrity of the data.¹³ If the proficiency data were to be used for either school funding or school accountability purposes in future, this would create strong and perverse incentives in the system to classify pupils in particular ways. If used for funding, with greater resources available for pupils at a lower proficiency stage, there would be a strong incentive to bias the assessments downwards in order to maximise the resources available to that school.

Schools are motivated to maximise their funding (particularly in the current climate), in order not to lose out in the competition to recruit good quality teachers, so that they can deliver better results for pupils, and so that they can maintain full pupil rolls to ensure their future financial stability. Over time, schools that resisted the initial incentive would face increasing pressure due to a prisoner’s dilemma.¹⁴

While it is in everyone’s interests to allocate resources according to need, the expectation that some schools will underreport proficiency levels in order to gain additional funding is likely to drive others to do the same. Current cost pressures and resulting staffing reductions faced by schools would add to the already-strong incentives to game the EAL proficiency assessments.

In other English-speaking jurisdictions that use teacher assessment of English proficiency in their funding systems this is capped either by ‘hard’ criteria such as a maximum number of years of eligibility (five in Alberta and New Zealand), or parental education (at least one parent with schooling equivalent to year 9 or below in New South Wales). New Zealand caps funding for 2nd generation migrant children at a shorter duration (three years) than 1st generation migrants, creating a distinction between new arrivals and English learners born within the country.

¹⁰ Consultation documents available at: <https://www.gov.uk/government/consultations/schools-national-funding-formula>

¹¹ BBC News (2016) *Pupil nationality data ‘will not be passed to Home Office’*, available at: <http://www.bbc.co.uk/news/education-37474705>

¹² Gayle, D. (2016) *Parents urged to boycott requests for children’s country of birth information*, The Guardian, available at: <https://www.theguardian.com/uk-news/2016/sep/26/parents-boycott-requests-childrens-country-of-birth-information>

¹³ See part 4 for details of systems in selected other English-speaking jurisdictions.

¹⁴ A prisoner’s dilemma is a situation in which two rational individuals do not cooperate, even though it is in their best interests to do so, because each cannot be certain that the other party will cooperate. If one party cooperates but the other doesn’t, the former will be worse off than if they hadn’t cooperated.

If the new proficiency data in England were used as part of the school accountability system, this would create a similar incentive for pupils to be assessed as having very low English proficiency to begin with, but also a competing incentive to show rapid progress through the competence stages over time, as ‘evidence’ of the effectiveness of the school’s support for those pupils.

These high-stakes uses are distinct from the potential use of the data to analyse and understand national or regional patterns and trends, which does not present the same threats to data quality because it does not reward or punish individual schools for particular proficiency levels.

In fact, research use of the proficiency data can enhance them over time by identifying weaknesses in data quality so that these can be addressed in future assessments and data collections. Possible examples of how the data can be improved would include enhancements to the guidance for teachers making the assessments, or additional validation rules applied during the data collection to weed out errors.

What is needed, to build on the first step that has been taken towards proficiency assessment, and to ensure the data meet their potential to add value for schools and benefit pupils with EAL, is a plan for maximising the integrity of the data over time. Only with high quality data can the new assessments lead to better planning and monitoring in schools, and better policy insight nationally.

A plan to protect, assess and enhance the English proficiency data

We recommend that DfE establishes a plan to protect, assess and enhance the integrity of the proficiency assessment data over time. In the immediate future, the following steps are recommended:

Protect: DfE should not attempt to use the new proficiency data in their current form to inform school funding decisions or allocations. As elaborated in the following section, better alternatives exist to make more sophisticated use of the long-standing binary EAL data, combined with the age/year group at which the pupil was first recorded in an English school.

Protect: Government should make a clear commitment that none of its educational data about pupils will be used for immigration enforcement purposes, either routinely or by exception. The current use of distinctions between different data collections, datasets and data items, and of different types of data sharing is confusing, and has failed to reassure concerned school staff and parents that it is safe to submit data.

Following these protective steps, in the medium term, the data should be tested to establish its quality and reliability:

Assess: The proficiency data should be reviewed for quality and completeness, with the aim of developing recommendations on how to enhance the data in future collections. A quality review could be conducted as part of wider research to investigate early lessons from the data and assess how far it improves upon the binary EAL data in predicting academic outcomes.

Assess: The proficiency data should be compared with arrival time data. This comparison should make use of the attainment benchmark model which is recommended for enhancing accountability for the attainment of children with EAL. See part 3 of this report for details of the arrival time data and benchmark model.

Following the assessment of the proficiency data, in the longer term, the review of data quality should be used to inform decisions about the development of the data, in order to maximise its quality and usefulness:

Enhance: The quality review should be used to consider whether any adjustments should be made to the assessment and data collection process. This might include consideration of further guidance to schools, official endorsement of The Bell Foundation’s framework, the introduction of a moderation requirement, or alternative means of assessment, depending upon the findings of the initial assessment.

Enhance: Current and future evidence about the quality of alternative assessment methods should be compared with the evidence from the review of the new English proficiency data. The alternative means considered should include the use of standardised testing of English proficiency in the United States. The reliability of these methods in the presence of school funding incentives should be assessed.

Part 2: Funding of EAL support

When considering funding for EAL support, it is natural to begin by assessing the extent of unmet need within the current system. Ideally, this should be based on assessments of English proficiency, but it is common for people to focus on the eventual attainment outcomes of children with EAL.¹⁵ This is problematic, because the level of English language support needs experienced by children with EAL is often obscured by strong underlying attainment. Potential for even better achievement may be missed as a result of this.

Additionally, the current good GCSE results observed on average for EAL pupils must be interpreted in light of the fact that recent GCSE cohorts underwent primary education during the era in which the Ethnic Minority Achievement Grant (EMAG) provided local authorities with ring-fenced funding to support pupils from black and minority ethnic backgrounds.¹⁶

Prior to 2012, local authorities could retain a small proportion of EMAG funding to provide central support services, before passing on the majority to schools. Alongside an extensive annual exercise of local authority and school target-setting, this created an increased focus on outcomes for these groups of children, many of whom had EAL. In 2011, the EMAG funds were absorbed into general school funding ending the requirement to spend these funds on black and minority ethnic pupils and/or those with EAL.

The impact of consolidating EMAG into general school revenue funding has been mixed. In a small minority of local authorities, EAL central services receive more funding than they were permitted to under EMAG's central retention limits. Newham and Leicester are the most notable examples of this, and it is likely to reflect the widespread prevalence of EAL in schools in these authorities, which makes it more likely that local schools forums will agree to have their funds top-sliced in this way.

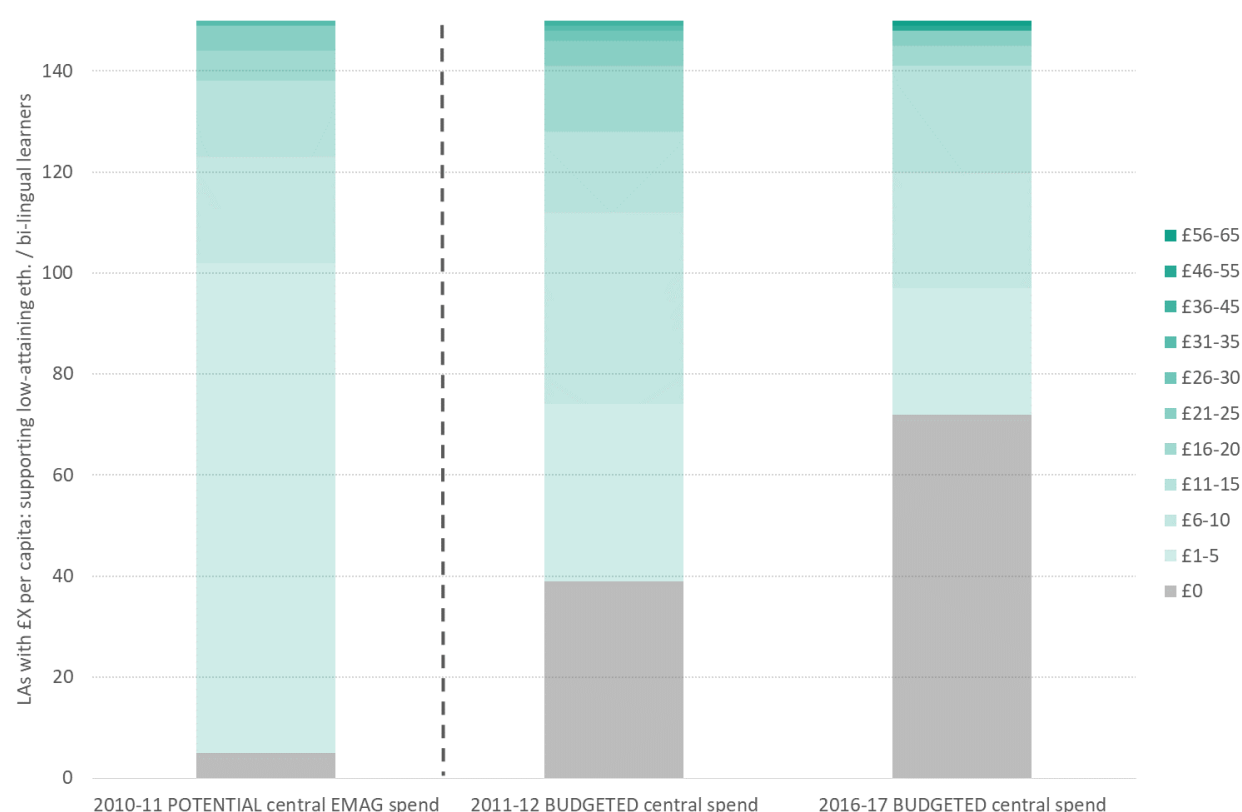
More significantly, however, there has been a much broader trend for LAs to reduce or cease funding central EAL support services. The number of LAs with no central EAL spending has increased from 39 to 72 since 2011-12.

¹⁵ Data on the attainment of children with EAL have been available for longer than the new data on English proficiency.

¹⁶ The conditions of grant for the EMAG permitted its use for the following purposes only:

(i) it allows LA strategic managers and schools to bring about whole school change in narrowing achievement gaps for Black and minority ethnic pupils which in turn ensures equality of outcomes; and (ii) it covers some of the costs of the additional support to meet the specific needs of bilingual learners and underachieving pupils.

Figure 2.1: Local authority centrally retained budgets for EAL



The new national funding formula for schools aims to provide consistent funding from place to place, mainly allocated according to pupil-led factors, i.e. the number of pupils in the school and their characteristics, including EAL status, that are associated with additional educational needs. EPI believes that the principles and aims of the funding formula are the right ones to bring about a more rational and fairer system. However, the proposed implementation of the formula has been controversial due to the overall level of funding passing through the formula, combined with significant increases in schools' staffing costs, which result in real terms losses for many schools.¹⁷

We have analysed the illustrative formula to establish what it means for pupils with EAL. In practice, local authorities can vary the formula allocations within certain constraints during a transitional period, but our analysis identifies the direction of travel implied by the overall workings of the formula, and compares this with the baseline funding received in 2017-18.

