Education Endowment Foundation

IPD meta-analysis: The impact of EEF-funded trials on the educational attainment of pupils with English as an additional language (2011-2024)

November 2025

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This project has been co-funded by The Bell Foundation and Unbound Philanthropy.

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This work applied the Individual Participant Data meta-analysis approach to assess the overall impact of the Education Endowment Foundation (EEF)-funded educational interventions on the group of pupils with English as an Additional Language, defined based on their time since arrival in the United Kingdom. It was carried out under the umbrella of the Durham Research Methods Centre as a collaborative project spanning researchers within Durham University from the School of Education, Department of Mathematical Sciences, Department of Anthropology, as well as the Teesside University School of Health and Life Sciences, with track records in evaluation of educational interventions, meta-analysis of evidence in education and advanced quantitative methods. We have partnered with the EEF to improve the educational attainment of pupils from disadvantaged backgrounds for more than five years by providing methodological support and translation of evidence to educational stakeholders.

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List of abbreviations

BAG	Baseline Attainment Group
CI	Credible Interval
EAL	English as an Additional Language
EEF	Education Endowment Foundation
FSM	Free School Meals
GDPR	General Data Protection Regulation
IPD	Individual Participant Data
LSYPE	Longitudinal Study of Young People in England
NPD	National Pupil Database
ONS	Office for National Statistics
PTE	Progress Test in English
PTM	Progress Test in Maths
RECyear	Reception year
RISE	Research Leads Improving Students' Education
RQ	Research Question
SD	Standard Deviation
SEND	Special Educational Needs and Disabilities
SRS	Secure Research Service
STEM	Science, Technology, Engineering, and Mathematics
ToA	Time of Arrival
TSA	Time Since Arrival
UK	United Kingdom
US	United States
WAL	Welsh as an Additional Language

Executive summary

Background

This study examines the pooled effects of Education Endowment Foundation (EEF)-funded trials on literacy and mathematics attainment outcomes for pupils with English as an Additional Language (EAL), focusing on their time since arrival (TSA) into the United Kingdom (UK) schooling system.

In general, EAL pupils are a highly diverse group, and as noted by Hutchinson (2018), their educational attainment often depends on how long they have been in the UK schooling system. Pupils with lower values of TSA, meaning they entered the system more recently, tend to have lower baseline attainment (Hutchinson, 2018), particularly in English. Research by Strand and Lindorff (2020, 2021) and Demie (2018) also found that English proficiency and attainment scores are strongly influenced by the time pupils have spent in the schooling system. Late arrival EAL pupils often face significant challenges due to limited exposure to both the curriculum and the English language. These challenges are more pronounced in literacy outcomes, as mathematics relies less on language proficiency.

Using the EEF data archive, the research objectives of this study were to examine the overall pooled effects of both mathematics and literacy EEF-funded trials on EAL pupil attainment, the differential effects between EAL and non-EAL pupils, and to understand how EAL pupil attainment impacts varied depending on the pupil's time of arrival in the UK education system. The complete set of explored research questions are presented in Section 1.4.

Methods

The study utilised data from 128 EEF-funded trials, involving over half a million pupils. Using May 2024 as a cut-off point, all the EEF trials available in the EEF archive from 2011 to this date were considered. Multi-arm trials (only 7% of all trials) were analysed as sub-sets of two-arm trials. Certain exclusion criteria (for e.g. excluding trials without EAL pupils, literacy or mathematics outcomes) were also applied and are detailed in Section 2.1 of this report. The final sample comprised of 51 trials focusing on literacy outcomes (46,267 EAL pupils) and 25 trials focusing on mathematics outcomes (49,296 EAL pupils).

To estimate the overall pooled Hedges' g effect sizes, an Individual Participant Data (IPD) meta-analysis was conducted using Bayesian multilevel models. The effect sizes were additionally estimated by Key Stage, type of outcome, study design, and the type of intervention. Types of intervention were classified into one-to-one, small group, whole class, and whole school intervention depending on the mechanism of the intervention delivery. Additionally, we conducted analyses on EAL pupils eligible for free school meals (FSM).

The TSA designation was defined as the number of years spent by a pupil in the UK schooling system, from when they first entered the UK schooling system up to the post-test year of the EEF trial they were involved in. Based on their duration of exposure to the UK schooling system, EAL pupils were classified as earlier (longer exposure with larger TSA values) or late (recent arrivals or shorter exposure with smaller TSA values) arrivals for additional sensitivity analyses.

Key findings

1. Overall, EEF-funded trials have had a small positive impact on EAL pupil attainment in literacy, including for EAL pupils that are eligible for FSM, and no impact on EAL pupil attainment in mathematics.

Literacy trials: The overall impact of EEF-funded literacy trials was positive with a pooled effect size of 0.058 (95% credible interval (CI): 0.017, 0.100) for EAL pupils and 0.067 (95% CI: -0.004, 0.133) for EAL pupils eligible for FSM. These results translate to an equivalent of one month's progress in literacy attainment.

Mathematics trials: The pooled effect size for EEF-funded mathematics trials was 0.028 (95% CI: -0.015, 0.070) for all EAL pupils and 0.040 (95% CI: -0.025, 0.106) for EAL pupils eligible for FSM. These results translate to no additional months' progress in mathematics attainment.

For the full set of results, refer to Sections 3.3.1 and 3.3.2. For results disaggregated by Key Stage and type of intervention refer to Section 3.5.

2. The impact of EFF-funded literacy and mathematics trials on pupil attainment is similar for both EAL and non-EAL pupils.

Literacy trials: The pooled effects from EEF-funded literacy trials were nearly same for EAL and non-EAL pupils (attainment gap effect size of 0.007 (95% CI: -0.034, 0.049)). In comparison with non EAL-FSM pupils, there was a slightly higher differential effect for EAL-FSM pupils (attainment gap effect size of 0.014 (95% CI: -0.055, 0.081)). Both attainment gap estimates translate to no additional months of progress in literacy attainment.

Mathematics trials: Similarly, there was no evidence of an average differential effect between EAL and non-EAL pupils participating in EEF-funded mathematics trials (attainment gap effect size of 0.002 (95% CI: -0.030, 0.037)). In comparison with non-EAL-FSM pupils, there was a marginally higher differential effect for EAL-FSM pupils (attainment gap effect size of 0.018 (95% CI: -0.042, 0.080)). Both attainment gap estimates correspond to no additional months of progress in mathematics attainment.

For the full set of results, refer to Sections 3.3.1 and 3.3.2.

3. EAL pupils that arrived later into the UK schooling system have lower prior attainment on average compared to earlier arriving EAL pupils and non-EAL pupils.

Among EEF-funded literacy trials, the lowest mean standardised prior attainment was observed for late arrival EAL pupils (mean: -0.797; (standard deviation (SD): 1.475), followed by earlier arrivals (mean: -0.083; SD: 0.974), and then non-EAL students (mean: 0.016; SD: 0.965). A similar trend was observed among EEF-funded mathematics trials, with the lowest mean standardised score of -0.395 (SD: 1.324) for late arrivals, -0.003 (SD: 0.997) for earlier arrivals and 0.021 (SD: 0.972) for non-EAL pupils. There were a few exceptions where the opposite occurred; among Key Stage 2 funded mathematics trials the mean scores were 1.256 (SD: 2.365) for late arrivals, -0.066 (SD: 0.955) for earlier arrivals, and -0.036 (SD: 0.871) for non-EAL pupils. This may reflect mathematics being less language-dependent, allowing some late arrivals with strong skills to perform well despite their recent arrivals.

For the full set of results, refer to Section 3.2.

4. The impact of EEF-funded trials on EAL pupil attainment is marginally greater for pupils that arrived later in the UK schooling system compared to earlier arriving EAL pupils.

Literacy trials: The average impact of EEF-funded literacy trials on EAL pupil attainment decreases by a pooled effect size of 0.03 per additional prior year of entry into the UK schooling system (95% CI: -0.082, 0.020). For EAL pupils eligible for FSM, the pooled effect size decreases by 0.048 (95% CI: -2.371, 2.308) per additional prior year of entry into the UK schooling system.

Mathematics trials: The average impact of EEF-funded mathematics trials on EAL pupil attainment decreases by a pooled effect size of 0.01 per additional year of prior entry into the UK schooling system (95% CI: -0.036, 0.017). For EAL pupils eligible for FSM, the pooled effect size decreases by 0.043 (95% CI: -2.337, 2.327) per additional prior year of entry into the UK schooling system.

For the full set of results, refer to Sections 3.3.3 and 3.4. For results disaggregated by Key Stage and type of intervention and for late arrivals refer to Section 3.5.

Robustness

The main analysis excluded trials with insufficient sample sizes (fewer than five pupils in any TSA category, i.e. late or earlier arrivals). To assess robustness, a sensitivity analysis was conducted by including these trials. The results showed no significant changes in the estimates compared to the main analysis. In the main analysis, pupils were categorised as earlier arrivals if they had spent at least 50% of their school time in the UK, with others classified as late arrivals. An alternative cut-off, defining earlier arrivals as those with more than two years in the UK system, was also tested. Both approaches consistently demonstrated that EEF-funded interventions had a greater impact on late arrivals than on their peers. Similarly, restricting the analysis to high evidence security rating projects (padlock ≥ 3) aligned with the main findings from the EAL subgroup analysis based on TSA, reinforcing the robustness of the approach.

Conclusion

This study finds that EEF-funded interventions have positively impacted literacy outcomes for EAL pupils, with greater impacts are observed for those who arrived later in the UK schooling system. However, the difference in effects on mathematics outcomes on EAL pupils remain limited.

The insights from this report are essential for guiding educators and policymakers towards the need for tailored support for EAL pupils, especially those who arrive late and are eligible for FSM. Notably, FSM-eligible EAL pupils who have spent less time in the education system benefit similarly in both literacy and mathematics, with their impact being more pronounced than that of the overall EAL pupils' population. By identifying the specific needs of these groups, educational interventions can be more effectively designed to bridge the attainment gap between EAL, especially late arrivals, and non-EAL pupils. This research indicates the role educational interventions can play in improving educational outcomes for the most deprived populations in the UK and providing all pupils with the opportunity to succeed.

Limitations

This is an exploratory project that aims to build formative knowledge about the pooled effects of EEF funded literacy and mathematics trials on EAL pupils, and to explore how cumulative impacts vary according to different methodological design features among the selected studies. The meta-analysis does not combine studies according to any shared aspects of their programme theories or themes of education practice. The studies grouped for this meta-analysis also vary according to their security ratings.

While the study goes beyond a simple binary classification of EAL/non-EAL by incorporating TSA, TSA may still not fully capture individual differences in English language proficiency, which can influence pupils' ability to engage with literacy and mathematics interventions in different ways. As TSA was determined using local authority codes from the spring census, which excluded pupils who joined the UK schooling system after the census, discontinuities in school attendance were not considered. Years spent in nurseries were excluded to ensure comparability across schools, as not all schools provide nursery facilities. Additionally, late arrivals were underrepresented in the sample, particularly in the attainment gap analysis where late arrivals were compared to the non-EAL pupils.

1. Introduction

The Department for Education (2025a) defines pupils with 'English as an Additional Language (EAL)' as those whose first language is not English. These pupils have been exposed to a language other than English during early development and continue to encounter this language at home or in their community. A pupil's first language is recorded in the annual school census (Department for Education, 2025b). The term EAL is often used interchangeably with the term 'English as a Second Language'. As Hutchinson (2018) notes, British citizens who speak another language at home can also be classified as EAL pupils. As Strand *et al.* (2015) highlight, EAL status recorded in the National Pupil Database (NPD) does not reflect pupils' proficiency in English. The EAL group, therefore, encompasses pupils who are competent or proficient in English as well as those who have high proficiency in another language (Lindorff *et al.,* 2025). These factors contribute to the complexity of EAL classification. For this reason, proficiency in English has been suggested as a stronger predictor or indicator of pupil achievement than EAL status (Hessel and Strand, 2023; Strand and Lindorff, 2021). The EAL group also consists of pupils who would be referred to as 'English Language Learners' (e.g. Wright and Li, 2008). In contrast, non-EAL pupils, who speak only English at home, are regarded as monolingual (Hessel and Strand, 2023).

EAL pupils constitute a diverse group, differing in socio-economic and demographic backgrounds (e.g. household income, ethnicity (Department for Education, 2024b), and free school meals (FSM entitlement), which contribute to heterogeneity in their academic achievement (e.g. Department for Education, 2023a; Sandilos *et al.,* 2020). Pupils who use EAL often have parents with lower levels of socio-economic status (Callahan *et al.,* 2010). Some EAL pupils may experience the high parental expectations of their immigrant parents, who aspire for their children to achieve educational success and a better life (Roessingh and Douglas, 2012). Hutchinson (2018) highlighted that the EAL group encompasses a wide range of characteristics related to their English proficiency, including the age at which pupils entered the English schooling system, their prior education experiences, and their first language. For example, at Key Stage 2 the Pashto, Panjabi, Turkish, Portuguese, Czech, and Slovak language groups had attainment below the national expected standard, and those of Tamil, Chinese, and Hindi had attainment above the national standard. In addition, Hutchinson (2018) noted that variations in the attainment of EAL groups could be observed, partly due to differences in the regional composition of EAL pupils and the support systems for late arrivals across the North and South of England. However, these regional disparities should not be considered conclusive, as cohort sizes vary significantly.

Education systems in many English-speaking countries have supported pupils who use EAL not only by improving their English proficiency but also social integration, considering that this can affect the national economic growth along with higher educational achievement (e.g. Roessingh and Douglas, 2012). In the United States (US), the policy named the No Child Left Behind Act was introduced for children to develop the ability to read at grade level by a certain age (Callahan *et al.,* 2010; Wright and Li, 2008). This policy facilitated immigrant children's access to other areas of learning and was later replaced by Every Student Succeeds Act in 2015. Australia, with a high level of migration record, has also laid out a variety of policies and programmes in place to support pupils who use EAL. These programmes promoted their English language competence and social engagement, and they have been specifically operated depending on states and territories (e.g. Department for Education, Children and Young People, 2024). Likewise, EAL education in Canada has different educational competency plans, guidance, and strategies along with provincial and territorial responsibility (e.g. Government of Ontario, 2008). In England, the Department for Education used five scales to assess English proficiency (e.g. new to English, early acquisition, developing competence, competent, and fluent) in order to inform systematic supports for EAL pupils (Department for Education, 2020). However, this framework was only in use for a two-year period (between 2016 and 2018) and is no longer officially implemented in England (Strand and Hessel, 2018), though similar scales remain in place in Wales (Stats Wales, 2024). During the period when the five scales of English proficiency assessment were in use, the Department for Education (2020) stated that teaching and learning standards for EAL pupils across all Key Stages should be embedded within the national curriculum. The Bell Foundation, thus, has supported a fully integrated approach to the education of EAL pupils to be efficiently adopted in the mainstream education system for social integration and equality of access to education (The Bell Foundation, 2020). Scotland, Wales, and Northern Ireland have had different education policies and systems for EAL pupils (Knight *et al.,* 2025). For example, alongside EAL, Wales also recognises Welsh as an Additional Language (WAL) in the same way (Welsh Language Commissioner, 2023). Scotland, for instance, has had the Additional

Support for Learning Action Plan for EAL pupils as well as any pupils who need additional support in education (Education Scotland, 2024).

Linguistic support given to recent immigrants in the US in an early stage of English acquisition has shown benefits to their mathematics-related attainment (Callahan *et al.,* 2010). Sandilos *et al.* (2020) remarked that pupils with limited English proficiency exhibited lower educational achievement and self-efficacy, compared to pupils with English proficiency based on a sample of pupils based in the US. The pupil's self-efficacy accounted for the relationship between the limited English proficiency and achievement in science, but not in mathematics. Since self-efficacy plays a crucial role in helping pupils effectively enhance their English proficiency in speaking, reading, writing, and listening, self-efficacy is required for pupils as well as EAL teachers who interact with them (e.g. Woodcock *et al.,* 2019). If EAL pupils do not receive adequate instructional support in both mathematics and science, they may struggle to understand the language of instruction, making it harder for them to grasp the content. This, in turn, can result in feelings of low self-efficacy (Sandilos *et al.,* 2020).

Pupils who use EAL have varying levels of English proficiency and therefore, need tailored interventions that account for the proficiency differences, supported by pedagogically well-considered strategies (Sandilos *et al.,* 2020). The academic measures, which come from well-managed and gathered resources, can help teachers and schools understand the disparities and struggles of different groups and provide practical support to them. Hessel and Strand (2023) highlighted that a limited understanding of pupils' English proficiency among teachers and policymakers, along with a poor grasp of practical strategies, could hinder the identification of effective tools and the provision of proper support to vulnerable pupils in terms of improving their learning. Teachers working closely with EAL pupils may, for example, feel unconfident in navigating diverse multilingual classrooms and meeting the specific needs of EAL pupils. The Department for Education (2023b) reported that fewer early career teachers felt their training had adequately prepared them for teaching in multilingual settings, based on a survey in 2022. Similarly, Foley *et al.* (2019) showed that many early career teachers expressed a lack of confidence in their own expertise in guiding their pupils in EAL practice.

According to The Bell Foundation (2024), more than one in five pupils are those who use EAL in England. Although it is important that all teachers entering the multilingual classrooms have the skills and knowledge for supporting EAL pupils, very few mainstream schools in England will have dedicated EAL teachers. Some may have an EAL coordinator but in most cases, they are a class or subject teacher with some additional time for EAL pupils. The Initial Teacher Training and Early Career Framework (Department for Education, 2024a) do not include approaches specific to particular additional needs of EAL pupils, so it can cause devolving responsibility to individual providers. EAL support is often not a key feature of initial teacher education. Inclusion of EAL support to this framework is highly expected to help EAL teachers—especially for early career teachers as well as EAL pupils. This can also encourage EAL teachers to build up their confidence in knowledge around EAL pupils' diversity and have more concrete tailored pedagogical practical strategies (e.g. Turner, 2015). This confidence can be reached with active collaborations through the recognition of complementary skill sets, the use of collaborative teams, and the inclusion of multiple perspectives in planning. EAL teacher education is expected to help EAL pre-service teachers become cross-curricular qualified specialists in language development. Furthermore, for sustainable EAL education, schools should establish relations between institutional and social practices, identities, and language resources. They need to understand common situations where pupils from linguistic minority backgrounds may find themselves in positions where they are uncertain about the transformation of their identity and underutilise their linguistic and intellectual resources (Miller, 2000).

1.1 Time since arrival (TSA)

The time of arrival (ToA) has been used as a critical variable in various research sectors along with other factors in education, marriage, labour market, and residual environments (Hull, 2022). ToA is a static variable, which is determined by the entry into the United Kingdom (UK) schooling system. For example, a pupil who arrived in Year 5 would have a ToA of 5 regardless of the year of assessment. ToA can be interchangeably replaced with age at migration (e.g. Roessingh and Douglas, 2012). Hull (2022) suggested the relative ToA, which seems a similar concept of TSA but also specifies a cross-generational difference (e.g. first and second generation of immigrants), which can be calculated by subtracting the child's birth year from the family's year of migration. In this report, we use a similar concept as ToA but we instead opt for a variable, which dynamically encapsulates the time passed between the year of entry into the UK schooling system and the time of

assessment, to which we refer as TSA. At the end of Key Stage 2 (Year 6), a pupil who arrived in Year 5 would hence have TSA as 2. In this manner, TSA relatively includes the length of time in a continuous and dynamic meaning.

The criteria for threshold on TSA to categorise early and late-arriving EAL pupils suggested in previous research varied significantly. Callahan *et al.* (2010) used a cut-off of five years for TSA (i.e. arrived in the US five years or less prior; arrived in the US six years or more prior) to define EAL groups and found that most EAL pupils immigrated during early teens and arrived a few years prior to the data collection. Roessingh and Douglas (2012) found no significant difference in overall educational attainment between younger arrivals (those aged under 14) and older arrivals (those aged 14 and above), nor between earlier arrivals and non-EAL pupils in their sample in Canada. Based on proficiency scales data from 2017 to 2018, the Department for Education (2019) stated that EAL pupils who joined an English school after Reception class were less likely to reach the expected standard in comparison to those whose first language is English, and at Key Stage 4 EAL pupils who joined an English school before Year 2 have a slightly higher attainment score than those whose first language is English.

With regard to TSA, we categorise pupils as 'earlier arrivals' (i.e. longer TSA), if they arrived in the UK at a younger age and have spent more time in the UK schooling system than in any other countries outside the UK. Conversely, 'late arrivals' (i.e. recent arrivals or shorter TSA) are those who arrived in the UK at an older age and spent more time in education outside the UK schooling system. However, this categorisation may not fully capture factors like pupils who experienced disrupted schooling, such as refugees or asylum seekers and those who have received education in multiple countries. In this report, we have considered pupils who have spent more than 50% of their education in the UK schooling system as 'earlier arrivals' and those who have been on the system for less than half of the national curriculum as 'late arrivals'. According to the Department for Education (2019), pupil's arrival date in the UK was extracted from the school census data to identify the academic year when each pupil first appeared in a state-funded school in England.

TSA in this report has been indirectly derived from the NPD in combination with the Education Endowment Foundation (EEF) archive data. More details of TSA are explained in Section 2.4. As the NPD data (or the EEF archive) alone did not contain all the necessary information to figure out when an EAL pupil joined the UK schooling system up to the end of a specific project by the EEF, we developed the TSA metric by integrating data from both the NPD and the EEF archive. The NPD provided the TSA values from 2006 to 2020, and the EEF archive provided the upper limit for TSA to account for projects conducted prior to 2020. The primary details used to calculate TSA, included the year for which a local authority code was entered for each pupil during the spring census (from NPD), the year of the census (from NPD), and the year when post-test was conducted (from the EEF archive). The post-test information was used to establish the upper bound of the TSA calculation.