Overall, the NFF tends to provide increases for schools outside of London and other large urban centres, and those with moderate (but not severe) levels of deprivation. By contrast, deprived urban schools in areas of high ethnic diversity will face increasing funding pressures. The future of funding for EAL support is therefore deeply intertwined with wider changes to the funding system, and cannot be properly understood in isolation from these wider changes, by simply considering the criteria for and value of the EAL premium formula factor.

In the context of a general funding squeeze¹⁸, all additional needs allocations will come under greater pressure as schools seek to meet basic staffing and operational needs. This places at risk the

¹⁷ Perera, N., Andrews, J. & Sellen, P. (2017) *The implications of the National Funding Formula for schools*. London: Education Policy Institute.

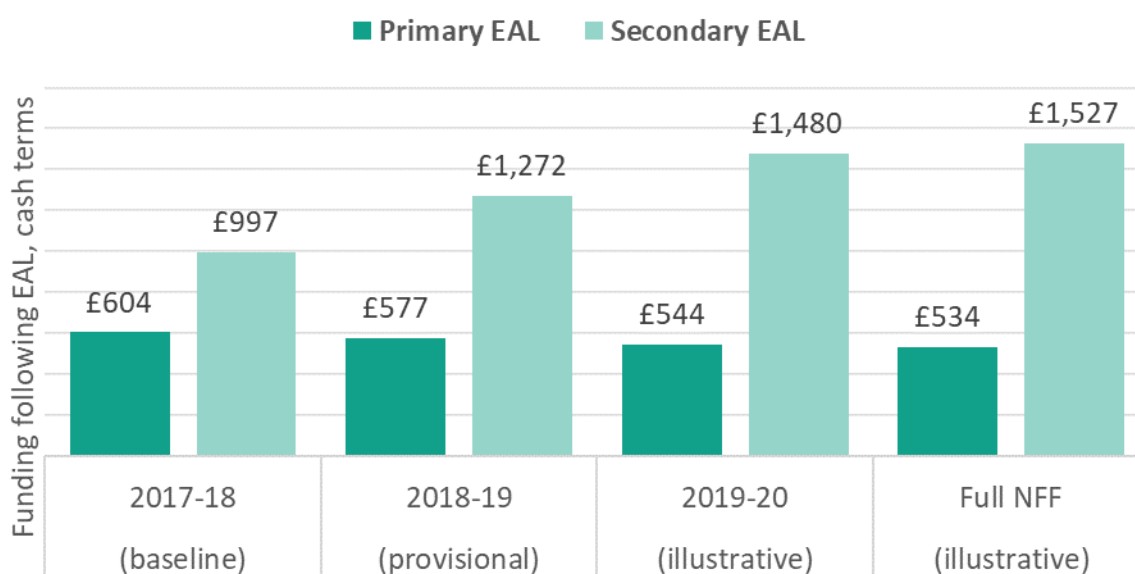
¹⁸ Funding levels were flat from 2010 to 2015 and then fell in the following two years, meaning that the cash increases now planned until 2020 are set against previous losses as well as inflationary pressures.

potential benefits of explicit funding streams for additional needs. For example, despite its associated accountability measures, many schools have reported needing to use Pupil Premium funding which is intended for disadvantaged pupils on general running costs.¹⁹

Against this general backdrop, we assess the specifics of the proposed funding for additional needs associated with EAL, and the longer-term option of building the new English proficiency data into the funding calculations.

Our analysis shows that it is particularly important to ensure full accommodation of additional needs due to EAL, because primary schools face downward pressure on the total amount of funding (in cash terms) following children with EAL.^{20,21} By contrast, the funding following EAL pupils in secondary schools increases in cash terms as the NFF is phased in.

Figure 2.2: Funding following EAL pupils, under current spending and the planned NFF



- The implicit consequence of the NFF, if applied directly to school funding, would be to gradually reduce the funds following the average primary pupil with EAL, but to increase the funds following the average secondary pupil with EAL. Transitional protections mean that the changes will occur over several years.
- The EAL formula factor values are set at just above the average level used by local authorities in 2016-17. Primary EAL funding would remain above this announced formula value for as long as the NFF's funding floor and minimum level was in place. Secondary EAL funding would not reach this level until 2019-20.
- Our analysis of the funds following the average pupil with EAL differ from the formula factor values because we include the effects of the NFF floor and minimum and transitional protections, which differ by location and historical funding levels.
- It is important to account for these parts of the formula when comparing it with the baseline year because they significantly constrain the gains and losses that would otherwise take

¹⁹ Sutton Trust (2017) *Teacher Polling 2017*, conducted by NfER and available at:

<https://www.suttontrust.com/research-paper/pupil-premium-polling-2017/>

²⁰ Analysis of DfE's school-level data underlying the NFF allocations released in September 2017.

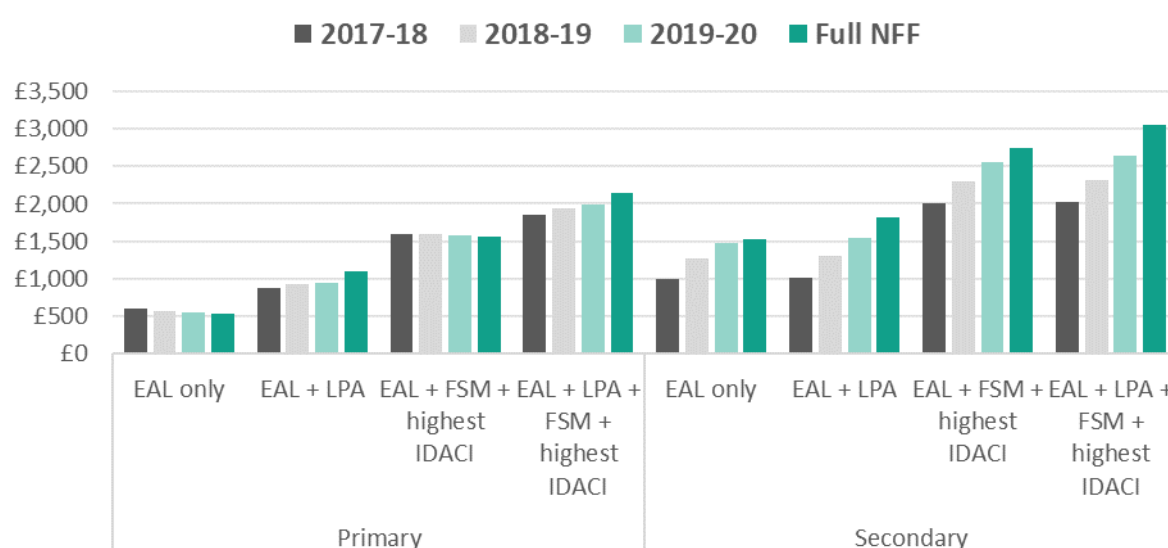
²¹ Our current observation that children with EAL who arrive during primary school achieve well in their GCSEs is based on cohorts who experienced a radically different funding system (see earlier discussion of EMAG).

place in order to move all schools onto the formula. The purpose is to stabilise the transition to the NFF, but this also matters to the eventual distribution of the funding.

Children with EAL often also have other additional needs, and this also affects the overall levels of additional needs funding channelled through the NFF. Further analysis of the NFF allocations reveals that children in primary schools with recorded low prior attainment (LPA)²² *as well as EAL* are set to experience a modest increase in total additional needs funding despite the loss of funding associated with EAL, because this is compensated for by rising low prior attainment funding.

However, those children in primary schools with EAL but *without recorded low prior attainment* will experience slightly reduced overall additional needs funding, even if they are also in the most deprived group and receiving funding for free schools meals status (FSM) and for living in the most deprived neighbourhoods (highest IDACI). In secondary schools, children with EAL will experience increased funding irrespective of their prior attainment and deprivation status.

Figure 2.3: Additional funding per pupil under current spending and the NFF (by pupil characteristics)



At a detailed level, we identify opportunities to improve the formula by better matching funding levels to need, and ensuring that the duration of EAL funding is evidence-informed. There are several contrasting needs that should be met by the funding system:

- Firstly, there is a need to *intervene early* to establish access to the curriculum and social integration, best achieved when children are still developing first language proficiency, particularly in learning to read and write.
- Secondly there is a need to *extend support* until academic language proficiency is reached - some years after basic social interaction proficiency is reached - in order to fully access the secondary school curriculum.
- Thirdly, there is an acute need to provide *intensive support* to children arriving in England late in their schooling when there is limited time in which to catch up in terms of English proficiency before the risk of very low GCSE attainment is realised.

²² Low prior attainment is assessed using the Early Years Foundation Stage Profile for primary pupils, and Key Stage 2 tests for secondary pupils.

The first need, for early intervention, is reasonably well provided for by the NFF, which allocates a funding premium to each child with EAL in each of their first three years in school in England. The majority of children with EAL are already in England by the time they start reception, meaning that the bulk of EAL funding will flow to infant and primary schools in respect of children in reception and Key Stage 1.

By contrast, the development of academic language proficiency is not supported by the funding system. The attainment profile for EAL pupils starting school in England at various ages strongly suggests that it takes longer than three years to become fully proficient in English (see analysis below). This is consistent with research on English learners in California and Canada that found basic oral proficiency takes 3-5 years to develop and full academic proficiency takes 4-7 years, based on populations including those who were present from kindergarten.²³ It is also consistent with analysis of proficiency assessment data collected in Lambeth.²⁴ All five international English-speaking jurisdictions that we reviewed²⁵ provided EAL support for longer durations than England.

Provision for late arrivals is also weak. While the NFF's EAL premium is higher for secondary school pupils, large attainment differences between those arriving in year 7 and those arriving in year 10 or 11 are not addressed. Our analysis demonstrates that children who arrive in England late within their school years face the most acute risk of low attainment, but yet the NFF makes less provision for them than other children with EAL in two ways:

- Firstly, they will miss out on a proportion of the three years of EAL funding if they arrive after year 9;
- Secondly, they will miss out on separate funding for low prior attainment if they have arrived after the Key Stage 2 tests at the end of primary school.

Analysis

Arrival within the English state school system systematically predicts attainment levels for children with EAL, both at Key Stage 2 and at GCSE level, with a severe attainment penalty for children arriving closest to the time of the tests or exams. The following charts illustrate this for 2016 results.

- At Key Stage 2, children with EAL who started school in reception scored 2 points above the expected standard in reading and maths, where the highest possible score would be 20 points above the expected standard. On average, children with EAL who arrived in English state-funded schools in years 1 or 2 achieved a score very close to the expected standard.²⁶
- By contrast, those children with EAL who arrived in English state-funded schools in year 3 scored an average of 2 points below the expected standard, and those who arrived in year 4 scored 3 points below the expected standard. Even more vulnerable were those who arrived in year 5, who were 7 points below the expected standard on average, and those who arrived in the final year of primary school, who were 17 points below expected, where the lowest possible test score was 20 points below the expected standard.