1.2 Overall impact of the EEF interventions on EAL and its subgroups

The EEF is an independent charity that has committed to promoting the attainment of disadvantaged children in primary and secondary schools in England. To improve those children's educational attainment, a variety of projects (e.g. Higgins *et al.,* 2022) have been carried out to evaluate a range of interventions directly or indirectly based on the pupil's data (Singh *et al.,* 2022; Uwimpuhwe *et al.,* 2021). The EEF has had more than 200 evaluations of educational interventions since 2011. The effectiveness of interventions has been demonstrated (e.g. Einbeck *et al.,* 2024) and the interventions have helped improve outcomes for children and young people (Uwimpuhwe *et al.,* 2021).

Interventions or practices have shown positive impacts on EAL and its subgroups (e.g. Hull, 2022). For the EEF-funded interventions, Uwimpuhwe *et al.* (2023) used a Bayesian multilevel Individual Participant Data (IPD) meta-analysis applied to standardised mathematics and literacy outcomes measures to show improvements in pupils' attainment and reductions of attainment gaps. Ashraf *et al.* (2021) found that the EEF-funded interventions enhanced the literacy of FSM-eligible pupils by an equivalent of about one month's progress, and that one to one and whole-school interventions had positive effects on the mathematics attainment of FSM pupils. Educational interventions aimed at pupil progress, therefore, help to allocate resources efficiently and implement evidence-based policies.

1.3 Study objectives

This study aims to summarise: i) the overall effects of the EEF-funded interventions on EAL pupils; ii) the overall effects of the EEF-funded interventions on EAL pupils with consideration of the TSA; iii) the attainment gap between earlier or late arrival EAL pupils and non-EAL pupils; and iv) additional analyses for subgroups such as EAL pupils eligible for FSM, as well as the effects of the EEF-funded interventions across Key Stages and types of interventions.

1.4 Research questions (RQs)

In this study, we investigated whether the impact of the EEF-funded interventions on literacy and mathematics outcomes varies by pupils' EAL status, considering the time these pupils have spent in the English schooling system. This term, referred to as TSA, measures the number of years EAL pupils have been in the UK schools, from when they first started until they joined the EEF project. Specifically, this work addresses the following RQs:

1. **RQs involving EAL pupils only:**
    - **RQ1.1** For EAL pupils, what is the overall effect of the EEF-funded mathematics/literacy interventions?
    - **RQ1.2** For EAL pupils eligible for FSM, what is the overall effect of the EEF-funded mathematics/literacy interventions?
    - **RQ1.3** For EAL pupils, does the effect of the EEF-funded interventions on mathematics/literacy attainment vary by TSA?
    - **RQ1.4** For EAL pupils eligible for FSM, does the effect of the EEF-funded interventions on mathematics/literacy attainment vary by TSA?
    - **RQ1.5** Are the results of RQ1.3 consistent across Key Stage and across types of interventions (e.g. one to one, small group, whole class, or whole school)?
2. **RQs involving EAL and non-EAL pupils:**
    - **RQ2.1** How does prior attainment vary by EAL status and across other factors such as FSM, Special Educational Needs and Disabilities (SEND), and gender?
    - **RQ2.2** Does the effect of the EEF-funded interventions on literacy/mathematics attainment differ between non-EAL pupils and EAL pupils?
    - **RQ2.3** Does the effect of the EEF-funded interventions on literacy/mathematics attainment differ between non-EAL pupils and EAL pupils whose arrival was recent or longer ago?
    - **RQ2.4** Are the results of RQ2.3 consistent across Key Stage and across types of intervention (e.g. one to one, small group, whole class, or whole school)?

The RQs follow the principles of interpretation of effect size and their directionality:

3. **EAL subgroup analysis (RQ1.1 and RQ1.2):**
    - Positive effect size would generally suggest a positive impact of the EEF-funded interventions on the EAL subgroup.
4. **EAL subgroup analysis based on TSA (RQ1.3, RQ1.4, and RQ1.5):**
    - Positive effect size would suggest that the effect of the EEF-funded interventions increases with every additional year that the EAL pupil was in the UK schooling system. Negative effect size would suggest that the effect of the EEF-funded interventions reduces with every additional year that the EAL pupil was in the UK system.
5. **Attainment gap between EAL versus non-EAL (RQ2.2):**

- Positive attainment gaps would indicate a greater impact of the EEF-funded interventions on EAL pupils than on non-EAL pupils.

6. **Attainment gap between earlier versus non-EAL (RQ2.3 and RQ2.4):**

   - Positive attainment gaps would indicate a greater impact of the EEF-funded interventions on earlier arrivals than on non-EAL pupils.

7. **Attainment gap between late versus non-EAL (RQ2.3 and RQ2.4):**

   - Positive attainment gaps would indicate a greater impact of the EEF-funded interventions on late arrivals than on non-EAL pupils.

1.5 Ethics and data protection

Ethical approval for this study is provided by the Department of Anthropology, Durham University. The data used in the quantitative analyses were extracted from the EEF archive generated by the Fischer Family Trust and provided to Durham University as part of the EEF archive and database project through the Office for National Statistics (ONS) Secure Research Service (SRS) environment. The legal basis for processing this data by Durham University is a 'Public Task' as defined in Article 6 1. (e) of the General Data Protection Regulation (GDPR; GDPR, 2016). This work was produced using statistical data from the ONS. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets, which may not exactly reproduce ONS aggregates.

2. Methods

2.1 Inclusion and exclusion criteria

Figure 1 provides the inclusion (trials with literacy or mathematics outcome, local authority code, EAL status, have no consent or computational issues) and exclusion criteria used in this study. At the time of the analysis initiated in May 2024, 128 projects were available in the EEF archive through the SRS environment. Among these, a total of 33 projects were initially excluded due to ineligibility (15 projects lacked either literacy or mathematics outcome; three projects without EAL status information and local authority codes; 11 projects lacked consent or data due to COVID-19; and four large trials encountered computational issues). From the remaining 95 eligible projects, two projects targeting both Year 7 and Year 9 pupils were separated by year. Another project targeting Key Stage 1 and Key Stage 2 pupils was separated by Key Stage and one project with two distinct interventions, each with its own control group, was also separated accordingly. A detailed breakdown of the processes is shown in Figure 1 below.

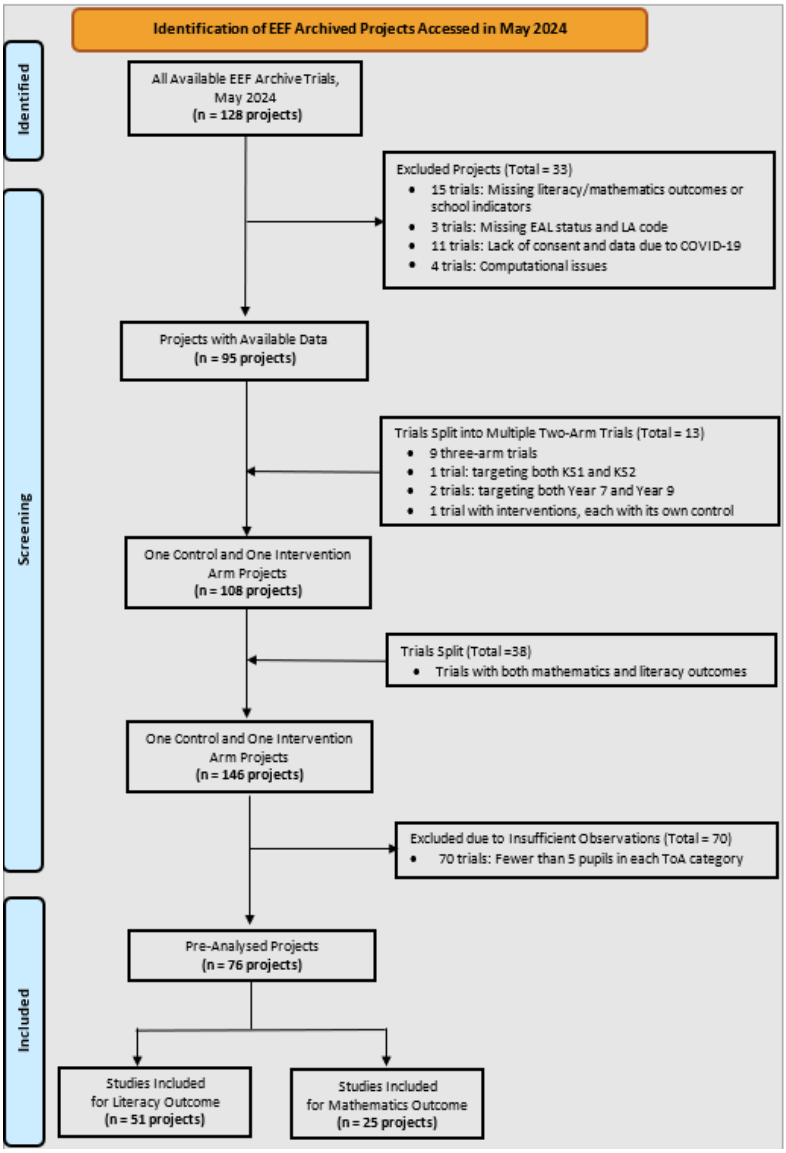

Figure 1: Screening procedures of the EEF archive projects accessed in May 2024 via the SRS environment

To facilitate the analysis, each of the nine three-arm trials (control vs arm 1 and arm 2) was split into two separate trials having two arms (i.e. trial 1: control vs arm 1, and trial 2: control vs arm 2). While this approach introduced some degree of double counting (Higgins and Green, 2017; Axon *et al.*, 2023), it was deemed acceptable as only 7% of trials involved three arms. The projects split from multi-arm trials were treated as independent, since adding a fourth level (beyond school and trial) to the multilevel model for the IPD meta-analysis to account for multi-arm trials would have added complexity that outweighed its potential benefits. Considering 38 projects with both mathematics and literacy outcomes, which resulted in 146 trials, we further excluded 70 trials with insufficient sample sizes. Specifically, projects with fewer than five observations in each TSA category were deemed to have insufficient sample sizes and were excluded due to computational issues. The whole process resulted in a final set of 76 projects, consisting of 51 literacy and 25 mathematics projects.

2.2 Robustness and the risk of bias

In order to avoid selection bias, all 128 trials available in the EEF archive at the start of our analysis conducted in 2024 were subjected to the eligibility criteria outlined in Figure 1 above. However, potential bias might have stemmed from the exclusion of three projects lacking data on EAL status or local authority codes. Since the computation of the TSA variable, the variable of interest in this analysis, depended heavily on these two pieces of information, projects without them were necessarily excluded. Nonetheless, we believe this risk of bias is minimal for two reasons: first, based on evaluator reports, the estimated impact from the excluded projects falls within the range of impacts observed in the included projects; and

second, only a small proportion of projects (approximately 2%) were excluded for these reasons. Further projects with insufficient sample size, specifically those with fewer than five pupils in each TSA category, were also excluded. These exclusions were necessary as including such projects would have led to computational challenges, particularly widening the credible intervals (CIs) and potentially compromising the precision of the analysis. As a sensitivity analysis, these projects were included in the analysis, and their point estimates fell within the CIs of the results obtained when they were excluded. This consistency suggests that their exclusion had minimal impact on the overall conclusions, ensuring the robustness of the findings.

In addition to sample size considerations, the inclusion of all studies versus focusing on high-evidence security rating projects could also influence the findings, as differences in data quality could pose a risk of bias. Including lower-quality studies might dilute the results by introducing noise or systematic errors, while excluding them could lead to selection bias if high-evidence security rating studies disproportionately represent specific types of projects or schools. To address this concern and ensure robustness, we conducted analyses on both the full dataset and a subset of high-evidence security rating studies, defined by a padlock security rating of 3 or more. Reassuringly, the key findings were consistent for EAL subgroup analysis, indicating that the conclusions are robust and not mainly affected by the inclusion or exclusion of lower-quality studies, indicating that the conclusions are robust and not mainly affected by the inclusion or exclusion of lower-quality studies.

Finally, the method used to categorise TSA into late and earlier arrivals (see Section 2.4 below) could influence the findings, as bias may arise if a particular threshold systematically favours certain groups, resulting in misclassification. In this study, the main analysis employs the 50% threshold, classifying pupils as earlier arrivals if they have spent at least half of their schooling in the UK (more details about this classification can be found in Table 1 in Section 2.4.1). This approach adapts the TSA threshold based on the pupil's year group, acknowledging that the challenges faced by late arrivals differ significantly across year groups. To test the robustness of our findings, we conducted a sensitivity analysis using an alternative fixed threshold (as proposed by Hutchinson, 2018), categorising pupils with a TSA of two years or less as late arrivals and others as earlier arrivals. This fixed threshold captures the immediate challenges faced by pupils with very limited exposure to the UK education system. Encouragingly, the key findings were consistent across both operational definitions of TSA, demonstrating the reliability and robustness of our approach.

Since all our analyses used an IPD approach and did not rely on a single project, the expectation is that both earlier arrival and late arrival groups include pupils from a wide range of TSA. In terms of EAL subgroup analysis, we have examined the overall effect of the EEF-funded interventions on EAL pupils. Beyond that, the analysis also unpacked how each additional year spent in the UK schooling system (TSA variable as a continuous measure) influences the impact of interventions on EAL pupils.

2.3 Study outcomes

The EEF trials are commissioned to independent evaluators who typically collect pupil outcomes at pre- and post-intervention intervals. These outcomes can include NPD measures, such as Key Stage 2 reading or mathematics scores, as well as commercial assessments like PTE (Progress Test in English – GL Assessment) and PTM (Progress Test in Maths – GL Assessment), among others listed in Appendix A Tables A 1 and A 2. Although this study did not specifically focus on follow-up measures, it is worth noting that follow-up data are available in the EEF archive for some trials.

The EEF trials are designed to improve pupil attainment in specific subjects, primarily literacy (covering English, writing, reading, listening, and grammar) and mathematics (covering mathematics and numeracy). Our analyses were limited to literacy and mathematics outcomes, regardless of whether these were primary or secondary outcomes. Additional outcomes outside literacy and mathematics were not considered due to an insufficient number of studies to estimate overall effects in other areas. Mixed outcomes, combining literacy/mathematics scores with other subjects such as science, were also excluded. In terms of outcome measurement, not all outcomes were continuous; ordinal scores were also treated as continuous in this study. All pre- and post-test outcomes were standardised using Z-scores at the trial level.

2.4 Generating TSA variable

The TSA variable was developed specifically for EAL pupils using data from the EEF archive linked with the NPD. TSA measures the number of years EAL pupils have spent in the UK schooling system, from when they first entered until the project's post-test year. This variable was generated based on information from the school's local authority code from the spring census and the year when the project's post-test assessment was conducted.

To ensure consistency in TSA measurement across schools, the calculation was based on the time from Reception to the project's post-test year. Reception was chosen as the starting point, as it is available across all schools, unlike Early Years and Nursery, which vary in availability. This standardisation allows TSA values to be comparable across different schools within each project. The project's post-test year marked the endpoint of the time frame.

The local authority code data spans from 2006 to 2022, providing a historical context for each pupil over time. To calculate TSA for a specific academic year, we assumed that pupils with missing local authority codes were not in the UK schooling system during that year. Consequently, TSA was computed as the count of non-missing local authority codes from the later of either 2006 or the pupil's Reception year (RECyear), up to the project's post-test year. The RECyear for each pupil, was identified based on the following two key variables:

- **NPD_CENSUS_SERIES (CENSyear)**: Indicating the year the spring census was conducted (ranging from 2012 to 2020).
- **NPD_CENSUS_NCYEAR (NCyear)**: Indicating the class or year group in which pupils spent most of their time. It includes categories such as Early Years (RE1, RE2), Nursery (NE1, NE2), Reception (R), values 1 to 13, and X, where X denotes pupils not following the national curriculum (inferred as group Year 11 for one specific project based on evaluator reports).

The computed RECyear ranges from 2000 up to 2019 (due to the unavailability of local authority codes before 2006, all values below 2006 were set to 2006 in the TSA calculation), and it was calculated as follows:

- For pupils with NCyear values between 1 and 13, $\mathbf{RECyear} = \mathbf{CENSyear} - \mathbf{NCyear}$
- For pupils in Early Years, Nursery, or Reception, $\mathbf{RECyear} = \mathbf{CENSyear}$

In summary, the TSA variable captures the years spent in the UK schooling system for each EAL pupil, starting from the latest of 2006 or their $\mathrm{RECyear}$ up to the project's post-test year. If the $\mathrm{RECyear}$ occurred before 2006, the count began from 2006; otherwise, it started from the pupil's $\mathrm{RECyear}$.

2.4.1 Categorisation of TSA variable

One of the objectives of this study is to estimate the attainment gap between EAL and non-EAL pupils. However, the EAL group varies according to the time they have spent in the UK schooling system. The EAL group is diverse, encompassing not only pupils who have lived in England all their lives and are likely fluent in English, but also those who have recently arrived in England and may have very little understanding of English. Additionally, it includes those who fall somewhere in between these two extremes, with varying levels of English proficiency (Department for Education, 2019). Research by Strand and Lindorff (2020; 2021) and Demie (2018) have shown that English proficiency and attainment scores are strongly influenced by the time pupils have spent in the schooling system. Therefore, to make meaningful comparisons with non-EAL pupils, it is critical to account for TSA.

Given the broad categorisation of EAL, further refinement is needed to better represent the diversity within this group. Drawing on previous research (Hutchinson, 2018; Strand *et al.,* 2015), we have categorised EAL pupils into two groups based on TSA: 'earlier arrivals' and 'late arrivals', terms also used by Hutchinson (2018). In this study, we classify EAL pupils as earlier arrivals if they have spent at least 50% of their school education in the UK. This group includes EAL pupils who were born in the UK, with their time of arriving in the UK education system counted from Reception onwards, as well as those who joined later but have spent more than half of their schooling in the UK. For example, pupils in Year 11 who joined the UK schooling system before Year 6 (between Reception and Year 5) are classified as earlier arrivals, while those who joined between Year 6 and Year 11 are classified as late arrivals (see Table 1 below). This classification is also motivated by

research from Strand and Lindorff (2020), which highlights that it typically takes multilingual learners more than six years to progress from being new to English to achieving fluency in the language required for educational attainment.

For sensitivity analysis, we alternatively define an EAL pupil with a TSA of more than two years as an earlier arrival, categorising those with shorter TSA as late arrivals. This threshold identifies pupils with very limited exposure to the UK system (as compared to the threshold of 50%) who are likely to face acute challenges in adapting to the curriculum and developing sufficient proficiency in English. We also acknowledge that, both late and earlier arrivals may include EAL pupils who are already fluent in English, particularly those who were taught in English abroad before joining UK schools. Our analysis provides a richer explanation of the impact of the EEF-funded interventions on EAL pupils, considering their TSA. This approach allows us to capture the impact of TSA on educational outcomes and more accurately assess the attainment gap between EAL and non-EAL pupils.

Table 1: Visual representation of **TSA** in the UK schooling system (duration from the year of arrivals to the post-test year group) by the post-test year group. Pupils arriving in Reception or earlier have the highest TSA, having completed (or nearly completed) all their schooling in the UK: dark grey for earlier arrivals (at least 50% of their school education in the UK) and light grey for late arrivals

		Year of arrival											
Post-test Year groups	Key Stage	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Reception	Early Years	1											
Year 1	Key Stage 1	2	1										
Year 2		3	2	1									
Year 3	Key Stage 2	4	3	2	1								
Year 4		5	4	3	2	1							
Year 5		6	5	4	3	2	1						
Year 6		7	6	5	4	3	2	1					
Year 7	Key Stage 3	8	7	6	5	4	3	2	1				
Year 8		9	8	7	6	5	4	3	2	1			
Year 9		10	9	8	7	6	5	4	3	2	1		
Year 10	Key Stage 4	11	10	9	8	7	6	5	4	3	2	1	
Year 11		12	11	10	9	8	7	6	5	4	3	2	1

TSA=duration from the year of arrival to the post-test year group.

2.4.2 Limitation of TSA

Using the spring census as the cut-off for calculating TSA, has some limitations. The spring census represents a snapshot in time, and any pupil movement (e.g. departures or arrivals) after the census date within the same academic year is not captured for that specific year. Pupils who have missing local authority codes during the census may be incorrectly classified as not in the UK education system, even if they arrived earlier but were not enrolled in a school at the time of the census, or if they arrived shortly after the census date. The spring census data used in the analysis spans only from 2006 onwards. Any pupils who entered the UK schooling system before 2006 will have an artificially limited TSA. Furthermore, the TSA measure does not account for interruptions, such as pupils who temporarily leave the UK schooling system and later return, as it is based solely on the count of non-missing local authority codes.

2.5 Grouping variables

The effect of the EEF interventions was first assessed across all Key Stages (Key Stage 1, Key Stage 2, Key Stage 3, and Key Stage 4). The outcomes were meta-analysed by the type of intervention to determine which type of intervention is more beneficial for low attainers. Types of intervention were classified into one to one, small group, whole-class, or whole-school interventions depending on the mechanism of the intervention delivery. We also considered a subset of EAL pupils eligible

for FSM. For sensitivity analysis, we considered padlock >=3 to identify high-evidence security rating projects. For descriptive purposes, we additionally examined gender (male and female), SEND status, and ethnicity (White and non-White/Other) across TSA categories.

2.6 Simplified IPD meta-analysis model

2.6.1 Methods for modelling data with EAL pupils only

To address our RQs, we employed a simplified IPD meta-analysis approach as detailed in Ashraf *et al.* (2021). The model used by Ashraf *et al.* (2021) was applied to EAL pupils to answer RQ1.1, RQ1.2, and RQ2.2. For RQ1.3, RQ1.4, and RQ1.5, the same framework was adapted to include the continuous TSA variable. Specifically, the following model focused exclusively on EAL pupils, with TSA treated as a continuous variable.

$$Y_{ijk}^{s} = \beta_{0k} + \beta_{1k} Pret_{ijk}^{s} + \beta_{2k} T_{ijk} + \gamma_{1k} TSA_{ijk} + \gamma_{2k} T_{ijk} TSA_{ijk} + S_{jk} + \varepsilon_{ijk} \quad \text{(Equation A1)}$$

where,

- s is the superscript that denotes standardised variables;
- Y_{ijk}^{s} and $Pret_{ijk}^{s}$ are standardised post- and pre-test scores for pupils i in school j from trial k;
- T_{ijk} is the intervention allocation for pupils i in school j from trial k;
- β_{0k} is a fixed intercept, β_{1k} is a fixed gradient between the standardised pre- and post-test scores, β_{2k} is the average effect of the intervention for zero TSA in trial k. γ_{1k} is a fixed gradient between standardised post-test and TSA for a control group, and γ_{2k} *is* the attainment gradient of TSA to the EEF-funded intervention in trial k;
- $S_{jk} \sim N(0, \omega_k^2)$, with ω_k capturing between-school variability in trial k; and
- $\varepsilon_{ijk} \sim N(0, \sigma_k^2)$, with σ_k capturing between-pupil variability in trial k.

The pooled effect sizes can be given by:

$$\varphi_2 = \frac{\sum_{k=1}^{K} W_k \gamma_{2k}}{\sum_{k=1}^{K} W_k}$$

where $W_k = ({\omega_k}^2 + {\sigma_k}^2)^{-1}$ captures within-trial variability, given that between-trial variability will be pre-scaled to 1.

2.6.2 Methods for modelling data with EAL and non-EAL pupils

RQ2.1 was answered through exploratory data analysis. Precisely, we cross-tabulated the baseline attainment group (BAG) and EAL status (earlier and late arrivals of EAL and non-EAL) to report cell sample size and percentage. The BAG variable categorises pupils into low, medium, and high attainers, defined as the lower, middle, and upper tertiles of prior attainment scores within each project. In addition, we prepared the mean and standard deviation (SD) of prior attainment for EAL (earlier and late arrivals) and non-EAL across some characteristics such as gender, FSM eligibility, and SEND status. This provides a clearer view of prior attainment levels across these groups.

RQ2.3 and RQ2.4 were answered by the following IPD meta-analysis model:

$$Y_{ijk}^{s} = \beta_{0k} + \beta_{1k} Pret_{ijk}^{s} + \beta_{2k} T_{ijk} + \sum_{l=1}^{2} \gamma_{1k}^{l} TSAG_{ijk}^{l} + \sum_{l=1}^{2} \gamma_{2k}^{l} T_{ijk} TSAG_{ijk}^{l} + S_{jk} + \varepsilon_{ijk} \quad \text{(Equation A2)}$$

where,

- $TSAG$ as the TSA group was generated from TSA variable having two groups: earlier and late arrivals (Section 2.4.1).
- $TSAG^{l}$ is 1 if $TSAG = l$ and 0 otherwise ($l = 1$ for earlier arrival and $l = 2$ for late arrival). The non-EAL group will be the reference group.

- γ_{2k}^{l} is the attainment gap (i.e. the difference in the average effect of the interventions between non-EAL and other TSA groups belonging to level l in trial k). For simplicity let us consider γ_{2k}^{l} as simply γ_{2k}, since the remaining estimates are obtained in the same way regardless of their TSA group.
- β_{2k} is the impact of the intervention on non-EAL pupils in trial k, and the impact of the intervention on TSA group in trial k is $\beta_{2k} + \gamma_{2k}$.

All models were fitted in a Bayesian framework, and the analysis was done in R, mainly using the *R2jags* package. To handle missing values, a complete case analysis approach was implemented. This involved excluding any observations with missing information in any of the variables (dependent and all independent variables) used for fitting the specific model.

2.7 Heterogeneity between trials

We used statistical measures such as the Q-test and I^2 to quantify the degree of heterogeneity and guide the selection of random effects models, aiding our interpretation of findings. However, these results should be interpreted with caution, as the rescaling of pre- and post-test scores in each trial, as applied in our analysis, significantly reduces between-trial variability (Ashraf *et al.,* 2021). This rescaling may limit the accuracy of Q-test and I^2 in reflecting actual variability within our data. Additionally, rescaling may alter the distributions of outcomes, particularly if the outcomes are not drawn from a common underlying construct, which is an important consideration for the robustness of our analyses.

3. Results and key findings

3.1 Exploratory data analysis

Table 2 to Table 4 provide a detailed distribution of pupil and trial characteristics in the EEF-funded literacy and mathematics trials included in the final analysis, specifically focusing on EAL (categorised as late and earlier arrivals) and non-EAL pupils. Indicators for EAL, SEND, and FSM status were primarily obtained from the NPD census data. Where any of these were unavailable from the NPD, project-level data (e.g. pupil with FSM) were used instead. The FSM status was defined using the EVERFSM6 variable, which identifies pupils who had been eligible for FSM at any time point in the previous six years. The data is further categorised by key characteristics considered for meta-analysis, including overall figures, FSM eligibility, Key Stage outcomes, gender, SEND status, ethnicity, and types of interventions.

3.1.1 TSA summary (Table 2)

Table 2 shows average TSA for EAL pupils by year group and Key Stage, with separate values for literacy and mathematics. The mean and SD of TSA for EAL pupils across other characteristics, such as types of interventions, FSM eligibility, SEND status, gender, and ethnicity are provided in Appendix A Table A 6. As expected, average TSA values varied across Key Stage, given the natural link between year group and TSA. For instance, in Key Stage 1, pupils have the lowest TSA values (ranging from one to three years), with averages of 2.307 (0.509) in literacy and 2.838 (0.462) in mathematics. In contrast, Key Stage 4 pupils have the highest average TSA, with 8.226 (1.920) in literacy and 8.347 (1.897) in mathematics, based on values ranging from 1 to 12 years. Table 2 also shows TSA thresholds for TSA categories (late and earlier arrivals) for each year group within Key Stage. The colour coding indicates pupil arrival categories: dark grey represents earlier arrivals (those who have spent at least 50% of their education in the UK); while light grey represents late arrivals.

Table 2: Mean and SD of literacy and mathematics **TSA** scores by Key Stage alongside a visual of **TSA** in the UK schooling system (duration from the year of arrival post-test year group) by the poste-test year group: dark grey for earlier arrivals (at least 50% of their school education in the UK); and light grey for earlier arrivals

Post-test Year groups	Key Stage	Literacy: Mean (SD)	Mathematics: Mean (SD)	Year of arrival											
				Year											
				Reception	1	2	3	4	5	6	7	8	9	10	11
Reception	Early Years	–	–	1											
Year 1	Key Stage 1	2.307 (0.509)	2.838 (0.462)	2	1										
Year 2				3	2	1									
Year 3	Key Stage 2	5.571 (1.546)	5.063 (1.445)	4	3	2	1								
Year 4				5	4	3	2	1							
Year 5				6	5	4	3	2	1						
Year 6				7	6	5	4	3	2	1					
Year 7	Key Stage 3	7.315 (2.276)	7.886 (2.047)	8	7	6	5	4	3	2	1				
Year 8				9	8	7	6	5	4	3	2	1			
Year 9				10	9	8	7	6	5	4	3	2	1		
Year 10	Key Stage 4	8.226 (1.920)	8.347 (1.897)	11	10	9	8	7	6	5	4	3	2	1	
Year 11				12	11	10	9	8	7	6	5	4	3	2	1

TSA=Duration from the year of arrival to the post-test year group.

3.1.2 Distribution of the EAL subgroups and non-EAL group in mathematics projects (Figure 2)

EAL pupils were further classified into earlier and late arrivals, based on their TSA values. Figure 2 illustrates the percentage distribution of these groups across mathematics outcome projects. However, non-EAL pupils comprised the majority

population in all projects. The proportion of late arrivals was particularly low, often representing a small fraction of overall participants. A similar pattern was observed for literacy trials (see Appendix A Figure A 1). For certain projects (e.g. Dialogic Teaching, Generation STEM [science, technology, engineering, and mathematics], Improving Numeracy and Literacy: Key Stage 1, and Maths Count), TSA data were suppressed in accordance with SRS guidelines due to low group sizes (i.e. fewer than ten pupils in either late or earlier arrival categories). The Tutor Trust Secondary has the highest number of overall participants (19,662), with the majority being non-EAL pupils (non-EAL: 100,514, earlier: 77,209, late: 3,643).

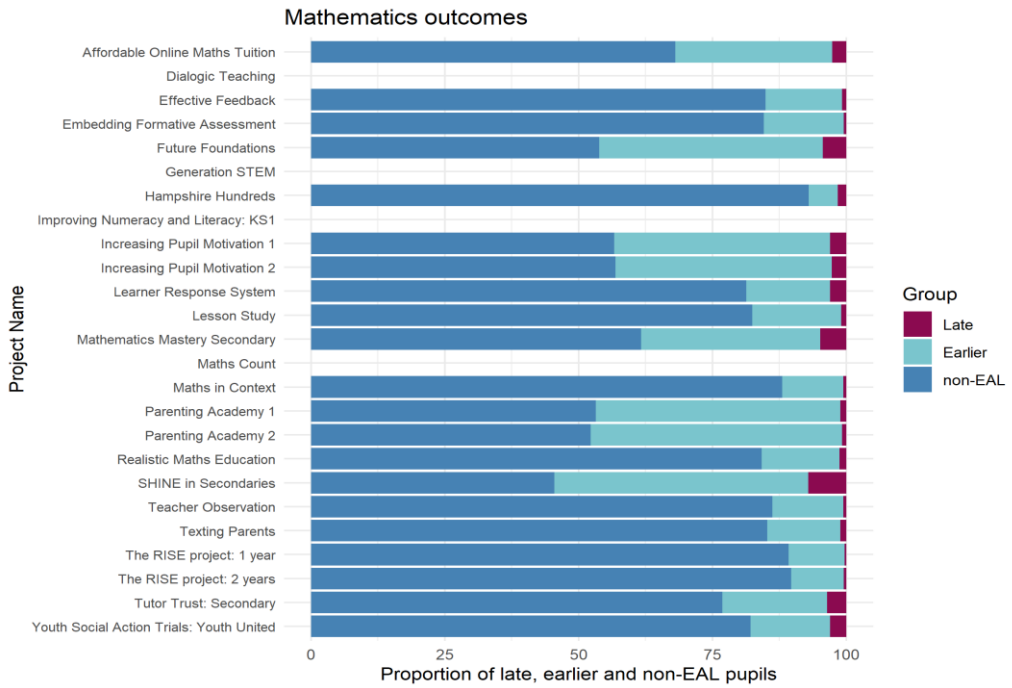

Figure 2: Project participation by group (late [red], earlier [blue], non-EAL [darker blue]) for projects with mathematics outcomes—empty bars represent projects in which one of the TSA categories includes fewer than ten pupils

3.1.3 Number of pupils by EAL status and characteristics (Table 3)

Table 3 presents the number and percentage of pupils in each EAL category by key characteristics. Note that some pupils and schools participated in multiple projects, and the table does not account for unique counts of pupils or schools, leading to some of them being counted more than once. As a result, the numbers presented in the table are higher than the actual unique counts. The total number of unique pupils (schools) participating in literacy projects was 207,571 (2,229), and for mathematics projects 222,988 (1,537), while the non-unique number of pupils (schools) who participated in literacy and mathematics projects was 219,079 (2,602) and 232,373 (1,754), respectively (see more details in Appendix A Table A 4). Among these, 46,267 in literacy and 49,296 in mathematics were EAL pupils, further categorised into late and earlier arrivals. Late arrivals comprised 9.7% of EAL pupils in literacy (N=4,485) and 10.9% in mathematics projects (N=5,359). Compared to earlier arrivals, late arrivals had lower FSM eligibility rates (39.1% vs 48.4% in literacy; 41.9% vs 50.7% in mathematics).

In literacy trials, late arrivals constitute 33 out of 1,432 EAL pupils at Key Stage 1 (2.3%), 714 out of 10,513 at Key Stage 2 (6.8%), 881 out of 6,043 at Key Stage 3 (14.6%), and 2,857 out of 28,279 at Key Stage 4 (10.1%). Similarly, in mathematics, late arrivals account for 366 out of 5,147 EAL pupils at Key Stage 2 (7.1%), 590 out of 5,415 at Key Stage 3 (10.9%), and 4,394 out of 38,500 at Key Stage 4 (11.4%). Regarding intervention types, late arrivals were more likely to receive one to one support (N=2,518, 56.1% literacy; N=3,735, 69.7% mathematics) compared to earlier arrivals (N=14,250, 34.8% literacy; N=21,473, 48.9% mathematics). SEND and gender distributions were similar across groups, with roughly 20% identified as

having SEND and an even gender split. In terms of **ethnicity**,[1] the majority of EAL pupils were from non-White (Other) backgrounds (including Asian, Black, mixed, and any other non-White ethnic group; e.g. Department for Education, 2025a), particularly among late arrivals (N=2,960, 66.8% literacy; N=3,663, 69.2% mathematics), while most non-EAL pupils were White (over 84% in both subjects).

Table 3: Number and percentage of pupils who participated in all trials included in this analysis, broken down by EAL status (late arrivals, earlier arrivals, and non-EAL) and key characteristics, including FSM eligibility, Key Stages, types of interventions, and SEND status

Category		EAL		All EAL N (%)	Non-EAL N (%)	All pupils N (%)
		Late arrivals N (%)	Earlier arrivals N (%)			
Literacy						
Overall		4,485 (100.0%)	41,782 (100.0%)	46,267 (100.0%)	172,812 (100.0%)	219,079 (100.0%)
FSM	Yes	1,753 (39.1%)	20,233 (48.4%)	21,986 (47.5%)	64,169 (37.1%)	86,155 (39.3%)
	No	2,732 (60.9%)	21,549 (51.6%)	24,281 (52.5%)	108,642 (62.9%)	132,923 (60.7%)
Key Stage outcomes	Key Stage 1	33 (0.7%)	1,399 (3.3%)	1,432 (3.1%)	5,395 (3.1%)	6,827 (3.1%)
	Key Stage 2	714 (15.9%)	9,799 (23.5%)	10,513 (22.7%)	38,741 (22.4%)	49,254 (22.5%)
	Key Stage 3	881 (19.6%)	5,162 (12.4%)	6,043 (13.1%)	23,122 (13.4%)	29,165 (13.3%)
	Key Stage 4	2,857 (63.7%)	25,422 (60.8%)	28,279 (61.1%)	105,554 (61.1%)	133,833 (61.1%)
Types of interventions	One to one	2,518 (56.1%)	14,520 (34.8%)	17,038 (36.8%)	54,756 (31.7%)	71,794 (32.8%)
	Small group	604 (13.5%)	4,263 (10.2%)	4,867 (10.5%)	12,369 (7.2%)	17,236 (7.9%)
	Whole class	990 (22.1%)	15,281 (36.6%)	16,271 (35.2%)	54,628 (31.6%)	70,899 (32.4%)
	Whole school	373 (8.3%)	7,718 (18.5%)	8,091 (17.5%)	51,059 (29.5%)	59,150 (27.0%)
SEND	Yes	818 (18.2%)	8,320 (19.9%)	9,138 (19.8%)	34,401 (19.9%)	43,539 (19.9%)
	No	3,667 (81.8%)	33,462 (80.1%)	37,129 (80.2%)	138,411 (80.1%)	175,540 (80.1%)
Gender	Female	2,154 (48.0%)	20,717 (49.6%)	22,871 (49.4%)	86,394 (50.0%)	109,266 (49.9%)
	Male	2,331 (52.0%)	21,065 (50.4%)	23,396 (50.6%)	86,418 (50.0%)	109,814 (50.1%)
Ethnicity[a]	White	1,472 (33.2%)	6,253 (15.1%)	7,725 (16.8%)	146,449 (85.4%)	154,174 (70.9%)
	Other	2,960 (66.8%)	35,267 (84.9%)	38,227 (83.2%)	25,085 (14.6%)	63,312 (29.1%)
Mathematics						
Overall		5,359 (100.0%)	43,937 (100.0%)	49,296 (100.0%)	183,077 (100.0%)	232,373 (100.0%)

[1] In line with our initial plan, we used condensed ethnic group categories; however, we acknowledge that examining more detailed classifications would provide a clearer understanding of the relationship between pupils' TSA and their ethnicity in relation to their baseline attainment scores. Ethnic minority groups including Irish Traveller and Roma were classified into the White ethnicity group.

Category		EAL		All EAL N (%)	Non-EAL N (%)	All pupils N (%)
		Late arrivals N (%)	Earlier arrivals N (%)			
FSM	Yes	2,243 (41.9%)	22,265 (50.7%)	24,508 (49.7%)	66,484 (36.3%)	90,992 (39.2%)
	No	3,111 (58.1%)	21,672 (49.3%)	24,783 (50.3%)	116,587 (63.7%)	141,370 (60.8%)
Key Stage outcomes	Key Stage 1	<10	>10	–	1,042 (0.6%)	1,276 (0.5%)
	Key Stage 2	366 (6.8%)[b]	4,781 (10.9%)[b]	5,147 (10.5%)	17,790 (9.7%)	22,937 (9.9%)
	Key Stage 3	590 (11.0%)[b]	4,825 (11.0%)[b]	5,415 (11.0%)	19,650 (10.7%)	25,065 (10.8%)
	Key Stage 4	4,394 (82.1%)[b]	34,106 (78.0%)[b]	38,500 (78.5%)	144,595 (79.0%)	183,095 (78.8%)
Types of interventions	One to one	3,735 (69.7%)	21,473 (48.9%)	25,208 (51.1%)	80,947 (44.2%)	106,155 (45.7%)
	Small group	106 (2.0%)	578 (1.3%)	684 (1.4%)	2,673 (1.5%)	3,357 (1.4%)
	Whole class	786 (14.7%)	11,780 (26.8%)	12,566 (25.5%)	43,341 (23.7%)	55,907 (24.1%)
	Whole school	732 (13.7%)	10,106 (23.0%)	10,838 (22.0%)	56,116 (30.7%)	66,954 (28.8%)
SEND	Yes	1,043 (19.5%)	8,637 (19.7%)	9,680 (19.6%)	35,851 (19.6%)	45,531 (19.6%)
	No	4,316 (80.5%)	35,300 (80.3%)	39,616 (80.4%)	147,226 (80.4%)	186,842 (80.4%)
Gender	Female	2,548 (47.5%)	21,915 (49.9%)	24,463 (49.6%)	91,720 (50.1%)	116,183 (50.0%)
	Male	2,811 (52.5%)	22,022 (50.1%)	24,833 (50.4%)	91,357 (49.9%)	116,190 (50.0%)
Ethnicity[a]	White	1,627 (30.8%)	5,438 (12.5%)	7,065 (14.4%)	153,630 (84.6%)	160,695 (69.7%)
	Other	3,663 (69.2%)	38,219 (87.5%)	41,882 (85.6%)	27,996 (15.4%)	69,878 (30.3%)

<10=Indicates a value less than ten, suppressed to prevent small cell risk disclosure due to low counts.

>10=Represents a value greater than ten but is suppressed to avoid secondary disclosure, as they could enable the computation of values for cells marked with the '<10' symbol.

[a]In line with our initial plan, we used condensed ethnic group categories; however, we acknowledge that examining more detailed classifications would provide a clearer understanding of the relationship between pupils' TSA and their ethnicity in relation to their baseline attainment scores. Ethnic minority groups including Irish Traveller and Roma were classified into the White ethnicity group.

[b]Means that the category with '<10' or '>10' symbols are excluded from percentage calculations. For example, Key Stage 1 is not included when computing percentages for Key Stage mathematics outcomes.

3.2 RQ2.1: Distribution of prior attainment by EAL group and TSA

3.2.1 Distribution of baseline attainments per TSA and across EAL categories

Table 4 shows the distribution of pupils across three BAG levels of prior attainment broken down by EAL categories. Recall that BAG refers to the baseline attainment group. These BAG groups were derived as tertiles of prior attainment within each project, with the lowest tertile containing low attainers, the middle tertile containing medium attainers, and the highest tertile representing high attainers. For both subjects, the proportion of late arrivals is higher in low BAG category. For example, 73% of late arrivals fall into the low BAG for literacy, compared to 47.5% of earlier arrivals and 42.8% of non-EAL pupils. Similar trends are observed for mathematics, with 63% of late arrivals in the low group, compared to 44.2% and 41.1% for earlier and non-EAL pupils, respectively.