²³ Hakuta, K., Butler, Y. and Witt, D. (2000) *How Long Does It Take English Learners to Attain Proficiency?* Santa Barbara: California University.

²⁴ Demie, F. (2013) 'English as an additional language pupils: how long does it take to acquire English fluency?', *Language and Education*, 27(1), pp 59-69.

²⁵ New Zealand, New South Wales, Alberta, Minnesota, New York State.

²⁶ The Key Stage 2 test scores are on a scale from 80 to 120, where 100 is the expected standard, and where children working below the level of the test can receive a teacher assessment of between 70 and 80.

- At Key Stage 4, Children with EAL who had arrived in the English state-funded school system by the first year of secondary school (between reception and year 7) achieved an average grade of around 5 in Attainment 8, which equates to around a C in the old pre-reform GCSEs.
- Children with EAL who arrived during years 8, 9 or 10 achieved an average Attainment 8 grade of around 4, or a D grade. Those who arrived in the final year of GCSE study achieved an average grade of just below 3, equivalent to E grades in the old system.

Figure 2.4: The relationship between Key Stage 2 scores and arrival in the school system

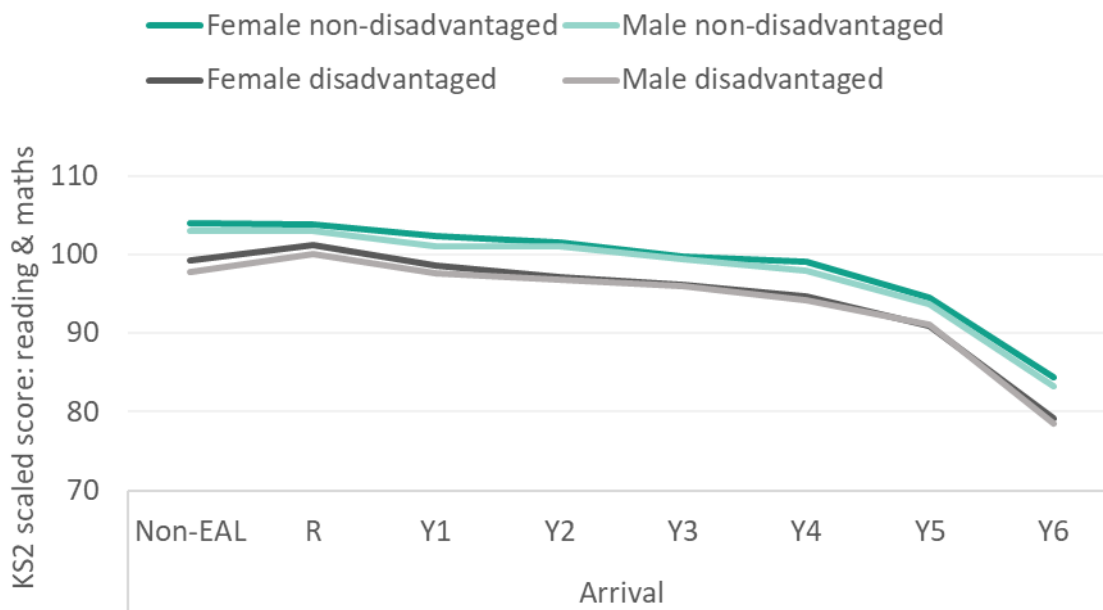
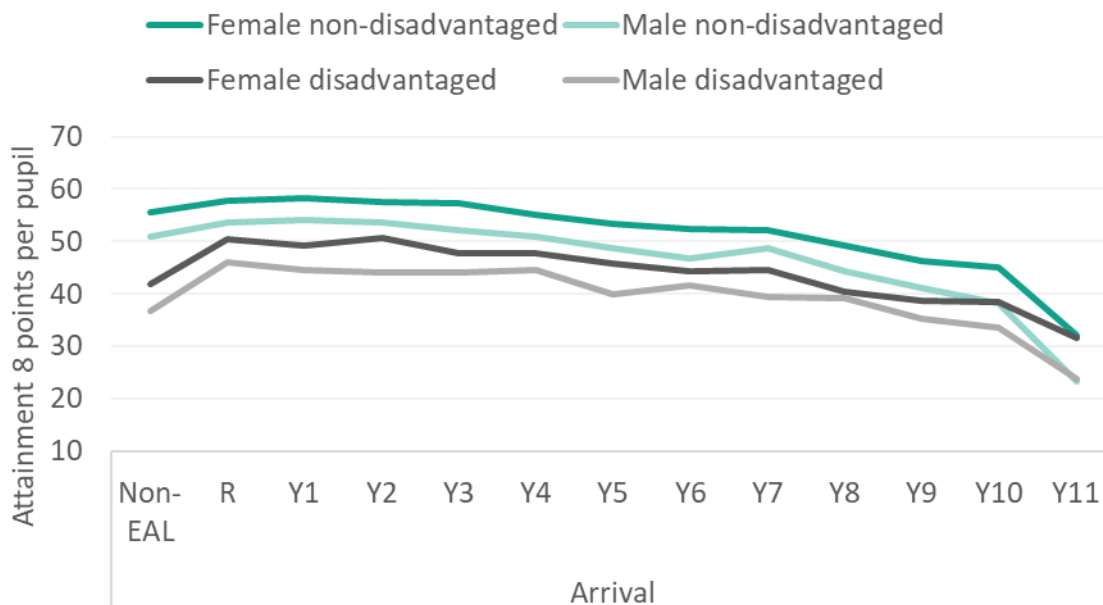


Figure 2.5: The relationship between Key Stage 4 scores and arrival in the school system



By virtue of their age structure, all-through primary schools have the flexibility to spend money allocated for those EAL children in reception who happen to be fluent in English to support later arrivals with greater need. The same scope does not exist for junior schools and secondary schools

integrating late arrivals, where the system cannot self-correct for the bluntness of the formula criteria.

In theory, the new teacher assessments of English proficiency could be used to restrict the allocation of the EAL premium to those children who are not already fluent in English, or to scale the amount of funding in accordance with need. However, as we have discussed, these new observational teacher assessments (with little detailed guidance and no moderation) are unlikely to be reliable if they are subject to the pressures of high-stakes funding use.

We concluded that the new proficiency data are not suitable for use in the funding system as their integrity would be systematically undermined by the resulting incentives for schools. Instead we propose that more sophisticated use is made of existing data on pupils' time of arrival (in which year group a child was first registered in any English school).

Our analysis of attainment by arrival time strongly suggests that in addition to the proposed basic EAL premium, a late arrival premium is needed to boost support for children arriving in English schools for the first time late in the primary or secondary phase. Providing suitably intensive support for pupils arriving during Key Stage 4 is a pressing priority not met by the NFF. The need for more intensive support for late arrivals demonstrated in our analysis is also corroborated internationally by analysis of English proficiency test results in the United States, which indicates that pupils arriving later make slower progress in learning English to the level of the curriculum.²⁷

Additional eligible years of less intensive funding (extending its duration) are needed to support children progressing from basic social interaction proficiency to academic proficiency, to enable full engagement with the secondary curriculum. The offer of three years of funding support for EAL pupils is also out of step with other English speaking jurisdictions such as New Zealand, New South Wales, Alberta and US States such as New York State and Minnesota. Five years of support is common, and some jurisdictions offer up to seven years for vulnerable groups such as refugees. It is not safe to assume that this need will be met from universal core pupil funding given that the most recent GCSE cohorts experienced a completely different funding system with hypothecated grants for this group during their primary schooling, there is now a funding squeeze, and local authorities have retreated from offering central support services.

²⁷ Cook, H. et al. (2008) *WCER Working Paper No. 2008-2: Issues in the Development of Annual Measurable Achievement Objectives for WIDA Consortium States*, Madison: University of Wisconsin.

Part 3: Monitoring, attainment and accountability

The EAL group is heterogenous

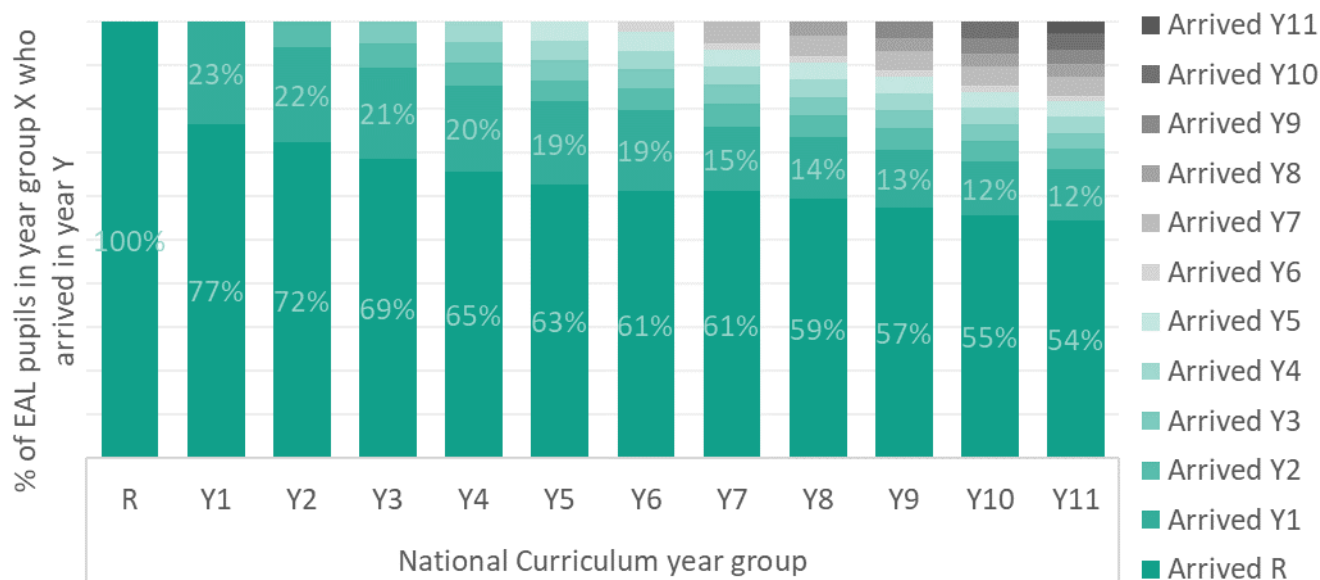
The EAL definition describes children who speak another language at home other than English. This includes children who are British citizens who speak another language at home, as well as refugees and migrants. The heterogeneity of the EAL group makes overall average attainment figures profoundly misleading, as we demonstrate below.

Two dimensions of EAL that can be identified in the national pupil database are the specific first language of the child, and the point of arrival in the English state-funded school sector. Of all the children with EAL in state-funded schools, we estimate that 65 per cent joined a primary school in England in reception year.²⁸ This group have not necessarily arrived in England at this point; many will have been born in England. A further 16 percent are estimated to have arrived in year 1; most but not all will have recently arrived in England. Less than 5 percent of EAL pupils arrived in each of years 2-11. The growth of the EAL population in each year group by arrival point is modelled below.

It is important to remember that time of arrival in the English state-funded schools sector does not tell us how proficient children are in the English language. They may have lived in English-speaking countries or been schooled in English prior to arrival, or have moved from independent schools, alternative provision or home-schooling. However, with the exception of those who arrive in reception, we would expect time of arrival to provide a proxy indication (albeit imperfect) of English proficiency.

The arrival time proxy for English proficiency is immediately available to improve school funding and national accountability for attainment, whereas the teacher-assessed proficiency data need to be subject to quality checks first, and are unlikely ever to be suitable for school funding allocations.

Figure 3.1: The arrival time of EAL pupils throughout the school system

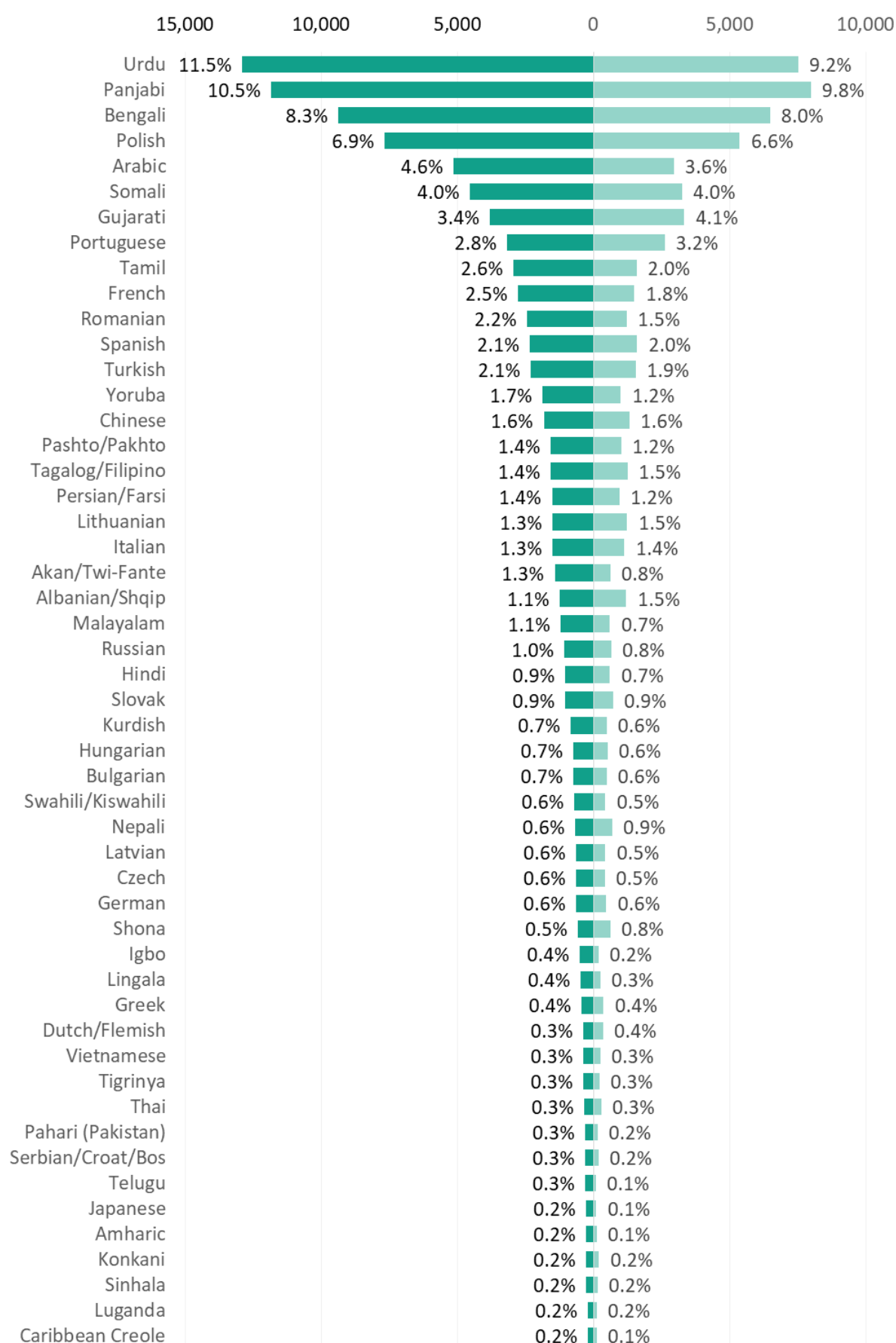


²⁸ Analysis excludes children in independent schools, alternative provision, or home-schooling due to data availability limitations. Estimates modelled from the 2016 KS2 and KS4 cohorts.

There were fifty-one different languages spoken as a first language by at least 200 hundred children in the 2016 Key Stage 2 cohort. Forty-two of these were also spoken by at least 200 children in the 2016 Key Stage 4 cohort. The most prevalent first languages are charted below by volume.

Better data and analysis on the EAL population is needed to ensure that policies are adequate, appropriate, targeted and relevant. Patterns of immigration and birth rates will continue to change as the government determines new immigration rules and this has potential implications for the numbers of children requiring EAL support, but also for the mix of language backgrounds that schools will need to provide support for.

Figure 3.2: Languages with at least 200 pupils at KS2: percentage of EAL pupils at KS2 (left) and KS4 (right)



Misleading averages

It is easy to conclude that the job of supporting EAL needs is successfully addressed on the basis of current official statistics that treat these children as a single homogenous group. In 2016, EAL pupils had an identical Attainment 8 score to the national average, made greater than average progress during school, and were more likely to achieve the English Baccalaureate than those with English as a first language (28 percent versus 24 percent).

But the above-average mean attainment for EAL children masks enormous variation between children with different first languages and different times of arrival. This creates a 'misleading average' problem when presenting statistics for EAL attainment. As previous research and the following analysis have found, many factors will determine how well a child with EAL will achieve, one of the key determinants being proficiency in English.^{29,30}

+ Misleading measurement

Making a more meaningful assessment of the performance of schools generally involves the use of measures of academic progress. These are useful for estimating the contribution made by schools because they measure attainment relative to a baseline starting point earlier in the school career, e.g. secondary school progress is measured from a Key Stage 2 baseline at the end of primary school, with GCSEs at age sixteen as the outcome.

However, the concept of academic progress is confounded by English proficiency for children with EAL. Academic assessments undertaken before proficiency is reached will under-estimate academic attainment to an unmeasured degree, because they are mediated by the child's English proficiency at the time of the test. There is therefore a 'misleading measurements' problem.

+ Missing data

Additionally, many children with EAL have missing attainment data. While schools make local assessments to inform their teaching, children who arrive just after national assessment points will wait for up to four years in primary school, or up to five years in secondary school, without any national assessment. We estimate around three in ten children with EAL fall into this category in primary schools, and around one in ten children with EAL in secondary schools.

= Assessment problem

These unique circumstances create a problem in assessing performance for EAL children. We know what their ultimate attainment outcomes are, but we don't know how performance compares with other children because there are no clear benchmarks for what reasonable or good attainment looks like given the evidently high academic potential of many children with EAL.

We believe it is important to work towards intelligent benchmarks for EAL attainment to avoid complacency about outcomes for high-ability groups and to avoid the average masking the urgent needs of some sub-groups, but also because there can be no progress towards accountability for the

²⁹ Strand, S., Malmberg, L. and Hall, J. (2015) *English as an Additional Language (EAL) and educational achievement in England: An analysis of the National Pupil Database*, London: Education Endowment Foundation.

³⁰ Demie, F. (2016) 'Language diversity and attainment in schools: implication for policy and practice', *Race, Ethnicity and Education*, 18(5), pp. 723-737.

funding allocated in respect of EAL without a reasonable benchmark with which to compare performance.

We are concerned with accountability because EPI has found evidence suggesting that those schools most affected by attainment and accountability metrics and floor standards because of the attainment profile of their pupils have made better progress in raising attainment for disadvantaged pupils and reducing gaps than other schools.³¹

In particular, schools with larger numbers of disadvantaged pupils have more data about the performance of these pupils published (greater transparency enables greater accountability). Those with more pupils near to the attainment thresholds used in the school performance tables and the previous floor standards³² have faced more acute accountability because of the risk of sanctions attached to performance at these thresholds. Both groups of schools have made faster progress for disadvantaged pupils than other schools.

For these reasons, we need to disentangle the misleading average, misleading measurements and missing data problems to understand performance for EAL pupils. These are difficult problems that will require ongoing work and collaboration between government, researchers and practitioners to find the best solutions.

Better official statistics are needed to inform policy discussion that acknowledges the wide spread of attainment outcomes for children with EAL. In particular, break-downs by time of arrival and first language should be used to understand where support needs are most acute. Current statistical outputs mask this variation and create a false sense of security around the ability of current policies to deliver fair outcomes, because smaller groups of children with high and unmet needs are hidden within a larger group that has had time on its side, and historically has had focused resources and support on its side (although as discussed earlier, this is no longer the case).

A prototype benchmark

In order to begin to develop an informed assessment of what is ‘good’ attainment for pupils with EAL, what is poor but in line with current performance, and what is poorer than elsewhere in the country, we set out one possible method for setting benchmarks. We welcome discussion of this prototype and encourage others to put forward their own views and proposals.

Revisiting the analysis of EAL attainment for children with different arrival times from the funding section, we found that arrival within the English state school system systematically predicts attainment levels for children with EAL, both at Key Stage 2 and at GCSE level, with a severe attainment penalty for children arriving closest to the time of the tests or exams.

Analysing attainment by arrival time and for specific first language groups reveals another layer of heterogeneity within the EAL population. Illustrated below are the attainment-by-arrival profiles for the highest and lowest-attaining first language groups.

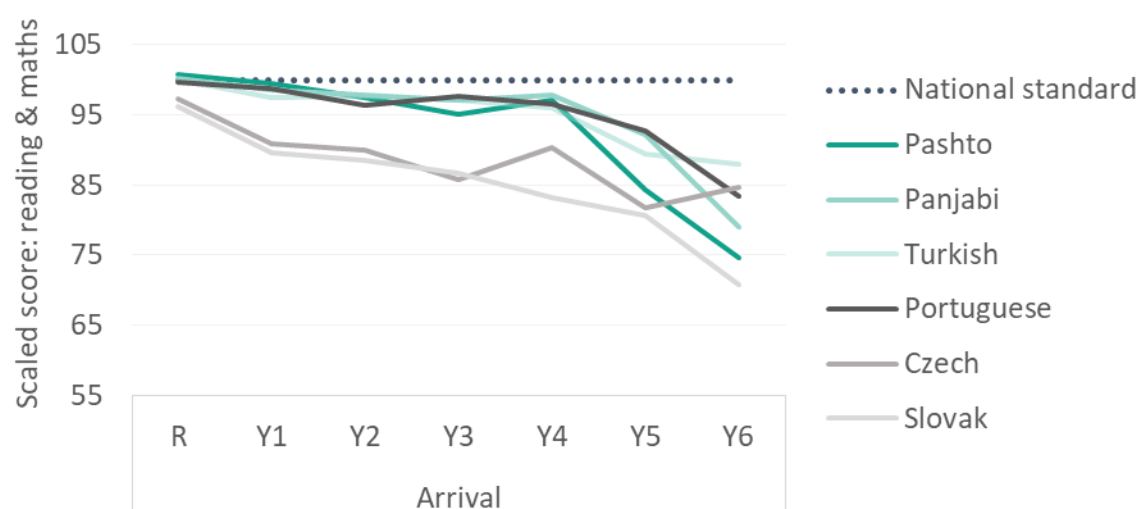
At Key Stage 2, six language groups have attainment below the national expected standard even for children who had arrived in English state-funded schools as infants; these are Pashto, Panjabi,

³¹ Hutchinson, J. and Dunford, J. (2016) *Divergent Pathways: the disadvantage gap, accountability and the pupil premium*, London: Education Policy Institute.