Table 4: Distribution of prior attainment categorised into low, medium, and high attainers by EAL status

BAG	Late arrival EAL	Earlier arrival EAL	Non-EAL
Literacy			
Low	3,272 (73.0 %)	19,833 (47.5%)	73,950 (42.8%)
Medium	730 (16.3%)	13,163 (31.5%)	55,968 (32.5%)
High	483 (10.7%)	8,786 (21.0%)	42,894 (24.8%)
Mathematics			
Low	3,377 (63.0%)	19,424 (44.2%)	75,193 (41.1%)
Medium	1,120 (20.9%)	13,040 (29.7%)	57,045 (31.2%)
High	862 (16.1%)	11,473 (26.1%)	50,839 (27.8%)

To gain a more detailed understanding of how attainment varies with time spent in the UK education system, the mean pre- and post-test scores in literacy and mathematics across TSA are shown in Figure 3. For all pupils, regardless of intervention status, both pre- and post-test scores increase with TSA. This pattern appears approximately linear, suggesting steady academic progression over time, a finding that aligns with previous research (Hutchinson, 2018), though this interpretation remains exploratory. Importantly, these trends are independent of any intervention effects. When examining the difference in differences, that is, the mean gain scores in the intervention group minus those in the control group (not shown in this report), there seems to be a decreasing trend with TSA. This suggests that the relative impact of the intervention may diminish as pupils spend more time in the UK education system.

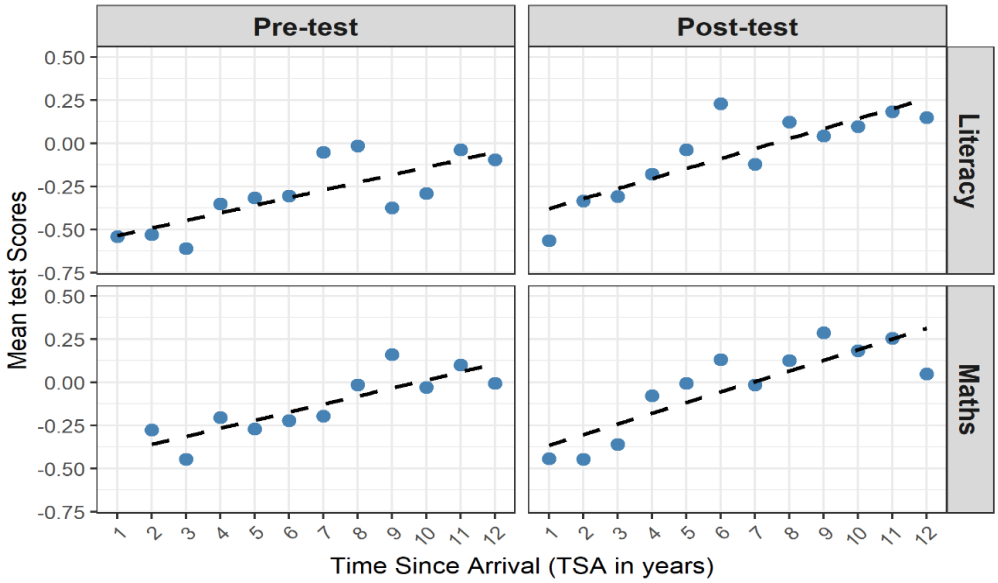

Figure 3: The relationship between average pre- and post-test scores for literacy and mathematics by TSA among EAL pupils. Dashed lines show fitted linear trends for each subject and test type. The data point at TSA = 1 in the pre-test mathematics panel (bottom-left) falls outside the displayed range.

3.2.2 Variation baseline attainments across EAL categories and key pupil characteristics

Figure 4 and Figure 5 present further insight by comparing the mean and SD of the baseline attainments (standardised pre-test scores) by EAL status (late and earlier arrivals of EAL and all EAL), disaggregated by key characteristics such as gender, FSM eligibility, SEND status, Key Stages, and types of interventions. Notably, late arrivals exhibited greater variability in achievement compared to earlier arrivals, despite the earlier arrivals' group having a larger sample size (see Figure 3). This suggests that pupils in their initial years in the UK display a wide range of attainment, with the variability decreasing as they spend more time within the UK schooling system. Further details are provided in Appendix A 2.2 Table A 3. Alongside the

values shown in Figure 4 and Figure 5, Appendix A 2.2 Table A 3 also reports the mean and SD of baseline scores for non-EAL pupils, who consistently demonstrate higher baseline attainment than both late and earlier EAL arrivals.

- The negative values shown in Figure 5 for the EAL groups, compared to the positive values in the non-EAL group (see Appendix A 2.2 Table A 3), suggest that EAL pupils tended to score lower overall.
- **For literacy outcomes:** Generally, the lowest mean prior attainment was observed for late arrivals, followed by earlier arrivals, and then non-EAL pupils. This trend remains the same for all subgroups analysed in this study.
- **For mathematics outcomes:** A similar trend of literacy outcomes was observed in mathematics. However, there were few exceptions where the opposite occurred as follows:
    - **Key Stage 2:** Mean scores (SD) were 1.256 (2.365) for late arrivals, -0.066 (0.955) for earlier arrivals, and -0.036 (0.871) for non-EAL.
    - **Small group interventions:** Mean scores (SD) were 0.119 (1.123) for late arrivals, 0.050 (0.949) for earlier arrivals, and -0.002 (0.993) for non-EAL.
    - **Whole-class interventions:** Mean scores (SD) were 0.240 (2.087) for late arrivals, -0.024 (0.989) for earlier arrivals, and -0.021 (0.952) for non-EAL.

Additionally, the average baseline scores for White pupils were consistently lower than those of non-White pupils. Not all non-White (Other) ethnic groups outperform White pupils, but this nuance is not captured in our analysis, which uses only two categories: White versus non-White. Attainment varies widely both within and between groups as well as in subjects, with factors such as time in the UK education system and English proficiency playing a key role.

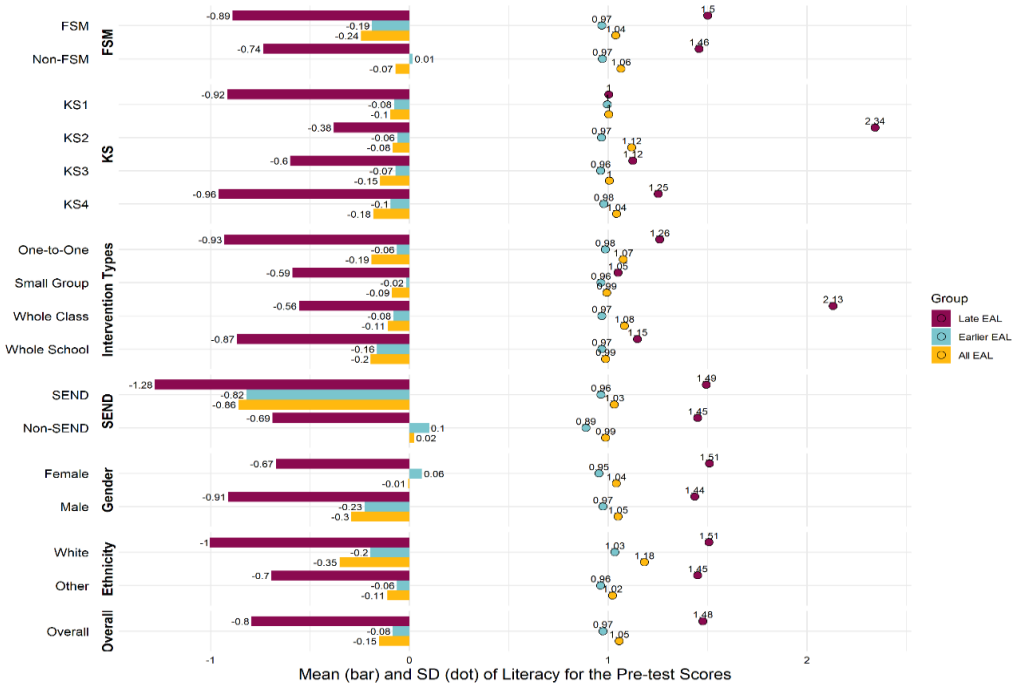

Figure 4: Mean (bars) and SD (dots) of the baseline literacy attainment for late arrivals, earlier arrivals, and all EAL groups

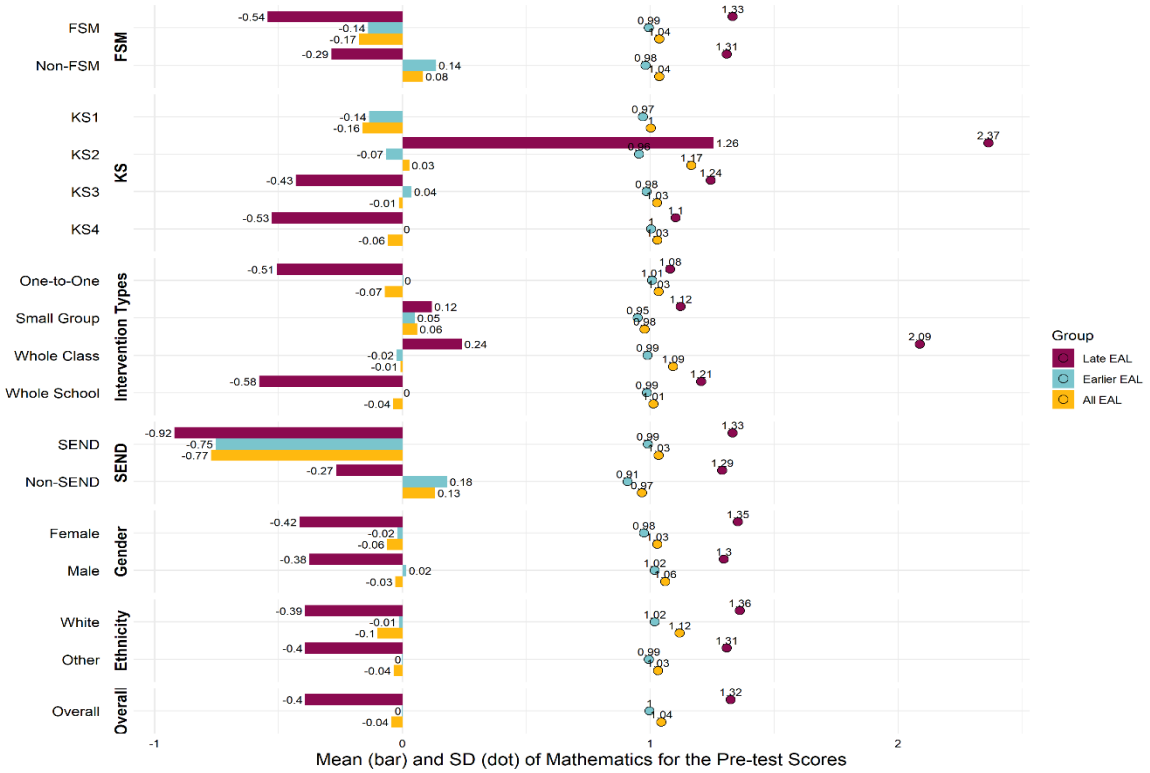

Figure 5: Mean (bars) and SD (dots) of the baseline mathematics attainment for late arrivals, earlier arrivals, and all EAL groups

3.3 RQ1.1, RQ1.2, RQ1.3, RQ2.2, and RQ2.3: Meta-analysis of overall intervention effects

Table 5 summarises the results of RQ1.1 and RQ2.2 while Table 7 presents the results to answer RQ1.3 and RQ2.3. The results in Table 5 show the overall impact of the EEF-funded interventions on EAL pupils. On the other hand, the results in Table 7 are based on TSA values and its categories (attainment gap between earlier arrivals and non-EAL, as well as between late arrivals and non-EAL). All analyses were performed separately for literacy and mathematics outcomes.

3.3.1 Summary of results on EAL (RQ1.1 and RQ2.2)

Table 5 presents the pooled effect size across literacy and mathematics outcomes (more detailed results in Appendix B Table B 1.1.1 and Table B 1.1.2). A positive sign means that on average the EEF-funded interventions have positive impacts on EAL pupils.

- On average, the EEF-funded interventions had positive impacts on the literacy outcomes of EAL pupils who participated in the trials with a pooled effect size of 0.058 (95% CI: 0.017, 0.100), which is equivalent to about one month's progress.
- On average, the effect size of EAL pupils on mathematics was 0.028 (95% CI: -0.015, 0.070) corresponding to no additional months' progress.

Table 5: Pooled effect size from IPD meta-analysis of EAL pupils and the attainment gap between them and their peers

Outcome	EAL subgroup				All pupils		
	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Literacy	51	1,942	46,267	0.058 (0.017, 0.100)	2,602	219,079	0.007 (-0.034, 0.049)
Mathematics	25	1,406	49,296	0.028 (-0.015, 0.070)	1,754	232,373	0.002 (-0.030, 0.037)

3.3.2 Summary of results on EAL-FSM (RQ1.2)

Table 6 presents the pooled effect size across literacy and mathematics outcomes for EAL pupils who are also eligible for FSM (for more detailed results see Appendix B Table B 1.2.1 and Table B 1.2.2). The average effects of interventions on the EAL-FSM pupils were higher than the overall EAL effects in both literacy and mathematics. However, the difference was not large enough to translate into more months of additional progress than the overall effects reported in Table 5.

- On average, the EEF-funded interventions had positive impact on the literacy outcomes of EAL-FSM pupils who participated in the trials with a pooled effect size 0.067 (95% CI: -0.004, 0.133), which is equivalent to about one month's progress.
- For mathematics and all attainment gaps, the effects sizes were positive but translate to no additional months' progress.

Table 6: Pooled effect size from IPD meta-analysis of EAL pupils eligible to FSM and the attainment gap between them and their EAL peers

Outcome	EAL subgroup				All pupils		
	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Literacy	51	1,409	21,986	0.067 (-0.004, 0.133)	2,503	86,155	0.014 (-0.055, 0.081)
Mathematics	25	1,101	24,508	0.040 (-0.025, 0.106)	1,727	90,992	0.018 (-0.042, 0.080)

3.3.3 Summary of results on EAL based on TSA (RQ1.3 and RQ2.3)

Table 7 presents the pooled effect size from subgroup analysis based on their TSA, as well as the attainment gap of earlier versus non-EAL as well as late versus non-EAL (more detailed results in Appendix B Table B 2.1 and Table B 2.2). The negative effect size estimate in the EAL subgroup analysis suggests that the effect of the EEF-funded interventions on EAL pupils reduces with every additional year of schooling in the UK. This indicates that EAL pupils who spent fewer years in the UK education system experience a greater impact from the EEF-funded interventions. Regarding the attainment gap, the positive estimates indicate that the EEF-funded interventions benefited late/earlier arrivals more than their peers (non-EAL pupils), suggesting that these interventions helped reduce the gap between late/earlier arrivals and non-EAL. For literacy, the attainment gap estimates indicate that the intervention is more effective for later arrivals, aligning with the findings from the subgroup analysis. For mathematics, the subgroup analysis suggests a similar trend, but with a much smaller effect of approximately one-third of the impact observed in literacy. While the attainment gap results for mathematics do not fully align with the subgroup analysis, their effects are minimal.

- **EAL subgroup analysis based on TSA:**
  - **For literacy:** The pooled effect size is -0.030 (95% CI: -0.082, 0.020), equivalent to no additional months' progress.
  - **For mathematics:** The pooled effect size is -0.010 (95% CI: -0.036, 0.017), equivalent to no additional months' progress.
- **Attainment gap based on TSA:**
  - **Earlier arrivals versus non-EAL:** Across both subjects, the attainment gap between earlier arrival and non-EAL was nearly zero for literacy at -0.002 (95% CI: -0.050, 0.042) and for mathematics outcomes at 0.004 (95% CI: -0.033, 0.039).
  - **Late arrivals versus non-EAL:** For literacy, the estimated attainment gap was 0.020 (95% CI: -0.09, 0.131) and -0.014 (95% CI: -0.138, 0.108) for mathematics. In terms of months' progress, for both literacy and mathematics outcomes, the late arrival versus non-EAL attainment gap was equivalent to no additional months' progress.

Table 7: Pooled effect size and their CIs for TSA intervention interaction effect on EAL pupils, as well as the attainment gap between earlier arrivals versus non-EAL and late versus non-EAL

Outcome	EAL subgroup	All pupils

	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Literacy	51	1,942	46,267	-0.030 (-0.082, 0.020)	2,602	219,079	-0.002 (-0.050, 0.042)	0.020 (-0.09, 0.131)
Mathematics	25	1,406	49,296	-0.010 (-0.036, 0.017)	1,754	232,373	0.004 (-0.033, 0.039)	-0.014 (-0.138, 0.108)

As shown in Table 7 above, the interventions had a greater impact on late arrivals than on those who arrived earlier. Their effectiveness declined as pupils spent more years in the schooling system (i.e. as TSA increased), with more decline observed in literacy outcomes compared to mathematics. This pattern was also illustrated in Figure 6, which shows the predicted effect size per TSA year. This figure clearly shows a reduction in intervention effects with increasing TSA. For pupils with lower TSA values (TSA <3), the intervention's effect was greater in literacy than in mathematics. However, beyond TSA 3, this pattern reversed. Although the effects continued to decline for both subjects, the impact on mathematics became relatively greater than that on literacy.

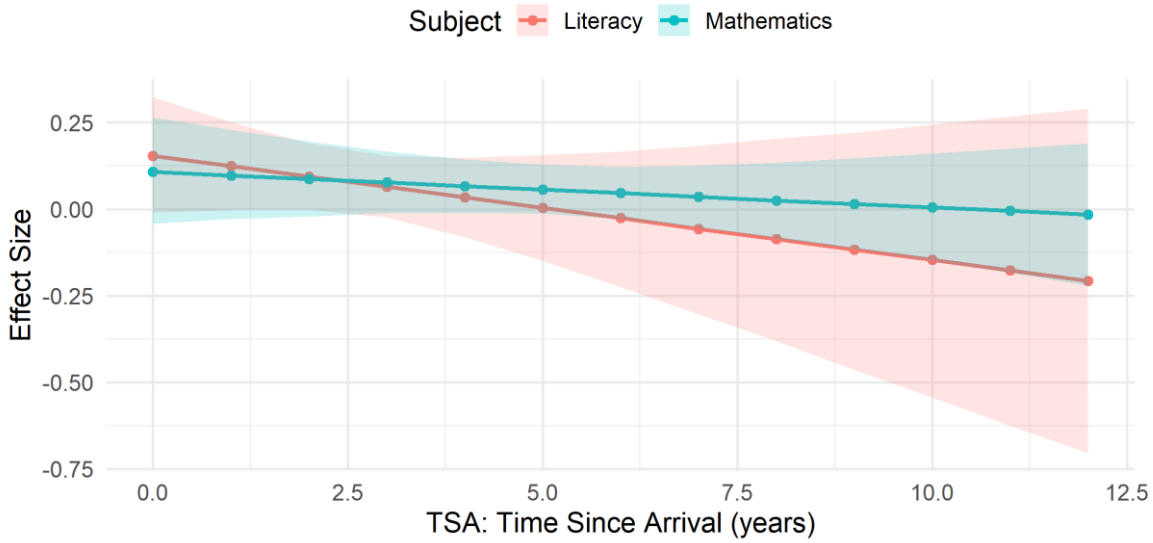

Figure 6: The predicted effect of the EEF-funded interventions by TSA in the UK schooling system, with 95% CIs for literacy and mathematics outcomes

The overall results presented in Table 7 may be influenced by individual projects depending on their sample size, the width of their CIs, and their effect size estimates (see Appendix B Table B 2.1 for literacy and Table B 2.2 for mathematics outcomes).

3.4 RQ1.4: Meta-analysis for FSM subgroups

Table 8 displays the pooled effect sizes from the analysis based on TSA for EAL pupils eligible for FSM (for more detailed results see Appendix B Table B 3.1 and Table B 3.2). A negative effect size estimate indicates a reduction in the EEF-funded interventions' effect with each additional year spent in the UK education system. Despite the wider CIs, both the estimates suggest that the EEF-funded interventions were likely to have more positive effects for FSM-eligible EAL pupils who spent fewer years in the UK education system. Comparable effects were observed across both subjects, and the FSM-related estimates, in Table 8, demonstrated a greater magnitude than their corresponding estimates from the overall analysis from Table 7. We also find that, while Table 6 showed a positive impact of the interventions on EAL pupils eligible for FSM overall (FSM analysis without considering TSA), the current analysis highlights that the extent of this impact varies by TSA.

- **For literacy:** The pooled effect size based on TSA for pupils eligible for both FSM and EAL is -0.048 (95% CI: -2.371, 2.308), suggesting that the EEF-funded interventions had a greater impact on pupils with shorter exposure to the UK schooling system, achieving approximately one month of additional progress.
- **For mathematics:** A similar interpretation applies to mathematics outcomes -0.043 (95% CI: -2.337, 2.327).

Table 8: Pooled effect size estimates based on TSA and their CIs for EAL pupils eligible to FSM

Outcome	Number of			Pooled effect size estimate (95% CI)
	Trials	Schools	EAL pupils	
Literacy	51	1,409	21,986	-0.048 (-2.371, 2.308)
Mathematics	25	1,101	24,508	-0.043 (-2.337, 2.327)

3.5 RQ1.5 and RQ2.4: Meta-analysis by Key Stages and types of interventions

3.5.1 Summary of results by Key Stage

Table 9 presents the meta-analysis results based on TSA by Key Stage (more detailed results see Appendix B Table B 4.1.1 to Table B 4.4.2). As there was only one project for Key Stage 1 mathematics, a meta-analysis could not be conducted for this case. Overall, the interventions seem to have a greater impact on late arrival EAL pupils compared to their peers, particularly in literacy, as indicated by the negative TSA effects from the EAL subgroup analysis. Attainment gaps are generally small, with late arrivals occasionally showing slight advantages over non-EAL pupils, especially in literacy Key Stage 1 to Key Stage 3. It is also important to mention that some Key Stage analyses are based on a relatively small number of studies, but the number remains within the recommended threshold for conducting a meta-analysis (Myung, 2023).