³² Pupils close to the borderline for achieving five good GCSEs (grades A*-C) including English and maths at age 16, or level 4 in reading, writing and maths at age 11 previously had a disproportionate impact on school performance measures. Therefore, schools with lots of these pupils were subject to greater scrutiny.

Turkish, Portuguese, Czech and Slovak. Those arriving in year 2 were between 2 points (Turkish) and 11 points (Slovak) below the expected standard, on average, on a scale where the lowest possible score is 30 points below the standard. Those arriving in the year of the Key Stage 2 tests (year 6) were between 12 points (Turkish) and 29 points (Slovak) below the expected standard.

Figure 3.3: The lowest attaining EAL groups at the end of Key Stage 2, by time of arrival



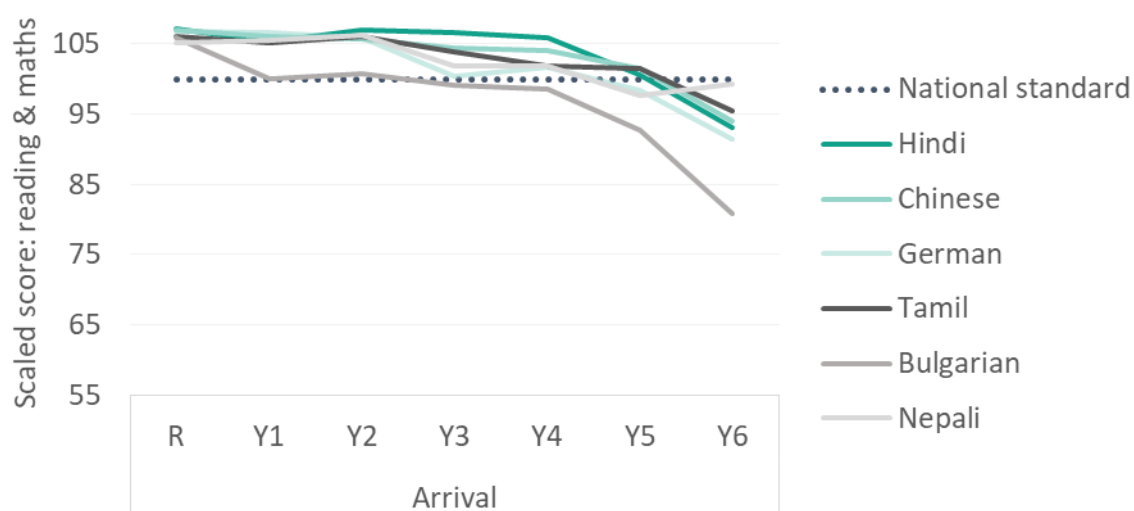
At the opposite end of the scale, three groups (Tamil, Chinese and Hindi) have attainment that is at least one point above the expected standard for children who arrived as late as year 5, and a further two (German and Nepali) for children arriving as late as year 4. Even for these resilient language groups, there is still a penalty for later arrival by comparison with children with the same first language who arrived earlier. For example, children with Tamil as a first language have attainment that is 5 points above the expected standard, on average, if they joined an English state school in reception, but 5 points below the expected standard if they arrived in year 6.³³

These should not be read as exhaustive lists of the first languages with high or low attainment because others have similar attainment patterns, but the numbers of children arriving in one or more year groups are too small to be able to report reliable statistics for them. See Strand (2015) for analysis of the most vulnerable first language groups.³⁴ Our primary purpose here is to examine the factors, including first language, which are candidates for setting benchmarks for EAL attainment.

³³ The points are on a scale from 80 to 120 for children sitting the tests but can be as low as 70 for those assessed by teachers as not able to sit the test; the national expected standard is 100 points.

³⁴ Strand, Malmberg & Hall (2015) found that Romanian, Turkish, Portuguese, Lithuanian, Polish and Albanian speaking 'white other' ethnicity pupils and French, Arabic, Lingala and Portuguese speaking 'black African' pupils had low attainment at Key Stage 2. At Key Stage 4, the low attaining language groups were Slovak, Lithuanian, Romanian and Latvian speaking 'white other' pupils and Somali, Lingala and Portuguese speaking 'black African' pupils. These groups differ from those in our analysis for two reasons. Firstly, because our analysis looks at attainment for children arriving in English schools at different times, some groups are excluded from the reporting because they have low numbers arriving in a particular year group. Secondly, we did not restrict the children counted against a first language group by ethnicity; this particularly affects some of the languages in the 'white other' ethnic group, where those with recorded ethnicity of 'Gypsy/Roma Traveller' are excluded from Strand's analysis but included in ours.

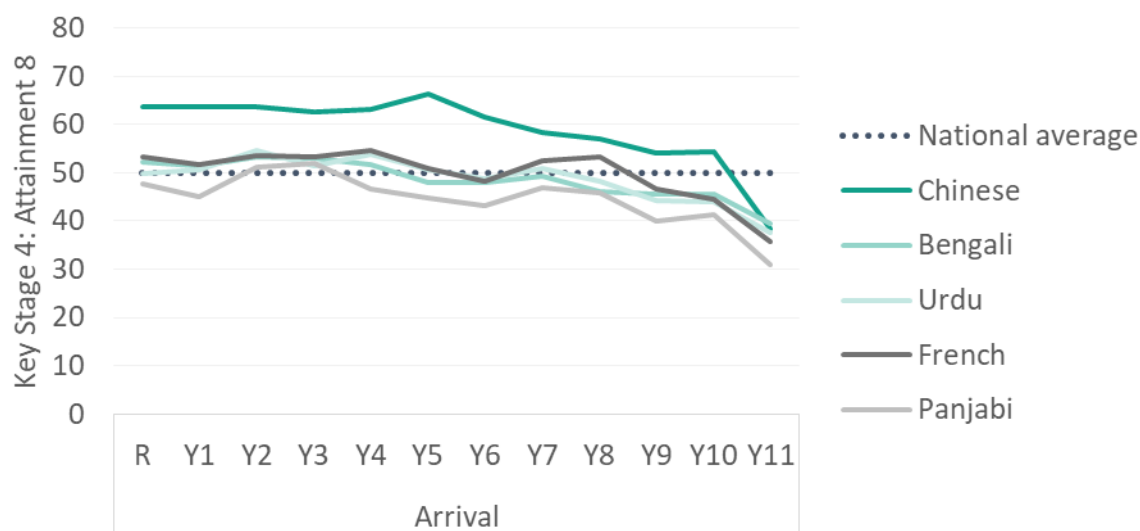
Figure 3.4: The highest attaining EAL groups at the end of Key Stage 2, by time of arrival



At Key Stage 4, only ten first language groups have sufficient numbers of pupils arriving in each year group from reception to year 11 to be able to chart their attainment broken down in this way. Attainment data is available for other first language groups, but we cannot report this as reliable estimates where groups have fewer than 30 pupils in a single age cohort for each arrival time.

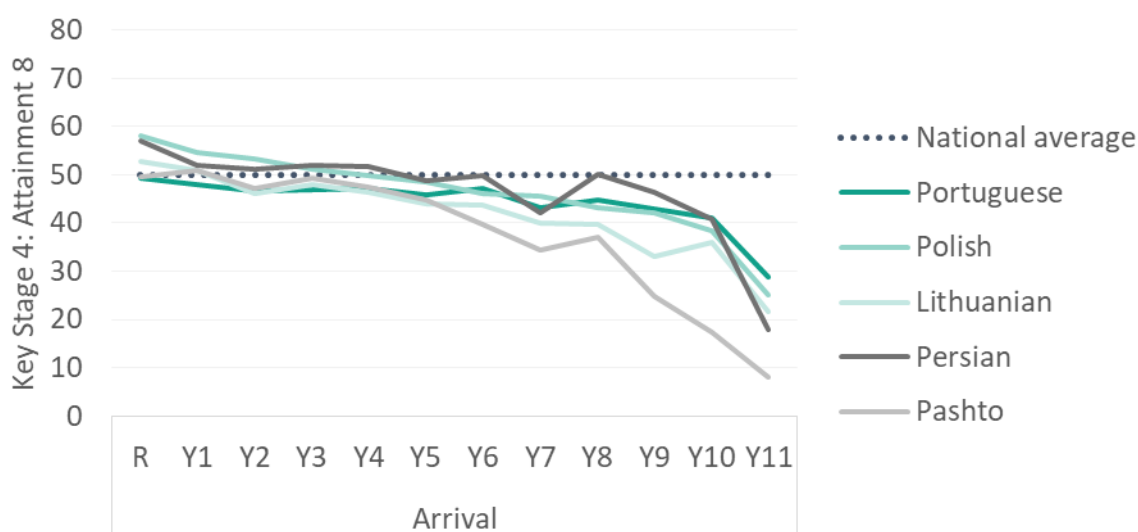
Pupils with Chinese as their first language have above-average Attainment 8 scores at age 16 if they have arrived as late as year 10; those with French have above average attainment if they arrived by year 8, and those with Urdu if they have arrived by year 7.

Figure 3.5: The highest attaining EAL groups at the end of Key Stage 4, by time of arrival



At the other end of the scale, pupils with Pashto or Lithuanian as their first language have below average attainment at age 16 if they have arrived after year 1, and those with Portuguese as their first language have below-average attainment even if they have attended English schools since the age of five.

Figure 3.6: The lowest attaining EAL groups at the end of Key Stage 4, by time of arrival



Following from this analysis, we use information about the attainment of children who were in English state-funded schools in reception year to create a benchmark against which to assess the attainment of each child with EAL. The benchmark models the potential attainment for each child if their school education had been located here from age 4-5.

In developing the prototype for the benchmark, we consider adjusting the expected attainment levels for children with EAL according to a set of additional factors that are also associated with attainment. The principle is that the actual attainment for children with EAL arriving after reception year can be assessed against the benchmark, which is based on children who were present in reception but had otherwise similar characteristics.

The additional factors tested in the benchmark are as follows:

- Ethnicity
- Gender
- Month of birth
- Any recorded special educational needs and disabilities (SEND), by type of need
- Deprivation at individual or neighbourhood level (per cent of school years in which they were eligible for free school meals and IDACI score of neighbourhood in which they live)
- First language

We do not use prior attainment in the benchmark options because of the missing data and misleading assessment problems described previously. Nevertheless, using all the characteristics listed above, we are able to explain almost one third of the variation (28 per cent) in attainment between pupils, which compares reasonably well with models including prior attainment.³⁵ This means our benchmark provides a good alternative to progress measures for children with EAL.

Three options for the specification of the benchmark model are introduced in the following table.

³⁵ Sutherland, A., Ilie, S. and Vignoles, A. (2015) *Factors associated with achievement at Key Stages 2 and 4*, London: Department for Education. This study found 33 per cent of variation in KS2 scores in the Millennium Cohort Study was explained by a model including prior attainment, measured as BAS raw vocabulary scores, alongside standard controls and a range of administrative deprivation measures.

Figure 3.7: Options for a new benchmark

Aim of benchmark	Identify a reasonable expectation for the attainment of children with EAL by reference to a benchmark comparison group's attainment		
Why is this needed?	To expose the size of the underlying 'EAL gap' including the missed potential of some children with EAL revealed by the high attainment of those who joined an English state-funded school in reception (age 4-5)		
Options for benchmark comparison group	EAL in reception	Same ethnicity, gender, month of birth, SEND and deprivation status	Same first language
Model A: Raw difference from reception joiners	Yes	No, all backgrounds	No, all languages
Model B: Adjusted for background characteristics	Yes	Yes	No, all languages
Model C: Adjusted for background and first language	Yes	Yes	Yes

These benchmark models aim to set reasonable expectations for the potential attainment levels we might expect if we were able to compensate for the language transition for children with EAL. Model C is the most detailed option, and can adjust for any differences between late arrivals and earlier arrivals in the probability of being economically deprived, or having special educational needs and disabilities; it also adjusts for the fact that there are separate gender and ethnic patterns to attainment irrespective of EAL status, by allowing the benchmark to move with these factors.

The benchmark models have a lot of flexibility but are not perfect; they cannot reflect educational losses for children who were born in England but were not proficient in English when they started school, because we have no means of knowing how much higher their attainment might have been if English were their first language but all else was equal. We can however compare children who were present in reception year and those who arrived later, controlling other characteristics (and hence allowing the benchmark to move with them) to keep these equal.

The following charts illustrate the size of the gaps for children with EAL, compared with children with EAL who joined an English state-funded school in reception, for each group who arrived in a subsequent year. The gaps for each benchmarking model (A, B or C) described in the box above are represented by the different coloured bars. For example, the dark grey bars represent Model C, and show the gap against the benchmark group of children who have EAL and joined school in reception, but who had the same first language, and also had the same ethnicity, gender, month of birth, SEND and deprivation statuses.

To illustrate the size of these effects, comparison gaps from Model C are given for children with visual impairments, and for those with speech language and communication needs (types of SEND).

The first chart shows the benchmarked gaps in reading and maths at Key Stage 2, and the second chart shows equivalent gaps in Attainment 8 at GCSE level.

Figure 3.8: Benchmarked gaps in Key Stage 2, under different options

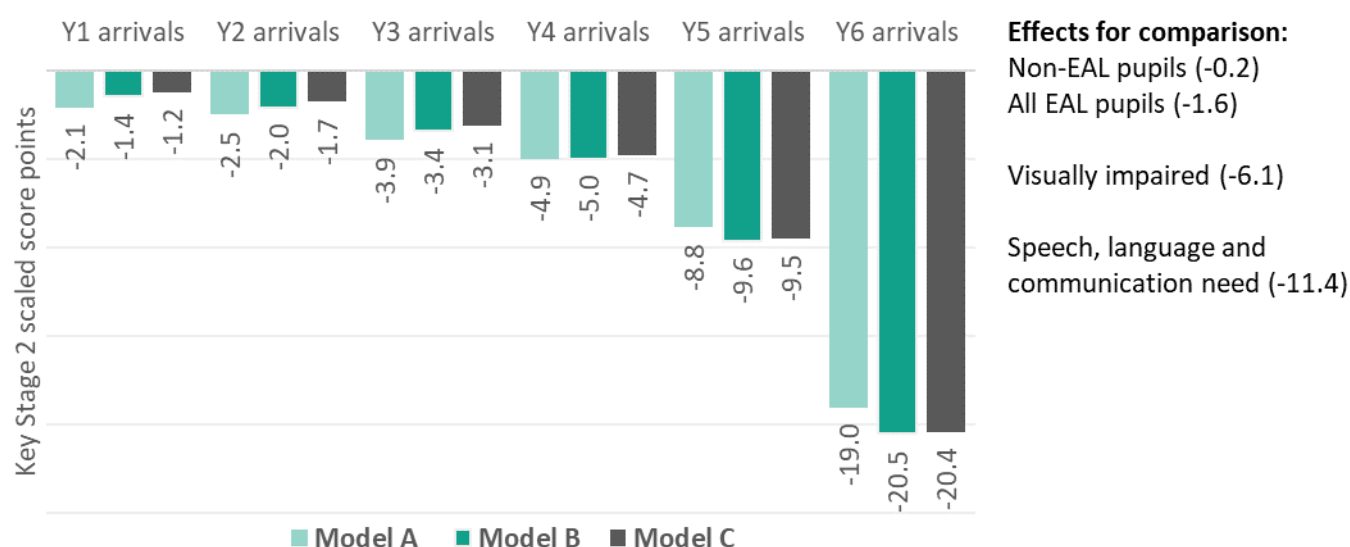
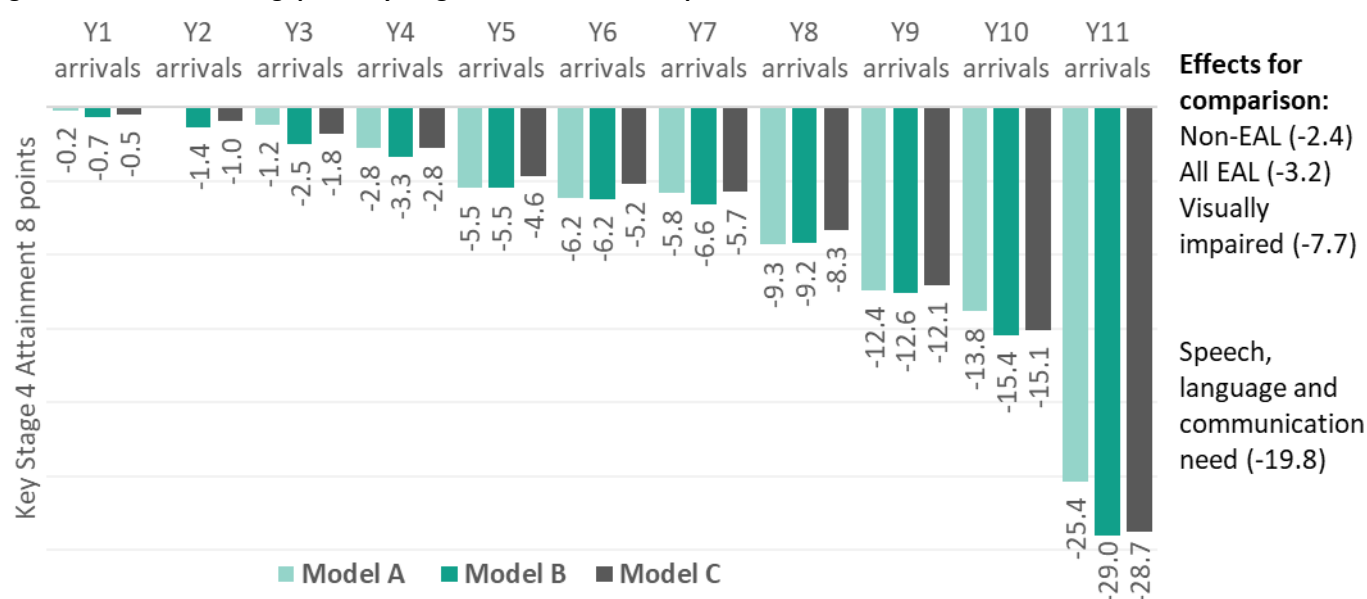


Figure 3.9: Benchmarked gaps in Key Stage 4, under different options



There are competing arguments in favour of the three different versions of the benchmarking model. To assess these we suggest five criteria, as follows:

- Simplicity – how easy is the model to calculate and understand?
- Nuance – how closely does the model account for multiple influences on attainment?
- Focus – how sharply does the model focus on proficiency in English as opposed to other strengths and challenges that correlate with EAL? This is in trade-off with nuance.
- Objectivity – does the model require us to make arbitrary choices about the benchmark group for attainment comparisons?
- Integrity – does the model create incentives for schools to ‘game’ the benchmarks by recording more EAL pupils as having particular characteristics, such as ethnicity or SEND?

The table below ranks the three models against these criteria (where 1 = most and 3 = least); this is followed by a discussion of the rankings and how these have been decided.

Figure 3.10: Assessment of options under desired criteria

Criteria	Model A: Raw difference from reception joiners	Model B: Adjusted for background characteristics	Model C: Adjusted for background and first language
Simplicity	1	2	3
Focus	1	2	3
Nuance	3	2	1
Objectivity	1.5	1.5	3
Integrity	1	2	3

Model A sets the benchmark so that the expected attainment level is the same for each different first language (but different for different arrival times). This means that estimated attainment losses by children with EAL include any language-to-language differences. It is likely that first language is also proxying for many non-linguistic factors that could impact on children's attainment. In some cases, it may proxy for refugee status, persecution, conflict or war, specific health threats, or having missed formal education; or at the other end of the scale it may proxy for being from an advantaged background. These are important issues but they are clearly distinct from linguistic proficiency, which is why Model C scores least well on 'focus'.

A second potential reason not to adjust the benchmark depending on the first language is that there is no obvious choice of language to set as the reference point for all others. Children with German as their first language are a possible choice based on their high attainment. However, this might be because German schools have taught English as a foreign language effectively, or because German parents are relatively likely to be proficient in English. It would be very difficult to decide what the optimal language group to benchmark against would be, and this could easily change over time.

A third reason not to adjust the benchmark according to first language is that we cannot assume that a single first language is identifiable for all children that provides all the relevant information about their linguistic history. Some children with EAL have moved countries and regions several times before arriving in England and may have been exposed to different languages at different stages of their speech and language development. The need to make an arbitrary choice of reference language and the reliance on a single first language is why Model C scores least well on 'objectivity'.

On a practical level, the data needed to derive arrival time has been available for all pupils since 2002, and the other data used to control for non-linguistic factors has been collected since the mid-2000s. It is difficult to game the arrival of a child in the system because the necessary information to identify when children were previously in another English school has already been provided by that previous school. It is in theory possible to manipulate the recorded ethnicity, first language, SEND status, etc. of children in order to achieve a different benchmark, which is why Model A scores highest on 'integrity' by avoiding the use of data items that are easier to 'game'.