- **EAL subgroup analysis based on TSA:**
  - **For literacy:** All Key Stage estimates are negative, indicating a reduction in the effect of the EEF-funded interventions with each additional year spent in the UK educational system. The magnitude of these effects decreases from Key Stage 1 to Key Stage 4. For instance, in Key Stage 2, a negative TSA pooled effect estimate of -0.013 (95% CI: -0.055, 0.031). In Key Stage 4, the effect size was -0.007 (95% CI: -0.035, 0.020). Except for Key Stage 1, where the effect size corresponds to three months of additional progress, all other Key Stages show estimates equivalent to no additional months' of progress.
  - **For mathematics:** A negative effect size for Key Stage 4, -0.029 (95% CI: -0.054, -0.005), indicates that late arrivals may have experienced a slightly greater impact from the interventions. Nearly zero effects were observed for Key Stage 2 at 0.002 (95% CI: -0.050, 0.054) and Key Stage 3 pupils at 0.004 (95% CI: -0.026, 0.033). All estimates were equivalent to no additional months' progress.
- **Attainment gap analysis:**
  - **For literacy:** For Key Stage 1, the attainment gap of late versus non-EAL (0.018; 95% CI: -0.527, 0.600) is smaller than that of earlier versus non-EAL (0.049; 95% CI: -0.051, 0.147), this contradicts the subgroup analysis showing that the EEF-funded intervention reduced by 0.189 for each additional year in the UK schooling system. These contradictions can be resolved when considering the very low number of trials in Key Stage 1 (N=5) and wider CIs. For Key Stage 2, the attainment gap between late arrival versus non-EAL was 0.041 (95% CI: -0.125, 0.207) indicating that the interventions had a slightly greater impact on late arrivals than non-EAL pupils by 0.04, while a smaller differential effect was also noted for earlier arrivals compared to non-EAL pupils (attainment gap: -0.032; 95% CI: -0.085, 0.020). Similar to Key Stage 2 subgroup, a negative TSA pooled effect size estimate (-0.012; 95% CI: -0.049, 0.023) was observed for Key Stage 3. Further, the attainment gap between late versus non-EAL was positive 0.017 (95% CI: -0.15, 0.185).
  - **For mathematics:** A slightly positive attainment gap between late arrivals versus non-EAL pupils in Key Stage 2 (0.010; 95% CI: -0.21, 0.256) and Key Stage 4 (0.052; 95% CI: -0.119, 0.217) suggests that the late arrivals experienced a slightly greater impact from the interventions than non-EAL pupils.

Table 9: Pooled average effect size and their CIs for TSA on EAL pupils as well as the attainment gap for earlier arrivals versus non-EAL and late arrivals versus non-EAL by Key Stage

Key Stage	EAL subgroup				All pupils			
	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Literacy								
Key Stage 1	5	182	1,432	-0.189 (-0.647, 0.271)	250	6,827	0.049 (-0.051, 0.147)	0.018 (-0.527, 0.600)
Key Stage 2	16	828	10,513	-0.013 (-0.055, 0.031)	1,204	49,254	-0.032 (-0.085, 0.020)	0.041 (-0.125, 0.207)
Key Stage 3	23	341	6,043	-0.012 (-0.049, 0.023)	474	29,165	0.019 (-0.077, 0.120)	0.017 (-0.15, 0.185)
Key Stage 4	7	591	28,279	-0.007 (-0.035, 0.020)	674	133,833	-0.035 (-0.080, 0.010)	-0.035 (-0.221, 0.149)
Mathematics								
Key Stage 2	10	408	5,147	0.002 (-0.050, 0.054)	556	22,937	0.018 (-0.051, 0.085)	0.010 (-0.21, 0.256)
Key Stage 3	5	192	5,415	0.004 (-0.026, 0.033)	221	25,065	0.005 (-0.062, 0.074)	-0.032 (-0.188, 0.126)
Key Stage 4	9	783	38,500	-0.029 (-0.054, -0.005)	942	183,095	-0.010 (-0.053, 0.035)	0.052 (-0.119, 0.217)

3.5.2 Summary of results by types of intervention

Table 10 summarises the pooled effect size and attainment gap estimates for EAL pupils across different intervention types for literacy and mathematics outcomes (for more detailed results see Appendix B Table B 5.1 to Table B 5.4.2). In literacy, one to one and small group interventions showed a positive effect on late arrivals, as indicated by negative TSA pooled effect size estimates (-0.018 for one to one and -0.133 for small groups) for EAL pupils and positive attainment gaps between late arrivals and non-EAL pupils (0.047 for one to one and 0.110 for small groups). For mathematics, the analysis combined two small group interventions with seven one to one trials due to the limited number of eligible small group studies. Whole-class mathematics interventions demonstrated a slightly negative TSA effect (-0.012). The corresponding negative attainment gap showed that non-EAL pupils experienced a greater impact than EAL pupils (both earlier and late arrivals). Other intervention types showed negligible effects.

- **EAL subgroup analysis based on TSA:**
    - **For literacy:** Except for small group interventions, with a negative TSA effect size of -0.133 (95% CI: -0.344, 0.084) equivalent to two months of additional progress, the estimates for other types of interventions were equivalent to no additional months' progress.
    - **For mathematics:** Except for whole-class interventions, with a negative effect size of -0.012 (95% CI: -0.070, 0.048) equivalent to no additional months' progress. The estimates were nearly zero at -0.009 (95% CI: -0.062, 0.044) for one to one and small group interventions and at -0.009 (95% CI: -0.038, 0.019) for whole-school interventions.
- **Attainment gap analysis:**
    - **For literacy:** One to one and small group of interventions have shown greater impacts for late arrivals compared to non-EAL pupils. In one to one interventions, a positive attainment gap estimate of 0.047 (95% CI: -0.169, 0.257) corresponds to approximately one month of additional progress, while small group interventions indicate a larger positive gap of 0.110 (95% CI: -0.138, 0.358), equivalent to about two months of additional progress. Small group interventions also demonstrate a small positive attainment gap estimate of 0.039 (95% CI: -0.069, 0.148) when comparing earlier EAL pupils to non-EAL pupils.
    - **For mathematics:** The attainment gaps are generally smaller and predominantly negative for all four types of interventions, indicating that non-EAL pupils may experience a greater impact from interventions than earlier or late arrivals EAL pupils; however, these gaps correspond to no additional months' progress. Among the analyses, only two positive estimates were found indicating a more positive impact on earlier arrivals as compared to the non-EAL pupils, with the highest attainment gap of 0.037 (95% CI: -0.013, 0.086) from whole-school interventions, followed by a gap of 0.010 (95% CI: -0.077, 0.100) for one to one interventions.

Table 10: Pooled average effect size and their CIs for TSA on EAL pupils as well as the attainment gap for late versus earlier arrivals and late arrivals versus non-EAL by types of intervention

Types of interventions	EAL subgroup				All pupils			
	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Literacy								
One to one	16	502	17,038	-0.018 (-0.068, 0.034)	769	71,794	-0.007 (-0.106, 0.093)	0.047 (-0.169, 0.257)
Small group	14	378	4,867	-0.133 (-0.344, 0.084)	515	17,236	0.039 (-0.069, 0.148)	0.110 (-0.138, 0.358)
Whole class	14	646	16,271	0.015 (-0.033, 0.063)	801	70,899	-0.002 (-0.067, 0.064)	-0.030 (-0.225, 0.171)
Whole school	7	416	8,091	-0.006 (-0.039, 0.028)	517	59,150	-0.055 (-0.116, 0.005)	-0.069 (-0.242, 0.107)
Mathematics								
One to one / small group	9	481	25,892	-0.009 (-0.062, 0.044)	665	109,512	0.010 (-0.077, 0.100)	-0.028 (-0.291, 0.236)
Whole class	8	444	12,566	-0.012 (-0.070, 0.048)	512	55,907	-0.042 (-0.091, 0.006)	-0.007 (-0.242, 0.233)
Whole school	8	481	10,838	-0.009 (-0.038, 0.019)	577	66,954	0.037 (-0.013, 0.086)	-0.010 (-0.142, 0.122)

3.6 Sensitivity analysis

This section presents three sensitivity analyses conducted to evaluate the robustness of the main results. The first sensitivity analysis involved redefining the TSA categories used in the main analysis, which were originally based on a 50% cut-off (see Section 2.4.1). In this alternative categorisation, EAL pupils with a TSA of more than two years were classified as earlier arrivals, while those with a shorter TSA were considered late arrivals. Although this categorisation simplifies the classification process, it led to the exclusion of more projects due to insufficient sample sizes, particularly in the late arrivals category and most of the Key Stage 1 projects. As a result, 41 projects with literacy outcomes and 20 with mathematics outcomes were eligible for this sensitivity analysis. The second analysis focused on projects with a high-security rating, defined as a padlock score of 3 or higher. The padlock security rating, ranging from 0 to 5 (Higgins *et al.,* 2012), provides a measure of the reliability of results from the EEF archived trials. Restricting the analysis to projects meeting this criterion resulted in 28 projects for literacy outcomes and 11 projects for mathematics outcomes. The last sensitivity analysis incorporated projects that did not pass the initial screening due to insufficient sample sizes. By including these previously excluded projects alongside the eligible ones, the total number of projects analysed increased to 91 projects for literacy outcomes and 54 projects for mathematics outcomes. Together, these analyses provide additional insights into the stability of the findings under different assumptions and selection criteria.

Table 11 summarises the pooled effect size and attainment gap estimates for EAL pupils across literacy and mathematics outcomes based on three different sensitivity analyses and provides a comparison with the main analysis results (more detailed results see the tables in Appendix C). The three different sensitivity analyses conducted include an alternative TSA categorisation (Cut2), restricting the trials to high-security projects (PadL3), and incorporating all eligible and insufficient sample size projects. Overall, the sensitivity analyses confirm the robustness of the main findings while highlighting the importance of high-evidence security rating data in producing reliable estimates.

Table 11: Pooled effect size from model in Equation A1 and attainment gaps from model in Equation A2 for literacy and mathematics outcomes based on three different sensitivity analyses. Results are shown for the main analysis (RQ1.3 and RQ2.3) and three sensitivity analyses: i) Cut2: using a two-year threshold for TSA classification; ii) PadL3: including only high-security trials with padlock score ≥3; and iii) All: inclusion of all eligible projects as well as those with small sample sizes.

Analysis	EAL subgroup				All pupils			
	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trial	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Literacy								
Main	51	1,942	46,267	-0.030 (-0.082, 0.020)	2,602	219,079	-0.002 (-0.050, 0.042)	0.020 (-0.09, 0.131)
Cut2	42	1,612	34,102	-0.019 (-0.070, 0.035)	2,178	142,636	-0.001 (-0.046, 0.043)	0.073 (-0.052, 0.194)
PadL3	28	980	13,171	-0.038 (-0.132, 0.058)	1,373	70,256	0.019 (-0.045, 0.084)	-0.022 (-0.194, 0.156)
All	93	3,749	65,793	-0.027 (-1.713, 1.611)	5,110	296,096	0.007 (-0.025, 0.038)	0.352 (-39.742, 0.646)
Mathematics								
Main	25	1,406	49,296	-0.010 (-0.036, 0.017)	1,754	232,373	0.004 (-0.033, 0.039)	-0.014 (-0.138, 0.108)
Cut2	20	1,112	36,780	-0.078 (-0.150, -0.005)	1,506	160,619	-0.007 (-0.053, 0.037)	-0.016 (-0.195, 0.160)
PadL3	11	472	9,985	0.001 (-0.048, 0.049)	568	52,356	-0.007 (-0.055, 0.043)	-0.026 (-0.263, 0.199)
All	53	2,869	65,194	-0.031 (-0.393, 0.328)	3,936	301,268	-0.006 (-0.033, 0.023)	-0.218 (-72.779, 0.048)

- **Literacy outcomes:**
    - **For Cut2:** Redefining TSA categories results in an effect size of -0.019 (95% CI: -0.070, 0.035), a comparable negative TSA estimate as in the main analysis equivalent to no additional months of progress. In terms of attainment gap, this sensitivity analysis resulted in nearly a zero-attainment gap between earlier versus non-EAL -0.001 (95% CI: -0.046, 0.043) as in the main analysis. However, the CIs between the estimates from the main analysis (RQ1.3 and RQ2.3) and the Cut2 analysis overlap with each other.
    - **For PadL3:** Restricting the analysis to high-security projects results in an effect size of -0.038 (95% CI: -0.132, 0.058) for literacy outcomes, which is very similar to that of the main analysis. But the attainment gap changes direction as compared to the main analysis.
    - **For all (eligible and insufficient N):** Including previously excluded projects leads to a highly unstable CI and pooled effect size of -0.027 (95% CI: -1.713, 1.611) and attainment gap between late versus non-EAL estimate of 0.352 (95% CI: -39.742, 0.646), reflecting the problem if low-quality data is included. Other than late versus non-EAL (with the main estimate belonging to the CI of this sensitivity estimate), all those estimates are comparable with the corresponding main estimates.
- **Mathematics outcomes:**
    - **For Cut2:** As compared to the results from the main analysis, redefining TSA categories results in a slightly negative pooled effect size of -0.078 (95% CI: -0.150, -0.005). However, attainment gap estimates remain similar, with an estimate of -0.016 (95% CI: -0.195, 0.160) for late arrivals versus non-EAL pupils.
    - **For PadL3:** High-security projects show negligible pooled effect size of 0.001 (95% CI: -0.048, 0.049) and minimal attainment gaps, with a slight reduction for late arrivals versus non-EAL pupils of -0.026 (95% CI: -0.263, 0.199).
    - **For all (eligible and insufficient N):** Including low-quality projects introduces instability in the results (with very wide CI), with a pooled effect size of -0.031 (95% CI: -0.393, 0.328) and a highly uncertain attainment gap between late versus non-EAL of -0.218 (95% CI: -72.779, 0.048). All estimates of this sensitivity analysis are in the same direction as the main analysis.

4. Conclusion

This research evaluates the impact of the EEF-funded trials on literacy and mathematics outcomes for EAL pupils, focusing on their TSA in the UK schooling system, which aligns with 'Analysis of the Longitudinal Study of Young People in England (LSYPE)' findings that the age at arrival in the UK is an important factor affecting the attainment of EAL pupils (Strand *et al.,* 2015). EAL pupils in this study were categorised as earlier arrivals and late arrivals, with an emphasis on understanding whether these interventions helped the EAL pupils as well as reducing the gap between EAL pupils, particularly late arrivals, and their non-EAL peers. Late arrival EAL pupils may face compounded challenges due to shorter exposure to the curriculum and the language, underscoring the importance of tailored interventions. However, it is important to acknowledge that a small group of late arrivals may already be fluent in English, particularly if they had prior exposure to English before joining the UK schooling system.

In terms of sample size, we observed the overrepresentation of non-EAL pupils in the overall sample, comprising 78.9% of the total cohort in literacy (172,812 of 219,079 pupils) and 78.8% in mathematics (183,077 of 232,373 pupils) trials. Despite this, the large cohort size ensured a substantial number of EAL pupils were included in the analyses with 46,267 pupils for literacy and 49,296 pupils for mathematics outcomes. When examining baseline achievement prior to the interventions, we found that EAL pupils did not have uniform baseline attainment; instead, their baseline achievement varied depending on the length of time they had spent in the UK education system, with longer durations associated with higher achievement.

Our findings indicate that the EEF-funded trials on average improved EAL pupils' literacy outcomes, corresponding to approximately one month of additional progress (pooled effect size: 0.058; 95% CI: 0.017, 0.100). There was no conclusive evidence of impact on mathematics outcomes for EAL pupils, with the estimated effect size of 0.028 (95% CI: -0.015, 0.070) equivalent to no additional months of progress. Strand *et al.* (2015) demonstrated that pupils who had very recently arrived in the UK exhibited lower attainment at age 14, highlighting that recently arrived EAL pupils tend to achieve much lower attainment outcomes than EAL pupils who have been in the UK schooling system for a long time. Our analysis focusing on attainment impacts by TSA revealed that late-arriving EAL pupils experienced a greater impact from the EEF-funded trials compared to earlier-arriving EAL pupils. For literacy, on average the impact of the EEF-funded trials showed a greater impact for EAL pupils who spent less time in the UK education system, with the effect size decreasing by 0.03 (pooled effect size: -0.030; 95% CI: -0.082, 0.020) for each additional year spent in the system. The results for mathematics outcomes also corroborate similar findings but with lesser effect (pooled effect size: -0.010; 95% CI: -0.036, 0.017).

Based on categorisation of EAL pupils into earlier and late arrival subgroups for the EEF-funded literacy trials, a larger average impact in literacy outcomes for late arrival EAL pupils was observed compared to the non-EAL pupils. Literacy attainment for the earlier-arriving EAL pupils (those who arrived in the UK a long time ago) was nearly the same as non-EAL pupils. Among the EEF-funded mathematics trials, there was no notable difference in mathematics outcomes for EAL pupils who spent less time in the UK than non-EAL pupils. Likewise, according to Strand *et al.* (2015), EAL pupils have shown that they generally perform better in mathematics than in literacy. At every age, EAL pupils tend to score higher in mathematics assessments than in reading assessments, which is plausible since mathematics is a less linguistically dependent subject. By age 11, the attainment gap in mathematics assessment between EAL and non-EAL pupils is almost eliminated, and by age 16, EAL pupils are slightly more likely to achieve a GCSE A*–C pass in mathematics than non-EAL pupils. EAL pupils are also more likely than non-EAL pupils to achieve the English Baccalaureate, and to achieve a GCSE A*–C in a Modern Foreign Language. Findings from Strand *et al.* (2015) suggested limited potential for improvement in the mathematics outcomes of EAL pupils, which could also explain the mathematics results from this IPD meta-analysis study.

A study by Ashraf *et al.* (2021) found that the EEF-funded educational interventions had a positive impact on the literacy outcomes of pupils eligible for FSM, with a pooled effect size of 0.06 (0.03, 0.08). The same study also indicated that the attainment gap in literacy outcomes between FSM and non-FSM pupils was marginally improved by the EEF-funded interventions. Our findings further show a positive impact of the EEF-funded interventions on EAL pupils eligible for FSM, equivalent to one month of additional progress in literacy and no additional months' progress in mathematics. However, the impact varied depending on the length of time EAL pupils have spent in the UK schooling system, with a greater impact observed among those who arrived more recently.

In terms of robustness, sensitivity analyses confirmed the robustness of the findings. Redefining late arrivals as pupils with two or fewer years in the UK education system and earlier arrivals as those with more than two years, excluded additional projects with fewer than five pupils per TSA group (total analysed trials in the main analysis: N=51 literacy and N=25 mathematics; in the alternative analysis: N=42 literacy and N=20 mathematics). Despite this, results remained consistent. Similarly, restricting the analysis to high-security projects (padlock ≥3) aligned with the main findings, reinforcing the robustness of the approach.

The insights from this report are essential for guiding educators and policymakers towards the need for tailored support for EAL pupils, especially those who arrive late and are eligible for FSM. Notably, FSM-eligible EAL pupils who have spent less time in the education system benefit similarly in both literacy and mathematics, with their impact being more pronounced than that of the overall EAL pupils' population. By identifying the specific needs of these groups, educational interventions can be more effectively designed to bridge the attainment gap between EAL, especially late arrivals, and non-EAL pupils. This research indicates the role educational interventions can play in improving educational outcomes for the most deprived populations in the UK and providing all pupils with the opportunity to succeed.

4.1 Strengths

Many studies on EAL pupils have focused on youth in middle or late adolescence (e.g. Hull, 2022). Our study, however, broadens its scope to EAL pupils from the Early Years (three years old) through four Key Stages (Key Stage 1 to Key Stage 4, up to 16 years old), with a specific focus on literacy and mathematics attainment rather than general educational outcomes. It also moves beyond treating EAL pupils as a single group by accounting for their TSA in the UK schooling system, providing a deeper understanding of the impact of targeted interventions on their educational outcomes. Building on Hutchinson (2018) that EAL pupils eligible for FSM often have low prior attainment and require sustained support, our study investigates the effects of the EEF-funded interventions not only on EAL pupils but also on those eligible for FSM, using data from the NPD and the EEF archives. Our study emphasises the importance of focusing on late arrival groups, who are often most in need of and responsive to such interventions, encouraging stakeholders and policymakers to prioritise ongoing support to ensure no individual is left behind in the education system.

4.2 Limitations

The imbalance between non-EAL, earlier-arriving EAL, and late-arriving EAL pupils, limits the generalisability of the findings, particularly when comparing late arrivals with non-EAL pupils. Our study tried to mitigate this limitation by incorporating data from multiple projects in the meta-analysis, rather than relying on a single study or dataset. Hessel and Strand (2023) and Strand and Lindorff (2021) stated that English proficiency is more likely to explain the pupil's achievement than EAL status. However, the data used in this study did not include measures of English proficiency, so this could not be directly examined. If the data related to pupils' English proficiency scales becomes available, this measure can be incorporated into our further research especially for attainment gap analysis. As TSA was determined using local authority codes from the spring census, for the pupils who joined the UK schooling system after the census, their TSA (number of years) was counted only from the following spring census. However, this affected only a very small number of pupils. Discontinuities in school attendance were also not considered for the computation of TSA. Years spent in nurseries were excluded to ensure comparability across schools, as not all schools provide nursery facilities. Furthermore, the study did not examine parental demographic factors, such as their education levels, educational engagement for their children, migration time—before or after their child's birth, or their language at home, which have been known to influence their children's educational attainment outcomes (e.g. Callahan *et al.,* 2010; Hull, 2022; Sandilos *et al.,* 2020). If the pupils data can be aggregated with various social and cultural variables linking with their parents demographic information (e.g. Åslund *et al.,* 2015) as well as with the given factors (e.g. FSM eligibility, Key Stages, types of interventions, SEND status, gender, and ethnicity), further analysis, which can be carried out by investigating cross-generational relationships (as suggested by Hull, 2022) can be more practically applied to policy making, figuring out who should be the immediate target group to have support.

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Appendix A: List of trials and outcome measurements and distribution by EAL status

A 1. List of trials and outcome measurements

Table A 1: List of trials included in the analysis

Literacy trials		Mathematics trials	
Trial name	Web-link for trials	Trial name	Web-link for trials
Trial with one subject either mathematics or literacy			
1stClass@Number	Link to EEF Website	Affordable Online Maths Tuition	Link to EEF Website
ABRA (Effectiveness)	Link to EEF Website	Ark Mathematics Mastery: Secondary	Link to EEF Website
Accelerated Reader – Effectiveness Trial	Link to EEF Website	Dialogic Teaching	Link to EEF Website
Butterfly Phonics	Link to EEF Website	Generation STEM	Link to EEF Website
Catch Up Literacy	Link to EEF Website	GraphoGame Rime	Link to EEF Website
Chatterbooks	Link to EEF Website	Maths Count	Link to EEF website
Discover Summer School	Link to EEF Website	Mathematics in Context	Link to EEF Website
Fresh Start – Pilot	Link to EEF Website	Mathematical Reasoning	Link to EEF Website
Graduate (Perry Beeches) Coaching Programme	Link to EEF Website	Realistic Maths Education	Link to EEF Website
Grammar for Writing	Link to EEF Website	Zippys Friends	Zippys_Friends.pdf
Grammar for Writing – Effectiveness Trial	Link to EEF Website	Lexia Reading	Link to EEF Website
Improving Writing Quality	Link to EEF Website		
Integrating English	Link to EEF Website		
LIT (Literacy Intervention Toolkit) Programme	Link to EEF Website		
Online Reading Programme (ABRA)	Link to EEF Website		
Paired Reading	Link to EEF Website		
PALS–UK (Peer Assisted Learning Strategies – UK)	Link to EEF Website		
Powerful Learning Conversation (Literacy and Maths)	Link to EEF Website		
Quest	Link to EEF Website		

Literacy trials		Mathematics trials	
Trial name	Web-link for trials	Trial name	Web-link for trials
Rapid Phonics	Link to EEF Website		
REACH	Link to EEF Website		
Response to Intervention	Link to EEF Website		
Rhythm for Reading	Link to EEF Website		
Speech Bubbles	Link to EEF Website		
Summer Active Reading Programme	Link to EEF Website		
Switch-On Effectiveness Trial	Link to EEF Website		
Talk for Literacy	Link to EEF Website		
Talk of the Town	Link to EEF Website		
TextNow Transition Programme	Link to EEF Website		
Unit of Sound	Link to EEF Website		
Vocabulary Enrichment Intervention	Link to EEF Website		
Word and World Reading	Link to EEF Website		
Trial with both subjects of mathematics and literacy			
Act, Sing, Play	Link to EEF Website	Lesson Study	Link to EEF Website
Effective Feedback	Link to EEF Website	Magic Breakfast	Link to EEF Website
Embedding Formative Assessment	Link to EEF Website	Parenting Academy	Link to EEF Website
Families and Schools Together (FAST)	Link to EEF Website	SHINE in Secondaries (Literacy)	Link to EEF Website
Future Foundations	Link to EEF Website	Teacher Observation	Link to EEF Website
Hampshire Hundreds	Link to EEF Website	Texting Parents	Link to EEF Website
Improving Numeracy and Literacy: Key Stage 1	Link to EEF Website	The RISE Project: Evidence-Informed School Improvement	Link to EEF Website
Increasing Pupil Motivation	Link to EEF Website	Tutor Trust Secondary	Link to EEF Website
Learner Response System	Link to EEF Website	Youth Social Action (Literacy and Maths)	Link to EEF Website

Table A 2: Project name and related literacy and mathematics outcome measurements segregated by type of outcome (primary or secondary outcome) and all outcomes considering standardised Z-scores

Literacy outcomes		Mathematics outcomes	
Project	Outcome measurement	Project	Outcome measurement
Primary outcomes			
ABRA (Effectiveness)	Progress on the PIRA	Affordable Online Maths Tuition	Key Stage 2 Maths SAT Fine Marked Score
Accelerated Reader – Effectiveness Trial	KS2 READSCORE	Dialogic Teaching	Level 10 GL Assessment Test in Maths
Butterfly Phonics	NGTR	Effective Feedback	Key Stage 1 TA Maths
Catch Up Literacy	NGTR	Embedding Formative Assessment	NPD numerical grades for (Maths KS4_APMAT_PTQ_EE)
Chatterbooks	NGRT	Generation STEM	KS4_APMAT_91
Discover Summer School	Writing Score	Future Foundations	PTM Score
Effective Feedback	Key Stage 1 TA Reading	Hampshire Hundreds	Mathematics InCAS
Embedding Formative Assessment	NPD Numerical Grades for English KS4_APENG_PTQ_EE)	Improving Numeracy and Literacy	PTM 7 Test
Fresh Start – Pilot	Overall Reading Scale	Improving Working Memory	GL BAS3 Test
Future Foundations	PTiE Score	Increasing Pupil Motivation	GCSE Maths Points
Graduate (Perry Beeches) Coaching Programme	PTE Raw Score	Learner Response System	Total Marks Achieved in Maths Test (KS2_MATTOTMRK)
Grammar for Writing	KS2_WRITTAOUTCOME	Lesson Study	NPD Key Stage 2 Maths Scores
Grammar for Writing – Effectiveness Trial	Key Stage 2 past writing paper (CalcTotal_Overall2)	Ark Mathematics Mastery: Secondary	PTM Score
Improving Numeracy and Literacy	Progress in English 7 Literacy Test	Maths Count	ZStandardised_GenMaths
Improving Writing Quality	Writing Score	Mathematics in Context	GCSE Mathematics Raw Score Standardised
Integrating English	Past Key Stage 2 Writing Papers (maximum 31)	Parenting Academy	InCAS Assessments in Maths
Learner Response System	NPD Key Stage 2 Reading (KS2_READMRK)	Realistic Maths Education	GL PTM13 raw total score
Lesson Study	KS2 Read Percentile	SHINE in Secondaries (Literacy)	GL Assessment's PTM 12
LIT Programme	Hodder Access Reading Test	Teacher Observation	GCSE Maths Point Score (KS4_EBPTSMAT_PTQ_EE)
Online Reading Programme (ABRA)	PIRA	Texting Parents	Combined Key Stage 3 Access Maths Test (Hodder) and GCSE Maths

Literacy outcomes		Mathematics outcomes	
Project	Outcome measurement	Project	Outcome measurement
Paired Reading	NGRT GL Assessment	The RISE Project: Evidence-Informed School Improvement (1 and 2 years)	GCSE Mathematics grade
PALS–UK	PIRA Age Standardised Score	Tutor Trust Secondary	GCSE Mathematics grade, Point Score equivalent
Parenting Academy	InCAS Assessments in Reading	Youth Social Action Trials: Youth United	
Powerful Learning Conversation (Literacy and Maths)	Age Standardised English Test Score		
Quest	GL Assessment's NGRT		
REACH	NGTR raw score		
Rapid Phonics	NGR 3B SS		
Response to Intervention	Overall reading scale NGTR		
Rhythm for Reading	NGTR overall raw score		
Speech Bubbles	Renfew Bus Story (RBS) score		
SHINE in Secondaries (Literacy)	GL Assessment's PTE12		
Summer Active Reading Programme	Standardised age score (NGTR)		
Switch-On Effectiveness Trial	NGTR score		
Talk for Literacy	NGTR overall raw score		
Talk of the Town	GL NGRT		
TextNow Transition Programme	GL NGRT		
Texting Parents	Combined Key Stage 3 Access Reading (Hodder) and GCSE English		
The RISE Project: Evidence-Informed School Improvement (1 and 2 years)	GCSE English Grade		
Tutor Trust Secondary	GCSE English Grade, Point Score equivalent		
Unit of Sound	GL Assessment's NGRT		
Vocabulary Enrichment Intervention	GL Assessment's NGRT		
Word and World Reading	GL Assessment's PTE long version		
Youth Social Action Trials: Youth United	Youth Social Action Trials: Youth United		

INCAS=Interactive Computerised Assessment System; NGRT=New Group Reading Test; PIRA=Progress in Reading Assessment; PTE: Progress Test in English; PTM: Progress Test in Maths; TA=Teach Assessment.

A 2. Distributions of baseline attainment and EAL status including EAL (late/earlier) and non-EAL

A 2.1 Literacy: Project-specific distributions of the pupils across EAL groups and non-EAL

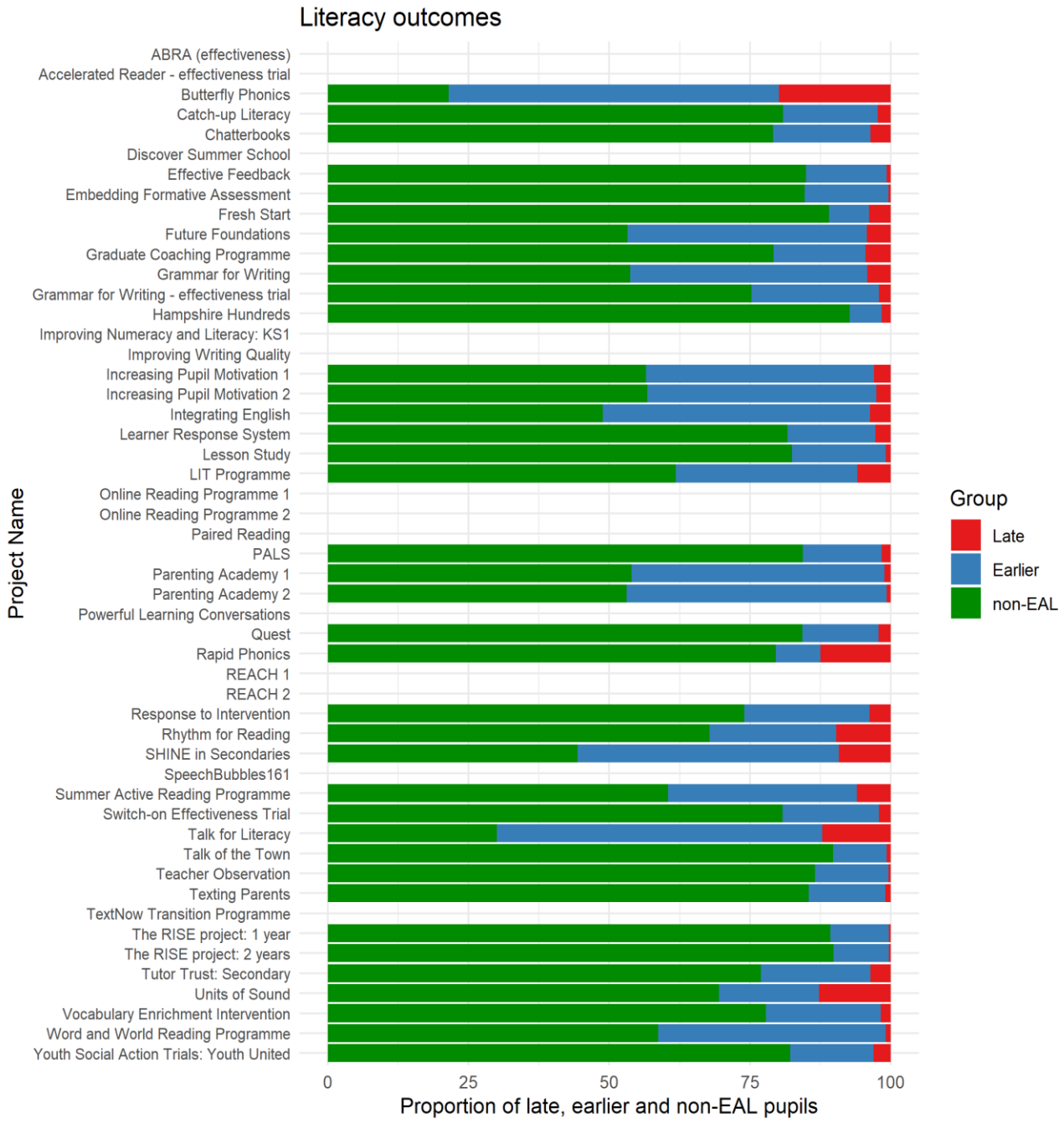


Figure A 1: Project participation by group (late [red], earlier [blue], non-EAL [green]) for projects with literacy outcomes and empty bars representing the projects in which one of the TSA categories includes fewer than ten pupils

A 2.2 Distribution of baseline attainment in terms of mean and SD across EAL status

Table A 3: Distribution of baseline attainment in terms of mean and SD across EAL status (late earlier, all EAL, and non-EAL) and different key features (and FSM eligibility, Key Stages, types of interventions, SEND status, gender, and ethnicity)

Variables		EAL: Mean (SD)			Non-EAL: Mean (SD)	Overall: Mean (SD)
		Late EAL	Earlier EAL	All EAL		
Literacy						
Overall		-0.797 (1.475)	-0.083 (0.974)	-0.153 (1.055)	0.016 (0.965)	-0.020 (0.987)
SEND	Non-SEND	-0.689 (1.450)	0.100 (0.887)	0.022 (0.986)	0.201 (0.867)	0.163 (0.896)
	SEND	-1.280 (1.493)	-0.820 (0.963)	-0.861 (1.030)	-0.729 (0.980)	-0.757 (0.992)
FSM	Non-FSM	-0.736 (1.456)	0.015 (0.971)	-0.070 (1.064)	0.176 (0.933)	0.131 (0.963)
	FSM	-0.890 (1.501)	-0.188 (0.967)	-0.244 (1.037)	-0.254 (0.957)	-0.252 (0.978)
Gender	Female	-0.672 (1.509)	0.062 (0.953)	-0.007 (1.041)	0.155 (0.935)	0.121 (0.960)
	Male	-0.912 (1.435)	-0.226 (0.974)	-0.295 (1.049)	-0.123 (0.973)	-0.160 (0.993)
Key Stage outcomes	Key Stage 1	-0.916 (1.002)	-0.078 (0.995)	-0.097 (1.002)	0.058 (0.983)	0.025 (0.989)
	Key Stage 2	-0.380 (2.342)	-0.062 (0.966)	-0.083 (1.117)	0.020 (0.920)	-0.002 (0.967)
	Key Stage 3	-0.601 (1.124)	-0.070 (0.962)	-0.147 (1.005)	0.063 (0.979)	0.019 (0.988)
	Key Stage 4	-0.960 (1.252)	-0.095 (0.978)	-0.182 (1.042)	0.002 (0.976)	-0.037 (0.993)
Types of interventions	One to one	-0.931 (1.259)	-0.063 (0.985)	-0.191 (1.075)	0.045 (0.970)	-0.011 (1.001)
	Small group	-0.589 (1.049)	-0.017 (0.963)	-0.088 (0.992)	0.061 (0.990)	0.019 (0.993)
	Whole class	-0.555 (2.131)	-0.081 (0.968)	-0.110 (1.081)	-0.060 (0.927)	-0.071 (0.965)
	Whole school	-0.868 (1.147)	-0.163 (0.967)	-0.195 (0.987)	0.055 (0.988)	0.021 (0.991)
Ethnicity	White	-1.003 (1.506)	-0.198 (1.033)	-0.352 (1.181)	0.007 (0.966)	-0.011 (0.981)
	Other	-0.695 (1.450)	-0.063 (0.962)	-0.112 (1.022)	0.071 (0.956)	-0.039 (1.000)

Variables		EAL: Mean (SD)			Non-EAL: Mean (SD)	Overall: Mean (SD)
		Late EAL	Earlier EAL	All EAL		
Mathematics						
Overall		-0.395 (1.324)	-0.003 (0.997)	-0.045 (1.044)	0.021 (0.972)	0.007 (0.988)
SEND	Non-SEND	-0.268 (1.290)	0.181 (0.908)	0.132 (0.967)	0.197 (0.883)	0.183 (0.902)
	SEND	-0.920 (1.332)	-0.754 (0.990)	-0.772 (1.034)	-0.702 (0.986)	-0.717 (0.997)
FSM	Non-FSM	-0.287 (1.308)	0.136 (0.981)	0.083 (1.037)	0.190 (0.943)	0.171 (0.961)
	FSM	-0.544 (1.332)	-0.138 (0.994)	-0.175 (1.036)	-0.276 (0.952)	-0.249 (0.976)
Gender	Female	-0.416 (1.353)	-0.021 (0.975)	-0.062 (1.028)	-0.006 (0.958)	-0.018 (0.974)
	Male	-0.376 (1.297)	0.016 (1.018)	-0.029 (1.060)	0.047 (0.985)	0.031 (1.002)
Key Stage outcomes	Key Stage 1	N<10	-0.135 (0.971)	-0.161 (1.002)	0.072 (0.971)	0.029 (0.980)
	Key Stage 2	1.256 (2.365)	-0.066 (0.955)	0.028 (1.166)	-0.036 (0.871)	-0.022 (0.946)
	Key Stage 3	-0.430 (1.244)	0.037 (0.985)	-0.014 (1.027)	0.039 (0.967)	0.028 (0.980)
	Key Stage 4	-0.527 (1.103)	0.001 (1.004)	-0.059 (1.029)	0.025 (0.985)	0.007 (0.995)
Types of interventions	One to one	-0.507 (1.080)	0.005 (1.007)	-0.071 (1.034)	0.030 (0.982)	0.006 (0.995)
	Small group	0.119 (1.123)	0.050 (0.949)	0.060 (0.977)	-0.002 (0.993)	0.010 (0.990)
	Whole class	0.240 (2.087)	-0.024 (0.989)	-0.008 (1.092)	-0.021 (0.952)	-0.018 (0.985)
	Whole school	-0.578 (1.205)	0.002 (0.987)	-0.037 (1.013)	0.040 (0.972)	0.027 (0.980)
Ethnicity	White	-0.393 (1.362)	-0.014 (1.018)	-0.102 (1.118)	0.020 (0.970)	0.015 (0.977)
	Other	-0.395 (1.308)	-0.002 (0.994)	-0.036 (1.031)	0.024 (0.984)	-0.012 (1.013)

Note: N<10 indicates the sample size was less than ten, mean and SD were suppressed to prevent small cell risk disclosure due to low counts.

A 2.3 Pupils' distribution (in terms of sample sizes and column percentages)

Table A 4: Pupils' distribution (in terms of sample sizes and column percentages) across literacy and mathematics trials, stratified by FSM eligibility, Key Stages, types of interventions, SEND status, gender, and ethnicity

Category		Literacy			Mathematics		
		Trials	Schools	Pupils	Trials	Schools	Pupils
Overall		51	2,602	219,079	25	1,754	232,373
FSM	Yes	51	2,503	86,155 (39.3%)	25	1,727	90,992 (39.2%)
	No	51	2,510	132,923 (60.7%)	25	1,723	141,370 (60.8%)
Key Stage outcomes	Key Stage 1	5	250	6,827 (3.1%)	1	35	1,276 (0.5%)
	Key Stage 2	16	1,204	49,254 (22.5%)	10	556	22,937 (9.9%)
	Key Stage 3	23	474	29,165 (13.3%)	5	221	25,065 (10.8%)
	Key Stage 4	7	674	133,833 (61.1%)	9	942	183,095 (78.8%)
Types of interventions	One to one	16	769	71,794 (32.8%)	7	567	106,155 (45.7%)
	Small group	14	515	17,236 (7.9%)	2	98	3,357 (1.4%)
	Whole class	14	801	70,899 (32.4%)	8	512	55,907 (24.1%)
	Whole school	7	517	59,150 (27.0%)	8	577	66,954 (28.8%)
SEND	No	51	2,492	175,540 (80.1%)	25	1,700	186,842 (80.4%)
	Yes	51	2,545	43,539 (19.9%)	25	1,672	45,531 (19.6%)
Gender	Female	51	2,479	109,266 (49.9%)	25	1,683	116,183 (50.0%)
	Male	51	2,470	109,814 (50.1%)	25	1,661	116,190 (50.0%)
Ethnicity	White	51	2,531	154,174 (70.9%)	25	1,707	160,695 (69.7%)
	Other	51	2,121	63,312 (29.1%)	25	1,542	69,878 (30.3%)

Note: Some pupils might have counted more than once if they participated in more than one trial.