It is worth noting that the overall pattern and order of magnitude of the gaps revealed at national level by the different benchmark models are quite similar irrespective of which model is chosen.

Including extra detail on children's background characteristics or first language does not change the overall level of ambition of the benchmarks much at this macro level, although it could change the benchmarks to a greater degree at a local level. It would be more worth considering using Model B or C in cases where a lower level of aggregation in the EAL attainment analysis is required.

Overall, the pattern of the results indicates that introducing a benchmark for late arrival would be a powerful tool for understanding lost opportunities for pupils with EAL, but that the decision over what else to put in the benchmark is less important than the decision to have a late arrival benchmark of one kind or another to begin with.

The table of criteria above suggests that Model A, based solely on arrival time, is an attractive option at the national level. However, this table is intended to help readers consider the options rather than to make a final judgement of the best option. It is possible that there are other considerations that should be included in addition to the five used here; it may also be the case that some criteria should carry greater weight than others; for example, at a localised level, nuance becomes more important than at a national level.

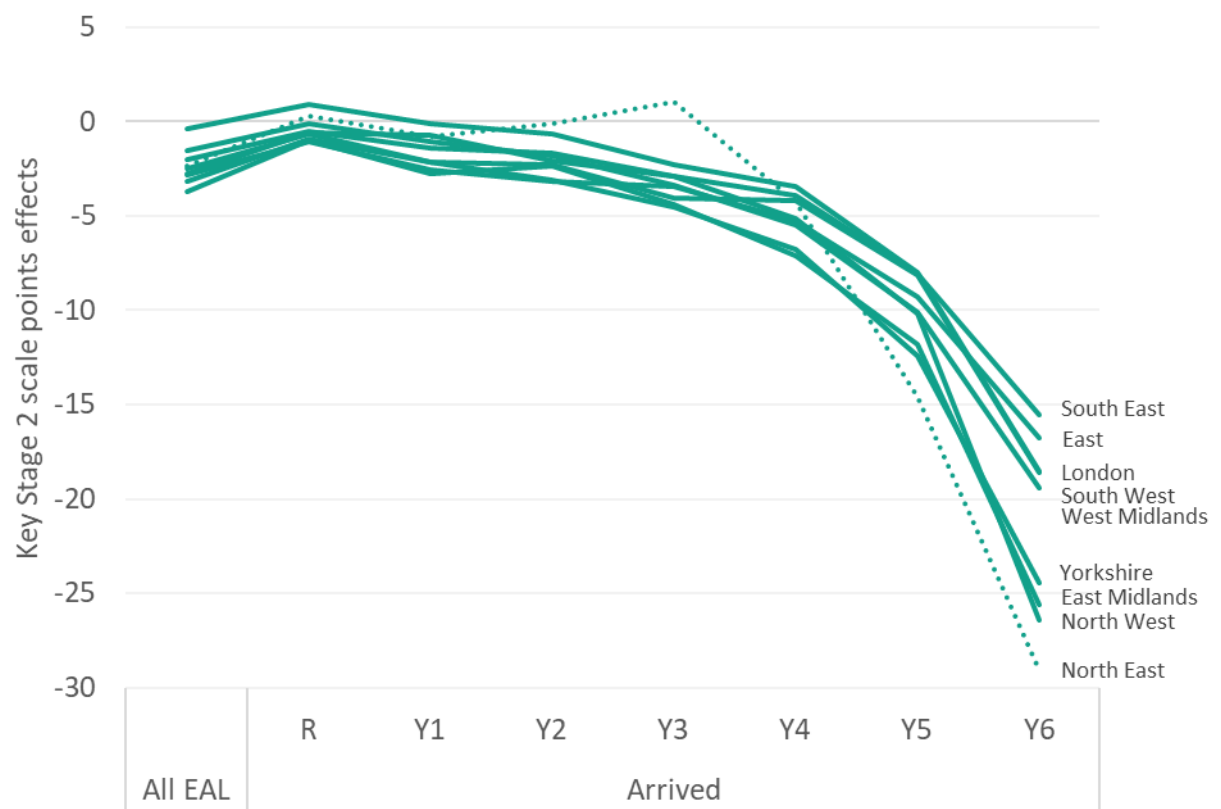
On balance, a good option may be for the government to publish regular basic attainment statistics for different first languages as well as late arrivals, but to establish benchmarks for the potential attainment of children with EAL using a simple model based solely on time of arrival.

To illustrate the scope for late arrival benchmarks to influence the attainment of pupils with EAL, we have compared performance in different regions. The analysis suggests that regional variations in the attainment of *the EAL group as a whole* are largely explained by differences between the children living in different regions, but that capacity to support *late arrivals* effectively could vary substantially between regions, with the North lagging well behind the South.^{36,37}

³⁶ The North East had low numbers of EAL pupils arriving after reception (between 73 and 101 per arrival point in this cohort), so its data points should not be used to draw any strong conclusions about this region.

³⁷ This finding holds true across Model versions A, B and C.

Figure 3.11: Regional variation in attainment at Key Stage 2



Part 4: Rounded EAL policy

Other English-speaking jurisdictions often have more extensive EAL policies than England. In particular there is a vacuum with respect to the creation and dissemination of new specialist expertise on EAL.

In England, the legacy of the Ethnic Minority Achievement Grant is fading fast in the absence of a national plan to preserve the knowledge that had been accumulated. With very few exceptions, local authorities are ceasing or reducing support to schools for this purpose. Our analysis of LA central spending on EAL in part 2 of this report documents this. There is currently no mechanism by which new specialists are likely to emerge under current funding pressures.

We have examined the arrangements for pupils with EAL in five other English-speaking jurisdictions; two of these are in the United States (New York State and Minnesota), one in Canada (Alberta), one in Australia (New South Wales), and the final one was New Zealand. Several observations can be made about the intended policy for EAL in these education systems.

Other English-speaking jurisdictions have policies with much greater emphasis on the following:

- Specialist roles, staff development and graduate level specialist qualifications.
- Guidance and/or minimum entitlements defining what support should be provided.
- Policy aimed at adequate provision in areas where EAL populations are sparse.
- Clear policies on parental and community engagement and provision choices.
- Valuing other languages through official certification of proficient bilingualism which is available to both EAL and non-EAL learners.

A summary of the international case studies that we have drawn from in this report is presented below for reference.

New South Wales, Australia

Eligibility	Language background other than English (including indigenous non-standard dialects and creoles) and at least one parent with schooling equivalent to year 9 or below
Funding	National government delegates additional 10 per cent of basic per pupil funding (\$995 primary/ \$1309 secondary) to State; State allocates to school based on numbers, time since arrival and stage of English proficiency
Assessment	National exemplification of four proficiency stages for each of three age-phases, organised by listening, speaking, reading/viewing, and writing; reported to State bi-annually
Staff & training	EAL specialist teachers support class teachers, develop and deliver EAL programmes, and prioritise students by need; professional teacher standards for EAL are available to support teachers' continuous professional development
Other features	Intensive English Centres cater for secondary-aged arrivals in metropolitan areas before integration into mainstream school; expected time to reach proficiency is 5-7 years, but up to 12 years if schooling has been limited or interrupted
Centralisation	Curriculum content and assessments are cross-referenced against EAL expectations; schools report on EAL spending annually but have flexibility in their approach to providing EAL support

Alberta, Canada

Eligibility	Foreign or Canadian-born children who require English language support to meet grade expectations, for a maximum of five years
Funding	Additional \$1178 per pupil, representing approximately 14-17 per cent of basic funding depending on phase and age
Assessment	Teacher-assessed proficiency with five stages covering behaviours and linguistic development; organised by four school phase distinctions (plus a fifth relating to pre-school children) and by reading, writing listening and speaking
Staff & training	No provisions specific to EAL
Other features	Extensive additional funded programmes for First Nation, Inuit and Methi students; Francophone programmes are also supported for this language minority group
Centralisation	Funding and assessment are the only centralised aspects of EAL; but these are fully integrated for pre-school and school phases

Minnesota, USA

Eligibility	Language other than English spoken at home and the student remains below the threshold proficiency test score in at least three of the four domains (reading, writing, speaking and listening); maximum of seven years eligibility
Funding	Estimated additional \$800 per EAL student in State and Federal funding (13 per cent of minimum basic funding); amount varies by concentration of EAL; the equity redistribution is greater than typical for US States
Assessment	Annual assessment of literacy in English by standardised test, and in native language 'where practicable'; also tested at entry to and exit from pre-school; the attainment of former EAL students is routinely tracked
Staff & training	Teacher certification and re-licensing requires EAL-specific professional development; there are incentives to use CPD funds for addressing EAL-specific training and development
Other features	Accreditation of proficiency in other languages
Centralisation	The progress of EAL students must be considered in the State's judgement of districts making insufficient progress; specific strategies can be mandated for districts failing to meet needs over time

New Zealand

Eligibility	First and second-generation migrants and refugees (up to five years while remaining below the proficiency threshold for first generation and up to three years while below the proficiency threshold for second generation)
Funding	\$650-\$1900 additional funding (approximately 9-27 per cent of basic funding), increasing with age-phase, in first year of eligibility, and for refugee background children; the proficiency threshold is higher for older students
Assessment	Detailed teacher-reported attainment of competence descriptors, organised by six age-phases, and by speaking, listening, reading and writing
Staff & training	Extensive CPD resources (including books and DVDs) are provided for specialist and mainstream school staff; there are scholarships for specialist study of EAL education at Higher Education Institutions
Other features	Guidance is provided for intensive immersion programmes; online advanced English classes are provided for students in secondary schools without an EAL specialist staff; separate programmes exist for Maori language support
Centralisation	EAL assessments and teaching resources aligned with the nationally-determined curriculum, and with mainstream literacy assessments; the approach to EAL is coordinated and holistic but relies on incentives rather than mandating

New York State, USA

Eligibility	Language other than English spoken at home and remains below proficiency test score; New York State is introducing separate designations and funding for children with interrupted formal education (\$490)
Funding	\$1461-\$2053 scaled by age-phase (40-50 per cent of base funding); introducing a higher rate for bilingual education programmes; there is a lower rate of ongoing support for students who reached proficiency in the last two years
Assessment	State standardised proficiency tests are used; districts must identify under-performing EAL students for extra support and provide support to former-EAL students; bilingual proficiency standards are applied not just English proficiency
Staff & training	Teachers must complete at least 26 hours of EAL-specific CPD; additional grants exist for extra trained staff to run the mandated minimum hours of EAL programmes
Other features	Home-school communications must be available in the home language; bilingual proficiency is accredited and valued; a choice of bilingual or transitional programmes are available and may influence school placement
Centralisation	Grade-specific programmes for groups of 20+ students with the same first language; programming must be minimum 360 minutes/week initially, reducing to 90; first stage must include stand-alone and integrated tuition

England has taken the first step towards catching up with these jurisdictions with respect to EAL assessment and proficiency data. But in their contrasting level of detail, the EAL policies in these jurisdictions highlight a policy vacuum with respect to initial teacher training, specialist qualifications, and oversight of professional development specific to EAL education in England since 2010. While the plans for funding EAL support and assessment have begun to develop, it is not possible to predict what might happen to attainment standards in the absence of a more comprehensive policy for preserving the legacy in expertise from the Ethnic Minority Achievement Grant.