A 2.4 Row percentages of the number of pupils across EAL categories and pupils' characteristics

Table A 5: The distributions of TSA for literacy and mathematics outcomes across FSM eligibility, Key Stages, types of interventions, SEND status, gender, and ethnicity

Category		EAL			Non-EAL N (%)
		TSA Mean (SD)	Late arrivals N (%)	Earlier arrivals N (%)	
Literacy					
Overall		7.320 (2.335)	4,485 (2.0%)	41,782 (19.1%)	172,812 (78.9%)
FSM	Yes	7.517 (2.042)	1,753 (2.0%)	20,233 (23.5%)	64,169 (74.5%)
	No	7.142 (2.560)	2,732 (2.1%)	21,549 (16.2%)	108,642 (81.7%)
Key Stage outcomes	Key Stage 1	2.307 (0.509)	33 (0.5%)	1,399 (20.5%)	5,395 (79.0%)
	Key Stage 2	5.571 (1.546)	714 (1.4%)	9,799 (19.9%)	38,741 (78.7%)
	Key Stage 3	7.315 (2.276)	881 (3.0%)	5,162 (17.7%)	23,122 (79.3%)
	Key Stage 4	8.226 (1.920)	2,857 (2.1%)	25,422 (19.0%)	105,554 (78.9%)
Types of interventions	One to one	7.040 (1.678)	2,518 (3.5%)	14,520 (20.2%)	54,756 (76.3%)
	Small group	5.695 (2.749)	604 (3.5%)	4,263 (24.7%)	12,369 (71.8%)
	Whole class	7.236 (1.826)	990 (1.4%)	15,281 (21.6%)	54,628 (77.1%)
	Whole school	9.060 (3.036)	373 (0.6%)	7,718 (13.0%)	51,059 (86.3%)
SEND	Yes	7.166 (1.983)	818 (1.9%)	8,320 (19.1%)	34,401 (79.0%)
	No	7.358 (2.413)	3,667 (2.1%)	33,462 (19.1%)	138,411 (78.8%)
Gender	Female	7.320 (2.312)	2,154 (2.0%)	20,717 (19.0%)	86,394 (79.1%)
	Male	7.320 (2.358)	2,331 (2.1%)	21,065 (19.2%)	86,418 (78.7%)
Ethnicity	White	6.578 (2.674)	1,472 (1.0%)	6,253 (4.1%)	146,449 (95.0%)
	Other	7.472 (2.229)	2,960 (4.7%)	35,267 (55.7%)	25,085 (39.6%)
Mathematics					
Overall		7.927 (2.146)	5,359 (2.3%)	43,937 (18.9%)	183,077 (78.8%)
FSM	Yes	7.963 (1.925)	2,243 (2.5%)	22,265 (24.5%)	66,484 (73.1%)
	No	7.893 (2.344)	3,111 (2.2%)	21,672 (15.3%)	116,587 (82.5%)
Key Stage outcomes	Key Stage 1	2.838 (0.462)	<10	>10	1,042 (81.7%)
	Key Stage 2	5.063 (1.445)	366 (1.6%)	4,781 (20.8%)	17,790 (77.6%)
	Key Stage 3	7.886 (2.047)	590 (2.4%)	4,825 (19.2%)	19,650 (78.4%)
	Key Stage 4	8.347 (1.897)	4,394 (2.4%)	34,106 (18.6%)	144,595 (79.0%)
Types of interventions	One to one	7.562 (1.683)	3,735 (3.5%)	21,473 (20.2%)	80,947 (76.3%)
	Small group	7.947 (2.636)	106 (3.2%)	578 (17.2%)	2,673 (79.6%)
	Whole class	7.955 (2.058)	786 (1.4%)	11,780 (21.1%)	43,341 (77.5%)
	Whole school	8.741 (2.837)	732 (1.1%)	10,106 (15.1%)	56,116 (83.8%)
SEND	Yes	7.660 (1.863)	1,043 (2.3%)	8,637 (19.0%)	35,851 (78.7%)
	No	7.981 (2.122)	4,316 (2.3%)	35,300 (18.9%)	147,226 (78.8%)
Gender	Female	7.951 (2.122)	2,548 (2.2%)	21,915 (18.9%)	91,720 (78.9%)
	Male	7.903 (2.170)	2,811 (2.4%)	22,022 (19.0%)	91,357 (78.6%)
Ethnicity	White	7.427 (2.593)	1,627 (1.0%)	5,438 (3.4%)	153,630 (95.6%)
	Other	8.013 (2.046)	3,663 (5.2%)	38,219 (54.7%)	27,996 (40.1%)

<10=Indicates a value less than ten, suppressed to prevent small cell risk disclosure due to low counts.

>10=Represents a value greater than ten but is suppressed to avoid secondary disclosure, as they could enable the computation of values for cells marked with the '<10' symbol.

A 2.5 Distribution of TSA

Table A 6: Distribution of TSA, reported as mean SD, by key characteristics including Key Stages, types of interventions, FSM eligibility, SEND status, gender, and ethnicity

Category		Literacy: Mean (SD)	Mathematics: Mean (SD)
Overall		7.320 (2.335)	7.927 (2.146)
Key Stage (Year group)	Key Stage 1 (Year 1 – Year 2)	2.307 (0.509)	2.838 (0.462)
	Key Stage 2 (Year 3 –Year 6)	5.571 (1.546)	5.063 (1.445)
	Key Stage 3 (Year 7 – Year 9)	7.315 (2.276)	7.886 (2.047)
	Key Stage 4 (Year 10 –Year 11)	8.226 (1.920)	8.347 (1.897)
Types of interventions	One to one	7.040 (1.678)	7.562 (1.683)
	Small group	5.695 (2.749)	7.947 (2.636)
	Whole class	7.236 (1.826)	7.955 (2.058)
	Whole school	9.060 (3.036)	8.741 (2.837)
FSM	Yes	7.517 (2.042)	7.963 (1.925)
	No	7.142 (2.560)	7.893 (2.344)
SEND	Yes	7.166 (1.983)	7.660 (1.863)
	No	7.358 (2.413)	7.981 (2.122)
Gender	Female	7.320 (2.312)	7.951 (2.122)
	Male	7.320 (2.358)	7.903 (2.170)
Ethnicity	White	6.578 (2.674)	7.427 (2.593)
	Other	7.472 (2.229)	8.013 (2.046)

Note: In our sample, Key Stage 4 pupils are overrepresented (61.1% in literacy, 78.8% in mathematics), and this has not been adjusted for in the statistics for this table. Reported means and SDs are unweighted.

Appendix B: Estimates of pooled and individual trial effect size in the EEF trials

B 1. Pooled effect size on EAL and the attainment gap between them and non-EAL

B 1.1 Overall EAL subgroup analysis and the attainment gap between EAL and non-EAL

Table B 1.1.1: Pooled and individual trial effect size for EAL pupils as well as their attainment gap between them and non-EAL for literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Overall	51	1,942	46,267	0.058 (0.017, 0.100)	2,602	219,079	0.007 (-0.034, 0.049)
Future Foundations	1	24	142	0.051 (-0.171, 0.267)	33	304	-0.119 (-0.415, 0.199)
Grammar for Writing	3	45	629	0.047 (-0.088, 0.177)	50	1,359	-0.037 (-0.209, 0.130)
Rhythm for Reading	4	6	113	-0.110 (-0.361, 0.155)	6	351	-0.168 (-0.505, 0.168)
Response to Intervention	5	20	97	0.230 (-0.237, 0.708)	48	373	0.134 (-0.266, 0.544)
Effective Feedback	6	13	419	0.068 (-0.084, 0.199)	13	2,782	0.035 (-0.071, 0.143)
Chatterbooks	10.1	12	63	0.042 (-0.300, 0.362)	12	302	0.283 (-0.131, 0.699)
Discover Summer School	11	12	54	-0.095 (-0.401, 0.206)	14	78	-0.730 (-1.381, -0.065)
LIT Programme	12	32	1676	0.060 (-0.059, 0.179)	34	4,389	-0.026 (-0.115, 0.057)
Rapid Phonics	13	12	36	0.089 (-0.542, 0.701)	21	176	0.129 (-0.479, 0.729)
Butterfly Phonics	15	6	241	0.315 (0.154, 0.481)	6	307	-0.068 (-0.452, 0.319)
Improving Writing Quality	16	12	135	0.683 (-0.023, 1.307)	22	266	-0.183 (-0.834, 0.419)
Summer Active Reading Programme	17	26	72	0.048 (-0.336, 0.434)	48	182	-0.096 (-0.628, 0.451)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
TextNow Transition Programme	18	22	62	-0.261 (-0.652, 0.137)	54	390	-0.195 (-0.613, 0.232)
Hampshire Hundreds	20	30	206	-0.064 (-0.226, 0.108)	36	2,818	-0.103 (-0.217, 0.009)
Units of Sound	21	20	129	0.073 (-0.145, 0.286)	33	423	0.168 (-0.119, 0.457)
Vocabulary Enrichment Intervention Programme	22	11	126	0.066 (-0.168, 0.293)	12	569	-0.015 (-0.297, 0.253)
Increasing Pupil Motivation (1)	25.1	45	3,105	0.052 (-0.084, 0.189)	48	7,145	0.002 (-0.081, 0.082)
Increasing Pupil Motivation (2)	25.2	45	2,995	0.034 (-0.140, 0.201)	48	6,928	0.012 (-0.072, 0.099)
Word and World Reading Programme (Curriculum Centre)	26	16	501	0.204 (-0.370, 0.774)	16	1,213	0.047 (-0.136, 0.230)
REACH (1)	28.1	11	29	0.265 (-0.447, 0.971)	19	123	0.027 (-0.512, 0.553)
REACH (2)	28.2	10	29	0.588 (-0.066, 1.230)	19	117	0.277 (-0.308, 0.868)
Catch Up Literacy	29	13	98	0.118 (-0.163, 0.406)	15	513	-0.011 (-0.352, 0.328)
Fresh Start – Pilot	31	8	46	0.046 (-0.358, 0.466)	10	418	-0.024 (-0.463, 0.397)
Talk for Literacy	32	3	149	0.380 (0.105, 0.652)	3	213	0.617 (0.149, 1.083)
Quest	40	18	328	-0.066 (-0.247, 0.144)	19	2,087	0.193 (-0.011, 0.400)
Improving Numeracy and Literacy in Key Stage 1	41	28	311	-0.050 (-0.276, 0.175)	37	1,342	-0.025 (-0.187, 0.145)
Tutor Trust Secondary	44	227	14,518	-0.058 (-0.324, 0.206)	278	62,889	0.038 (-0.136, 0.208)
Lesson Study	45.2	114	1,103	0.009 (-0.184, 0.201)	171	6,305	0.019 (-0.107, 0.147)
SHINE in Secondaries (Literacy)	46	4	302	0.013 (-0.204, 0.225)	4	543	-0.042 (-0.240, 0.153)
Talk of the Town	49	47	275	-0.055 (-0.267, 0.151)	63	2,676	-0.048 (-0.236, 0.151)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Powerful Learning Conversations	65	13	48	0.037 (-0.494, 0.609)	15	1,722	-0.175 (-0.630, 0.283)
Texting Parents	67	29	1,654	0.099 (0.015, 0.182)	29	11,375	0.083 (-0.003, 0.165)
Online Reading Programme (ABRA) (1)	68.1	33	261	0.302 (0.008, 0.592)	48	1,311	0.110 (-0.135, 0.350)
Online Reading Programme (ABRA) (2)	68.2	35	270	0.469 (0.204, 0.741)	48	1,297	0.097 (-0.156, 0.342)
Graduate (Perry Beeches) Coaching Programme	73	4	60	0.520 (0.104, 0.960)	4	288	0.218 (-0.202, 0.635)
Paired Reading	75.2	8	46	-0.136 (-0.445, 0.188)	10	1,273	-0.029 (-0.382, 0.328)
Youth Social Action Trials: Youth United	82	49	547	-0.058 (-0.440, 0.302)	65	3,060	0.104 (-0.094, 0.296)
Parenting Academy (1)	90.1	14	591	-0.022 (-0.141, 0.102)	16	1,284	-0.035 (-0.202, 0.126)
Parenting Academy (2)	90.2	15	654	-0.023 (-0.138, 0.094)	16	1,394	-0.057 (-0.207, 0.093)
Learner Response System	97	80	1,060	0.066 (-0.190, 0.317)	99	5,788	0.001 (-0.165, 0.164)
Teacher Observation	98	78	2,808	0.066 (-0.047, 0.178)	82	20,895	-0.036 (-0.108, 0.033)
Switch-On Effectiveness Trial	101	85	173	-0.036 (-0.240, 0.165)	182	900	-0.063 (-0.269, 0.135)
Embedding Formative Assessment	110	130	3,458	-0.011 (-0.103, 0.082)	140	22,609	-0.034 (-0.095, 0.026)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	33	722	0.016 (-0.219, 0.239)	39	6,742	-0.114 (-0.252, 0.023)
The RISE Project: Evidence-Informed School Improvement (2 year)	127.2	33	673	-0.108 (-0.358, 0.100)	39	6,625	-0.075 (-0.225, 0.066)
Grammar for Writing – Effectiveness trial	131	103	1,336	-0.158 (-0.342, 0.024)	135	5,408	-0.065 (-0.197, 0.066)
Integrating English	151	80	1,830	-0.056 (-0.248, 0.134)	80	3,576	-0.035 (-0.143, 0.071)
Accelerated Reader – Effectiveness Trial	152	109	1,271	0.017 (-0.099, 0.135)	180	11,627	0.023 (-0.095, 0.140)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Speech Bubbles	161	24	382	-0.031 (-0.190, 0.128)	24	755	0.045 (-0.181, 0.279)
PALS–UK	166	33	226	0.074 (-0.188, 0.332)	66	1,447	0.110 (-0.140, 0.373)
ABRA (Effectiveness)	177.1	62	208	0.085 (-0.172, 0.342)	93	2,122	0.112 (-0.121, 0.333)

Table B 1.1.2: Pooled and individual trial effect size for EAL pupils as well as their attainment gap between them and non-EAL for mathematics outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Overall	25	1,406	49,296	0.028 (-0.015, 0.070)	1,754	232,373	0.002 (-0.030, 0.037)
Future Foundations	1	24	137	-0.010 (-0.295, 0.266)	33	297	-0.046 (-0.425, 0.332)
Effective Feedback	6	13	420	-0.058 (-0.327, 0.188)	13	2,784	-0.124 (-0.226, -0.024)
Hampshire Hundreds	20	30	196	0.148 (-0.025, 0.308)	36	2,788	0.119 (-0.009, 0.244)
Increasing Pupil Motivation (1)	25.1	45	3,108	0.155 (0.027, 0.290)	48	7,161	0.055 (-0.022, 0.134)
Increasing Pupil Motivation (2)	25.2	45	2,995	0.063 (-0.061, 0.194)	48	6,939	-0.014 (-0.096, 0.072)
Ark Mathematics Mastery: Secondary	38	44	2,218	0.043 (-0.089, 0.172)	44	5,783	-0.028 (-0.122, 0.062)
Improving Numeracy and Literacy in Key Stage 1	41	23	234	0.070 (-0.219, 0.374)	35	1,276	-0.053 (-0.276, 0.160)
Lesson Study	45.2	115	1,116	0.032 (-0.151, 0.221)	171	6,353	0.081 (-0.053, 0.213)
SHINE in Secondaries (Literacy)	46	4	293	-0.361 (-0.520, -0.207)	4	537	0.065 (-0.142, 0.272)
Affordable Online Maths Tuition	66	41	184	-0.057 (-0.344, 0.253)	64	576	-0.033 (-0.272, 0.208)
Texting Parents	67	29	1,702	0.011 (-0.058, 0.082)	29	11,548	-0.062 (-0.132, 0.007)
Youth Social Action Trials: Youth United	82	49	547	-0.098 (-0.484, 0.270)	65	3,060	0.034 (-0.165, 0.231)
Affordable Individual and Small Group Tuition: Secondary – Maths	88	269	23,305	-0.040 (-0.138, 0.056)	317	100,514	-0.040 (-0.140, 0.059)
Parenting Academy (1)	90.1	14	611	0.014 (-0.105, 0.132)	16	1,306	0.029 (-0.131, 0.194)
Parenting Academy (2)	90.2	15	673	0.035 (-0.072, 0.149)	16	1,409	0.111 (-0.038, 0.265)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Dialogic Teaching	95	60	666	0.127 (-0.008, 0.263)	69	1,245	0.046 (-0.136, 0.225)
Learner Response System	97	80	1,101	0.122 (-0.141, 0.389)	99	5,888	0.008 (-0.158, 0.163)
Teacher Observation	98	79	2,858	0.093 (-0.003, 0.196)	82	20,720	-0.050 (-0.111, 0.012)
Embedding Formative Assessment	110	130	3,539	0.049 (-0.045, 0.144)	140	22,914	0.031 (-0.021, 0.087)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	33	727	0.093 (-0.155, 0.325)	39	6,771	-0.043 (-0.165, 0.078)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	34	685	0.053 (-0.178, 0.275)	39	6,660	0.021 (-0.104, 0.145)
Maths Count	128	16	43	0.148 (-0.416, 0.722)	39	291	-0.221 (-0.801, 0.390)
Generation STEM	164	49	99	0.144 (-0.165, 0.438)	111	1,522	0.122 (-0.156, 0.401)
Realistic Maths Education	174	66	655	0.050 (-0.100, 0.196)	79	4,137	-0.002 (-0.123, 0.123)
Mathematics in Context	184	99	1,184	-0.067 (-0.240, 0.096)	118	9,894	-0.112 (-0.234. 0.003)

B 1.2 FSM-eligible EAL pupils subgroup analysis and the attainment gap between them and non-EAL-FSM pupils

Table B 1.2.1: Pooled and individual trial effect size for EAL-FSM pupils as well as their attainment gap between them and non-EAL-FSM pupils for literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Overall	51	1,409	21,986	0.067 (-0.004, 0.133)	2,503	86,155	0.014 (-0.055, 0.081)
Future Foundations	1	24	101	-0.002 (-0.293, 0.269)	32	207	-0.178 (-0.549, 0.182)
Grammar for Writing	3	38	362	-0.024 (-0.205, 0.153)	50	747	-0.207 (-0.440, 0.029)
Rhythm for Reading	4	6	70	-0.059 (-0.381, 0.270)	6	226	-0.107 (-0.534, 0.336)
Response to Intervention	5	12	50	0.152 (-0.536, 0.890)	42	167	0.005 (-0.502, 0.527)
Effective Feedback	6	12	94	0.151 (-0.132, 0.412)	13	559	0.106 (-0.122, 0.343)
Chatterbooks	10.1	7	32	0.261 (-0.243, 0.773)	12	134	0.705 (0.093, 1.323)
Discover Summer School	11	10	30	-0.106 (-0.465, 0.260)	12	42	-0.458 (-1.174, 0.256)
LIT Programme	12	31	900	0.109 (-0.003, 0.222)	34	2,211	0.016 (-0.108, 0.135)
Rapid Phonics	13	10	16	-0.448 (-1.461, 0.597)	19	111	-0.322 (-1.223, 0.539)
Butterfly Phonics	15	6	162	0.289 (0.072, 0.505)	6	209	0.072 (-0.368, 0.535)
Improving Writing Quality	16	9	66	0.598 (-0.285, 1.482)	19	136	-0.331 (-1.162, 0.440)
Summer Active Reading Programme	17	15	30	0.302 (-0.353, 0.995)	38	96	0.042 (-0.780, 0.867)
TextNow Transition Programme	18	10	16	-0.147 (-1.095, 0.800)	51	190	-0.037 (-0.908, 0.850)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Hampshire Hundreds	20	16	36	-0.020 (-0.368, 0.298)	36	1,044	0.024 (-0.260, 0.317)
Units of Sound	21	18	77	0.016 (-0.221, 0.256)	33	306	0.138 (-0.217, 0.517)
Vocabulary Enrichment Intervention Programme	22	8	49	-0.076 (-0.489, 0.329)	12	278	-0.236 (-0.674, 0.187)
Increasing Pupil Motivation (1)	25.1	44	1,994	0.023 (-0.117, 0.170)	48	4,428	-0.042 (-0.149, 0.064)
Increasing Pupil Motivation (2)	25.2	44	1,936	0.013 (-0.169, 0.193)	48	4,245	0.031 (-0.093, 0.157)
Word and World Reading Programme (Curriculum Centre)	26	13	234	0.069 (-0.444, 0.672)	16	632	-0.101 (-0.366, 0.157)
REACH (1)	28.1	7	15	-0.027 (-0.938, 0.906)	18	61	-0.216 (-0.906, 0.484)
REACH (2)	28.2	7	13	0.312 (-0.413, 1.068)	18	61	0.033 (-0.876, 0.923)
Catch Up Literacy	29	8	40	0.054 (-0.299, 0.409)	15	169	-0.017 (-0.572, 0.536)
Fresh Start – Pilot	31	7	16	-0.028 (-0.921, 0.884)	10	181	-0.222 (-0.978, 0.528)
Talk for Literacy	32	3	77	0.471 (0.109, 0.838)	3	119	0.787 (0.170, 1.378)
Quest	40	10	140	-0.262 (-0.553, 0.038)	19	833	-0.032 (-0.370, 0.305)
Improving Numeracy and Literacy in Key Stage 1	41	11	68	0.159 (-0.238, 0.520)	31	277	0.103 (-0.307, 0.500)
Affordable Individual and Small Group Tuition: Secondary – English	44	209	7,638	0.160 (-0.155, 0.479)	273	27,166	0.117 (-0.138, 0.372)
Lesson Study	45.2	69	361	0.066 (-0.173, 0.300)	169	2,221	0.096 (-0.116, 0.308)
SHINE in Secondaries (Literacy)	46	4	164	0.142 (-0.161, 0.435)	4	328	0.173 (-0.065, 0.418)
Talk of the Town	49	29	88	-0.067 (-0.392, 0.268)	63	1,403	-0.113 (-0.447, 0.225)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Powerful Learning Conversations	65	4	<10	-0.319 (-4.823, 4.088)	15	397	-0.526 (-2.337, 1.225)
Texting Parents	67	20	558	0.057 (-0.068, 0.185)	29	2,812	0.055 (-0.096, 0.208)
Online Reading Programme (ABRA) (1)	68.1	17	57	0.266 (-0.353, 0.829)	41	335	-0.140 (-0.661, 0.382)
Online Reading Programme (ABRA) (2)	68.2	17	64	0.378 (-0.243, 0.889)	41	348	-0.181 (-0.728, 0.372)
Graduate (Perry Beeches) Coaching Programme	73	4	31	0.390 (-0.274, 1.052)	4	134	0.117 (-0.504, 0.730)
Paired Reading	75.2	7	16	-0.134 (-0.627, 0.361)	10	472	-0.012 (-0.723, 0.697)
Youth Social Action Trials: Youth United	82	34	215	0.234 (-0.265, 0.701)	64	1,149	0.412 (0.081, 0.749)
Parenting Academy (1)	90.1	13	321	-0.066 (-0.231, 0.098)	16	741	-0.063 (-0.291, 0.158)
Parenting Academy (2)	90.2	14	358	-0.126 (-0.285, 0.029)	16	804	-0.202 (-0.408, 0.009)
Learner Response System	97	67	508	0.032 (-0.277, 0.332)	99	3,436	0.062 (-0.170, 0.301)
Teacher Observation	98	61	1,156	-0.001 (-0.142, 0.141)	82	7,074	-0.078 (-0.212, 0.051)
Switch-On Effectiveness Trial	101	37	55	0.023 (-0.346, 0.357)	153	381	0.004 (-0.332, 0.341)
Embedding Formative Assessment	110	101	1,436	-0.018 (-0.142, 0.105)	140	6,506	-0.004 (-0.104, 0.095)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	23	250	0.130 (-0.119, 0.361)	39	1,759	0.057 (-0.243, 0.356)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	21	235	0.013 (-0.233, 0.260)	39	1,755	0.064 (-0.204, 0.327)
Grammar for Writing – Effectiveness Trial	131	77	562	-0.109 (-0.348, 0.125)	135	2,473	-0.029 (-0.223, 0.158)
Integrating English	151	73	574	0.041 (-0.198, 0.289)	80	1,277	0.035 (-0.153, 0.215)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Accelerated Reader – Effectiveness Trial	152	59	528	-0.006 (-0.199, 0.180)	180	4,351	-0.042 (-0.235, 0.153)
Speech Bubbles	161	23	109	-0.203 (-0.513, 0.104)	24	257	-0.186 (-0.590, 0.214)
PALS–UK	166	19	41	0.981 (0.346, 1.608)	62	388	0.931 (0.313, 1.538)
ABRA (Effectiveness)	177.1	21	32	0.115 (-0.497, 0.736)	84	519	0.110 (-0.383, 0.600)