Appendix: Cloud Chamber Analysis of EAL attainment in schools

The analysis in this part of the report was conducted by Cloud Chamber on behalf of The Bell Foundation. It is presented here as a useful tool for understanding the distribution of performance and needs for children with EAL, and for targeting efforts to support schools to improve their performance. The Education Policy Institute was not involved in the production of this analysis.

Objectives of the analysis

The Bell Foundation commissioned Cloud Chamber to conduct a school-level analysis of relevant EAL indicators for internal purposes.

Methods

Data were collated from the following key sources into a single school-level dataset:

- School Census (2015/16 and 2011/12);
- KS2 Performance Data (Revised, January 2017);
- KS4 Performance Data (Revised, January 2017);
- Cleaned and processed data for analysis (see data limitations);
- Imported subsets of the data in Google Fusion tables for highest (or lowest) deciles;
- Produced both point and heat maps illustrating clustering in the data.

Descriptive Statistics for the dataset

Description	Percentage of pupils with English not as first language	Percentage of pupils eligible for free school meals	Percentage of EAL pupils reaching the expected standard in reading, writing and maths	Reading progress measure for EAL pupils	Average Attainment 8 score per pupil for whom English is an additional language	Progress 8 measure - pupils for whom English is an additional language	Percentage point growth in %EAL (2011/12 – 2015/16)
N	21,711	21,565	4,518	2,201	2,088	1,621	16,224
Mean	15.0	14.6	54.4%	0.4	52.1	0.5	2.1
Median	5.8	11.2	54.0%	0.0	52.1	0.5	1.1
Min	0.0	0.0	5.0%	-8.0	0.0	-2.6	-87.2
Max	100.0	90.0	100.0%	13.5	78.2	1.8	70.5
Standard deviation	21.0	11.6	20.1%	2.8	8.7	0.4	5.7
Upper quartile	18.8	20.8	69.0%	2.0	56.8	0.7	4.1
Lower quartile	1.9	5.6	40.0%	-1.3	47.2	0.2	-0.1
Interquartile range	16.9	15.2	29.0%	3.3	9.6	0.49	4.2
90th Percentile	47.26	31.5	82.0%	4	62.29	0.97	8.3
95th percentile	66	38	88.0%	5.3	66.69	1.13	12
99th Percentile	89.2	50.6	100.0%	8.2	74.8	1.427	19.4
10th percentile	0.00	2.90	29.0%	-3.00	42.31	-0.03	-2.40
5th percentile	0.00	1.80	21.0%	-4.00	39.36	-0.19	-4.70
1st percentile	0	0	11.0%	-5.8	30.573	-0.571	-11.6

Concentrations of pupils with EAL

The following heat map displays the areas with the highest concentrations of children with EAL, measured in terms of schools in the top 10 per cent nationally by percentage of pupils with English as an additional language. Red denotes the highest concentration, yellow denotes medium concentrations and green denotes low concentrations.



Low attainment by pupils with EAL

The following pair of heat maps displays the geographic areas with the highest concentrations of schools with low attainment for EAL pupils. Low attainment at Key Stage 2 refers to those schools in the bottom 10 per cent according to the percentage of their pupils with EAL attaining the expected levels in reading, writing and maths; at Key Stage 4, it refers to schools in the bottom 10 per cent according to the average Attainment 8 score of pupils with EAL.

At Key Stage 2, the heat map reveals clustering in urban areas:

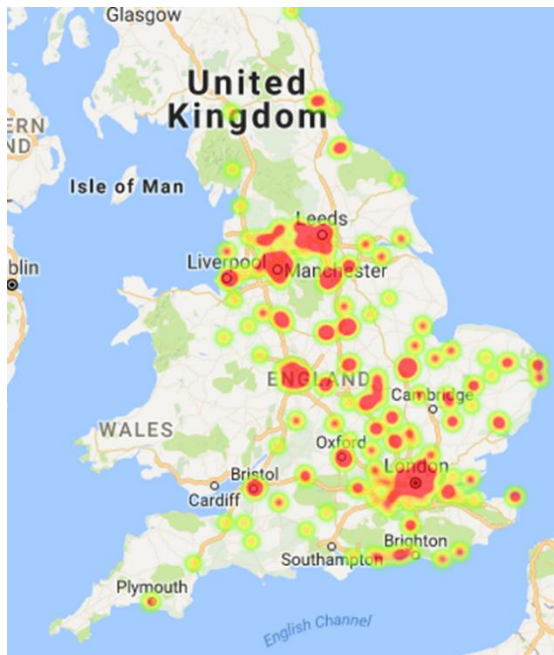
- London
- West Midlands (Birmingham & Stoke)
- West and South Yorkshire (Leeds, Bradford & Sheffield)
- Greater Manchester
- East Midlands (Nottingham & Derby, Northampton, Kettering & Corby)
- South East (Luton, Bedford & Milton Keynes)

- North East (Middlesbrough & Newcastle)

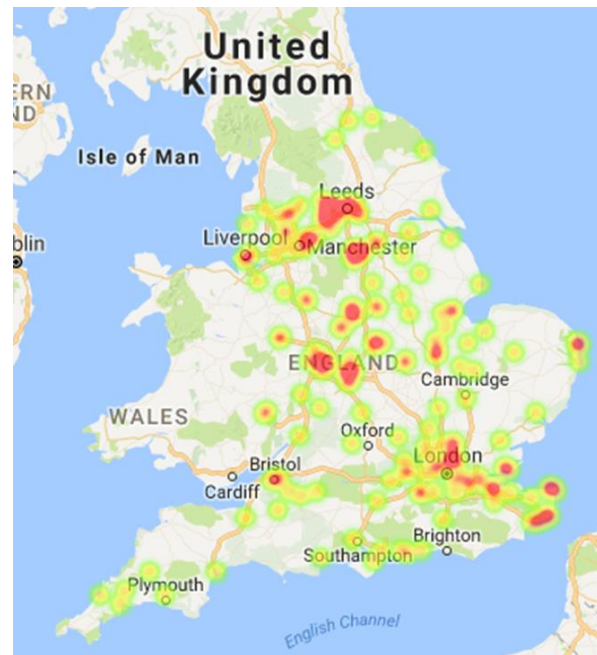
There is additional clustering in small market towns with pockets of low attainment, primarily in the East of England, with a significant cluster in Peterborough. Coastal clusters are found in Hampshire, Sussex and Margate, and further clusters are found in South Oxford and North East Bristol.

At Key Stage 4, there remains clustering of low attainment in Peterborough and the coastal East, and in Bristol. Clusters are apparent in Yorkshire and Lancashire focused on Oldham, Bradford, North Sheffield and Rotherham. The North East appears to have lower concentrations than at Key Stage 2, as does Oxford. Within London, the clustering moves to the North and South East of the region. Low attainment for pupils with EAL is spread further across Kent than at Key Stage 2.

Low-attaining schools at Key Stage 2

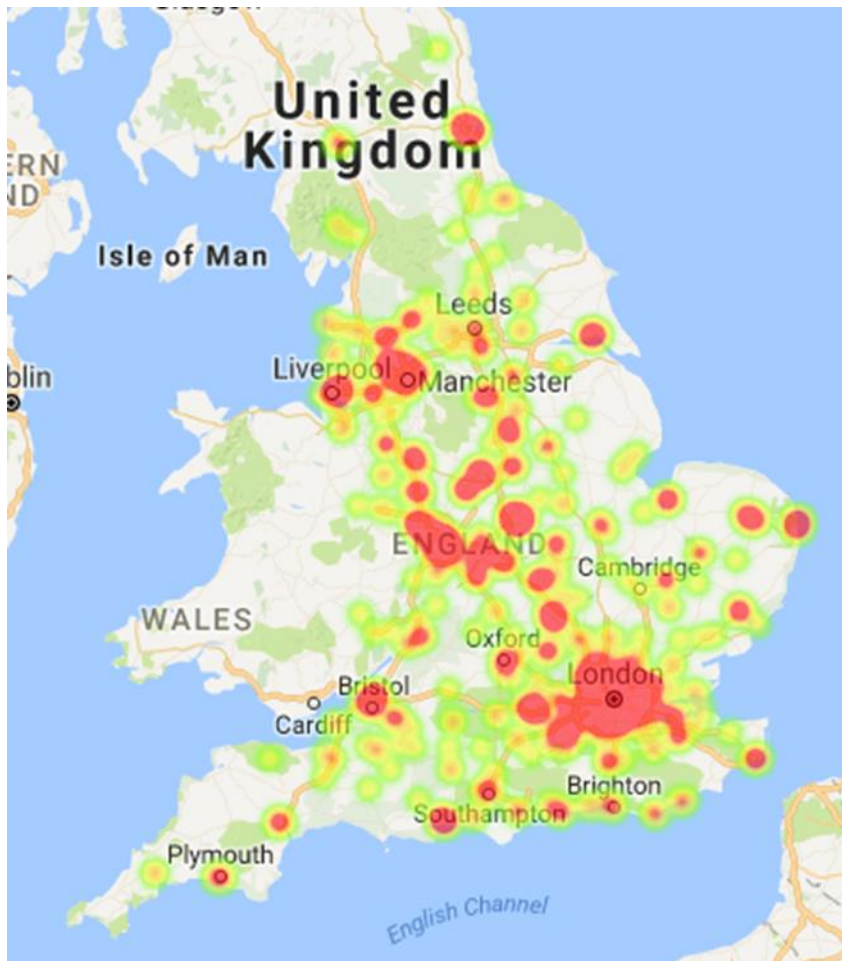


Low-attaining schools at Key Stage 4



Growth in populations of pupils with EAL

Some of the clusters of low attainment for pupils with EAL coincide with increases in the size of the EAL population between 2011 and 2016. The following heat map displays clusters of schools in the top 10 per cent nationally according to the size of increases in their proportions of pupils with EAL. This is particularly the case in Middlesbrough, Great Yarmouth, Bristol, Oxford, the South East Coast and Kent. Manchester and Liverpool have also experienced higher growth in comparison with Leeds.



Data Limitations

Suppressed data:

- Large volumes of data at the school level for EAL pupils are suppressed because of identification issues (either small number on roll, or small number of EAL pupils);
- The analysis is therefore limited in comparison to analysis of aggregated data from the National Pupil Database.

Missing data:

- Missing data for EAL is common, especially at KS2. This is often due to the inclusion of infant schools and free schools;
- In many other cases, the reasons why data is missing for EAL pupils are not apparent.

High prevalence of 'Zeros' in KS2 EAL attainment data:

- In the KS2 EAL attainment variable there are approximately 6,000 zeros coded in the dataset. This affects our calculation of deciles (the top and bottom 10 per cent of schools);
- Schools with zero values for KS2 EAL attainment have been excluded, although it may be perfectly legitimate for KS2 EAL attainment to be 0 per cent for some schools.