Table B 1.2.2: Pooled and individual trial effect size for EAL pupils as well as their attainment gap between them and non-EAL-FSM pupils for mathematics outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Overall	25	1,101	24,508	0.040 (-0.025, 0.106)	1,727	90,992	0.018 (-0.042, 0.080)
Future Foundations	1	24	99	-0.009 (-0.344, 0.328)	32	204	-0.137 (-0.554, 0.280)
Effective Feedback	6	12	95	0.090 (-0.287, 0.411)	13	561	-0.034 (-0.251, 0.180)
Hampshire Hundreds	20	16	36	0.158 (-0.174, 0.490)	36	1,045	0.090 (-0.161, 0.334)
Increasing Pupil Motivation (1)	25.1	44	1,991	0.113 (-0.032, 0.264)	48	4,443	0.031 (-0.070, 0.133)
Increasing Pupil Motivation (2)	25.2	44	1,932	0.051 (-0.099, 0.199)	48	4,259	0.015 (-0.099, 0.126)
Ark Mathematics Mastery: Secondary	38	41	1,132	0.140 (-0.006, 0.281)	44	2,704	0.077 (-0.051, 0.209)
Improving Numeracy and Literacy in Key Stage 1	41	9	50	-0.337 (-1.164, 0.336)	32	238	-0.404 (-0.927, 0.141)
Lesson Study	45.2	71	370	0.137 (-0.123, 0.395)	169	2,255	0.084 (-0.138, 0.299)
SHINE in Secondaries (Literacy)	46	4	162	-0.375 (-0.593, -0.151)	4	330	0.118 (-0.130, 0.374)
Affordable Online Maths Tuition	66	30	99	-0.051 (-0.466, 0.348)	63	314	0.051 (-0.278, 0.368)
Texting Parents	67	22	567	0.031 (-0.099, 0.154)	29	2,850	-0.063 (-0.187, 0.062)
Youth Social Action Trials: Youth United	82	34	215	0.025 (-0.494, 0.536)	64	1,149	0.224 (-0.093, 0.545)
Affordable Individual and Small Group Tuition: Secondary – Maths	88	251	12,361	0.019 (-0.118, 0.151)	315	43,455	-0.033 (-0.179, 0.117)
Parenting Academy (1)	90.1	13	339	-0.022 (-0.182, 0.138)	16	759	0.014 (-0.192, 0.226)
Parenting Academy (2)	90.2	14	372	0.088 (-0.066, 0.245)	16	817	0.154 (-0.048, 0.350)
Dialogic Teaching	95	58	337	0.087 (-0.084, 0.256)	69	662	-0.117 (-0.336, 0.107)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap
	Trials	Schools	EAL pupils		Schools	All pupils	
Learner Response System	97	67	527	0.055 (-0.276, 0.395)	99	3,505	0.074 (-0.153, 0.306)
Teacher Observation	98	61	1,171	0.042 (-0.077, 0.167)	82	7,048	-0.118 (-0.234, -0.005)
Embedding Formative Assessment	110	103	1,459	0.021 (-0.093, 0.135)	140	6,584	0.044 (-0.047, 0.131)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	23	251	0.163 (-0.166, 0.470)	39	1,777	0.100 (-0.161, 0.368)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	22	238	-0.023 (-0.334, 0.252)	39	1,769	0.023 (-0.195, 0.229)
Maths Count	128	7	21	-0.023 (-0.860, 0.854)	34	133	-0.426 (-1.226, 0.432)
Generation STEM	164	22	28	0.462 (-0.169, 1.108)	102	499	0.465 (-0.084, 0.999)
Realistic Maths Education	174	46	191	0.148 (-0.056, 0.360)	77	1,133	0.196 (-0.039, 0.427)
Mathematics in Context	184	63	465	-0.118 (-0.334, 0.094)	117	2,499	-0.230 (-0.436, -0.025)

B 2. Pooled effect size for EAL pupils (based on TSA) and attainment gaps

Table B 2.1: Overall pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	51	1,942	46,267	-0.030 (-0.082, 0.020)	2,602	219,079	-0.002 (-0.050, 0.042)	0.02 (-0.09, 0.131)
Future Foundations	1	24	142	0.038 (-0.117, 0.200)	33	304	-0.136 (-0.436, 0.166)	0.069 (-0.698, 0.835)
Grammar for Writing	3	45	629	-0.002 (-0.087, 0.084)	50	1,359	-0.035 (-0.204, 0.139)	0.008 (-0.412, 0.44)
Rhythm for Reading	4	6	113	0.048 (-0.046, 0.143)	6	351	-0.117 (-0.491, 0.267)	-0.256 (-0.84, 0.322)
Response to Intervention	5	20	97	-0.127 (-0.286, 0.044)	48	373	0.056 (-0.355, 0.484)	0.692 (-0.084, 1.487)
Effective Feedback	6	13	419	-0.005 (-0.063, 0.056)	13	2,782	0.031 (-0.081, 0.143)	0.214 (-0.219, 0.644)
Chatterbooks	10.1	12	63	-0.044 (-0.211, 0.116)	12	302	0.220 (-0.229, 0.691)	0.575 (-0.366, 1.551)
Discover Summer School	11	12	54	-0.028 (-0.202, 0.148)	14	78	-0.751 (-1.419, -0.068)	-0.648 (-1.763, 0.474)
LIT Programme	12	32	1,676	-0.001 (-0.033, 0.031)	34	4,389	-0.040 (-0.131, 0.050)	0.047 (-0.125, 0.214)
Rapid Phonics	13	12	36	-0.025 (-0.352, 0.320)	21	176	0.310 (-0.598, 1.233)	0.004 (-0.723, 0.738)
Butterfly Phonics	15	6	241	-0.063 (-0.132, 0.008)	6	307	-0.156 (-0.526, 0.208)	0.192 (-0.274, 0.639)
Improving Writing Quality	16	12	135	-0.137 (-0.434, 0.168)	22	266	-0.234 (-0.915, 0.396)	0.05 (-1.335, 1.428)
Summer Active Reading Programme	17	26	72	0.083 (-0.129, 0.298)	48	182	-0.005 (-0.541, 0.558)	-0.663 (-1.838, 0.492)
TextNow Transition Programme	18	22	62	0.086 (-0.152, 0.334)	54	390	-0.114 (-0.549, 0.340)	-0.867 (-2.105, 0.311)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Hampshire Hundreds	20	30	206	-0.018 (-0.087, 0.050)	36	2,818	-0.102 (-0.236, 0.038)	-0.109 (-0.35, 0.138)
Units of Sound	21	20	129	-0.096 (-0.185, -0.007)	33	423	-0.063 (-0.413, 0.282)	0.489 (0.091, 0.881)
Vocabulary Enrichment Intervention Programme	22	11	126	0.039 (-0.129, 0.206)	12	569	0.010 (-0.292, 0.307)	-0.292 (-1.226, 0.615)
Increasing Pupil Motivation (1)	25.1	45	3,105	-0.003 (-0.083, 0.072)	48	7,145	0.005 (-0.078, 0.088)	-0.041 (-0.242, 0.153)
Increasing Pupil Motivation (2)	25.2	45	2,995	0.035 (-0.050, 0.119)	48	6,928	0.020 (-0.070, 0.114)	-0.053 (-0.29, 0.181)
Word and World Reading Programme (Curriculum Centre)	26	16	501	-0.168 (-0.351, 0.022)	16	1,213	0.027 (-0.153, 0.205)	0.662 (-0.125, 1.429)
REACH (1)	28.1	11	29	-0.066 (-0.401, 0.263)	19	123	0.067 (-0.502, 0.657)	-0.252 (-1.374, 0.852)
REACH (2)	28.2	10	29	-0.089 (-0.363, 0.192)	19	117	0.292 (-0.386, 0.970)	0.168 (-0.891, 1.215)
Catch Up Literacy	29	13	98	0.004 (-0.153, 0.163)	15	513	0.011 (-0.343, 0.373)	-0.094 (-0.996, 0.805)
Fresh Start – Pilot	31	8	46	-0.033 (-0.194, 0.130)	10	418	-0.082 (-0.609, 0.431)	0.043 (-0.628, 0.724)
Talk for Literacy	32	3	149	0.035 (-0.093, 0.169)	3	213	0.633 (0.141, 1.148)	0.603 (-0.107, 1.379)
Quest	40	18	328	0.031 (-0.062, 0.122)	19	2,087	0.190 (-0.038, 0.408)	0.134 (-0.336, 0.603)
Improving Numeracy and Literacy in Key Stage 1	41	28	311	0.300 (-0.040, 0.627)	37	1,342	-0.005 (-0.164, 0.149)	-0.592 (-1.325, 0.115)
Tutor Trust Secondary	44	227	14,518	-0.060 (-0.153, 0.030)	278	62,889	-0.023 (-0.215, 0.160)	0.21 (-0.117, 0.547)
Lesson Study	45.2	114	1,103	0.155 (-0.034, 0.349)	171	6,305	0.012 (-0.116, 0.146)	-0.095 (-0.5, 0.308)
SHINE in Secondaries (Literacy)	46	4	302	-0.018 (-0.094, 0.059)	4	543	-0.046 (-0.248, 0.150)	0.002 (-0.384, 0.389)
Talk of the Town	49	47	275	-0.124 (-0.238, -0.010)	63	2,676	-0.064 (-0.265, 0.142)	0.222 (-0.411, 0.839)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Powerful Learning Conversations	65	13	48	-0.057 (-0.249, 0.131)	15	1,722	-0.272 (-0.758, 0.229)	0.262 (-0.824, 1.356)
Texting Parents	67	29	1,654	0.037 (-0.004, 0.078)	29	11,375	0.100 (0.017, 0.186)	-0.137 (-0.409, 0.136)
Online Reading Programme (ABRA) (1)	68.1	33	261	0.290 (-1.217, 1.823)	48	1,311	0.117 (-0.139, 0.351)	-0.343 (-1.925, 1.19)
Online Reading Programme (ABRA) (2)	68.2	35	270	-0.664 (-1.882, 0.507)	48	1,297	0.066 (-0.189, 0.325)	0.712 (-0.51, 1.929)
Graduate (Perry Beeches) Coaching Programme	73	4	60	-0.046 (-0.226, 0.130)	4	288	0.093 (-0.377, 0.544)	0.683 (-0.121, 1.506)
Paired Reading	75.2	8	46	0.014 (-0.213, 0.240)	10	1,273	-0.023 (-0.395, 0.347)	-0.225 (-1.307, 0.82)
Youth Social Action Trials: Youth United	82	49	547	0.010 (-0.061, 0.077)	65	3,060	0.126 (-0.078, 0.334)	0.103 (-0.278, 0.48)
Parenting Academy (1)	90.1	14	591	-0.046 (-0.141, 0.049)	16	1,284	-0.041 (-0.203, 0.121)	0.204 (-0.585, 1.005)
Parenting Academy (2)	90.2	15	654	-0.078 (-0.171, 0.019)	16	1,394	-0.048 (-0.205, 0.110)	-0.153 (-1.31, 0.966)
Learner Response System	97	80	1,060	-0.061 (-0.135, 0.013)	99	5,788	-0.038 (-0.213, 0.139)	0.207 (-0.11, 0.532)
Teacher Observation	98	78	2,808	0.011 (-0.031, 0.052)	82	20,895	-0.035 (-0.108, 0.037)	-0.02 (-0.359, 0.313)
Switch-On Effectiveness Trial	101	85	173	0.115 (-0.180, 0.412)	182	900	-0.085 (-0.291, 0.123)	-0.331 (-1.101, 0.435)
Embedding Formative Assessment	110	130	3,458	0.002 (-0.028, 0.031)	140	22,609	-0.031 (-0.091, 0.029)	-0.248 (-0.523, 0.056)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	33	722	-0.081 (-0.158, -0.005)	39	6,742	-0.113 (-0.256, 0.032)	0.242 (-0.605, 1.138)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	33	673	0.055 (-0.017, 0.124)	39	6,625	-0.069 (-0.209, 0.076)	-0.297 (-1.009, 0.399)
Grammar for Writing – Effectiveness Trial	131	103	1,336	-0.005 (-0.070, 0.061)	135	5,408	-0.067 (-0.203, 0.064)	0.026 (-0.298, 0.352)
Integrating English	151	80	1,830	-0.052 (-0.107, 0.002)	80	3,576	-0.045 (-0.158, 0.067)	0.121 (-0.154, 0.386)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Accelerated Reader – Effectiveness Trial	152	109	1,271	-0.041 (-0.141, 0.060)	180	11,627	0.017 (-0.098, 0.138)	-0.076 (-1.396, 1.226)
Speech Bubbles	161	24	382	-0.015 (-0.278, 0.253)	24	755	0.051 (-0.194, 0.277)	-0.328 (-1.781, 1.133)
PALS–UK	166	33	226	0.129 (-0.066, 0.321)	66	1,447	0.159 (-0.098, 0.413)	-0.421 (-1.067, 0.206)
ABRA (Effectiveness)	177.1	62	208	-1.236 (-2.816, 0.402)	93	2,122	0.072 (-0.157, 0.301)	1.045 (-0.392, 2.507)

Table B 2.2: Overall pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for mathematics outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	25	1,406	49,296	-0.010 (-0.036, 0.017)	1,754	232,373	0.004 (-0.033, 0.039)	-0.014 (-0.138, 0.108)
Future Foundations	1	24	137	-0.003 (-0.201, 0.194)	33	297	-0.038 (-0.428, 0.355)	-0.21 (-1.116, 0.719)
Effective Feedback	6	13	420	0.013 (-0.048, 0.077)	13	2,784	-0.119 (-0.221, -0.013)	-0.255 (-0.656, 0.16)
Hampshire Hundreds	20	30	196	0.018 (-0.068, 0.107)	36	2,788	0.145 (0.000, 0.283)	0.024 (-0.237, 0.285)
Increasing Pupil Motivation (1)	25.1	45	3,108	-0.034 (-0.112, 0.042)	48	7,161	0.060 (-0.019, 0.142)	0.002 (-0.178, 0.183)
Increasing Pupil Motivation (2)	25.2	45	2,995	-0.052 (-0.136, 0.032)	48	6,939	-0.023 (-0.105, 0.066)	0.121 (-0.096, 0.335)
Ark Mathematics Mastery: Secondary	38	44	2,218	0.045 (0.011, 0.079)	44	5,783	0.008 (-0.089, 0.107)	-0.199 (-0.382, -0.012)
Improving Numeracy and Literacy in Key Stage 1	41	23	234	-0.005 (-0.410, 0.388)	35	1,276	-0.042 (-0.261, 0.182)	-0.736 (-1.578, 0.109)
Lesson Study	45.2	115	1,116	-0.105 (-0.307, 0.111)	171	6,353	0.045 (-0.089, 0.181)	0.397 (-0.013, 0.823)
SHINE in Secondaries (Literacy)	46	4	293	-0.010 (-0.101, 0.082)	4	537	0.052 (-0.164, 0.264)	0.073 (-0.376, 0.536)
Affordable Online Maths Tuition	66	41	184	0.065 (-0.053, 0.179)	64	576	-0.016 (-0.265, 0.222)	-0.127 (-0.672, 0.445)
Texting Parents	67	29	1,702	-0.015 (-0.049, 0.020)	29	11,548	-0.067 (-0.138, 0.002)	-0.015 (-0.238, 0.198)
Youth Social Action Trials: Youth United	82	49	547	0.071 (0.006, 0.136)	65	3,060	0.116 (-0.083, 0.330)	-0.292 (-0.659, 0.085)
Affordable Individual and Small Group Tuition: Secondary – Maths	88	269	23,305	-0.093 (-0.144, -0.041)	317	100,514	-0.092 (-0.200, 0.009)	0.109 (-0.065, 0.287)
Parenting Academy (1)	90.1	14	611	-0.028 (-0.120, 0.065)	16	1,306	0.024 (-0.142, 0.190)	0.282 (-0.477, 1.055)
Parenting Academy (2)	90.2	15	673	-0.027	16	1,409	0.117	-0.184

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
				(-0.119, 0.068)			(-0.032, 0.271)	(-1.269, 0.909)
Dialogic Teaching	95	60	666	0.006 (-0.236, 0.241)	69	1,245	0.039 (-0.140, 0.216)	1.12 (-0.366, 2.636)
Learner Response System	97	80	1,101	-0.049 (-0.127, 0.028)	99	5,888	-0.036 (-0.205, 0.137)	0.193 (-0.115, 0.509)
Teacher Observation	98	79	2,858	-0.016 (-0.052, 0.021)	82	20,720	-0.062 (-0.121, -0.004)	0.169 (-0.099, 0.428)
Embedding Formative Assessment	110	130	3,539	0.019 (-0.008, 0.046)	140	22,914	0.037 (-0.017, 0.091)	-0.159 (-0.394, 0.068)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	33	727	-0.057 (-0.132, 0.017)	39	6,771	-0.044 (-0.164, 0.076)	0.141 (-0.526, 0.852)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	34	685	0.010 (-0.054, 0.071)	39	6,660	0.031 (-0.098, 0.161)	-0.269 (-0.798, 0.231)
Maths Count	128	16	43	0.047 (-0.543, 0.629)	39	291	-0.178 (-0.785, 0.439)	-1.33 (-3.242, 0.624)
Generation STEM	164	49	99	-0.035 (-0.177, 0.103)	111	1,522	0.066 (-0.207, 0.347)	0.529 (-0.472, 1.555)
Realistic Maths Education	174	66	655	-0.023 (-0.083, 0.039)	79	4,137	-0.005 (-0.131, 0.124)	0.062 (-0.313, 0.435)
Mathematics in Context	184	99	1,184	0.036 (-0.017, 0.091)	118	9,894	-0.087 (-0.212, 0.032)	-0.284 (-0.74, 0.162)

B 3. Pooled effect size for EAL pupils eligible to FSM (based on TSA values) and attainment gaps

Table B 3.1: Pooled and individual trial effect size for EAL pupils (based on TSA) eligible to FSM as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	51	1,409	21,986	-0.048 (-2.371, 2.308)	2,503	86,155	0.012 (-0.061, 0.089)	0.12 (-14.197, 14.162)
Future Foundations	1	24	101	0.077 (-0.172, 0.319)	32	207	-0.191 (-0.561, 0.180)	0.061 (-0.944, 1.038)
Grammar for Writing	3	38	362	0.003 (-0.142, 0.148)	50	747	-0.208 (-0.448, 0.035)	-0.104 (-0.91, 0.69)
Rhythm for Reading	4	6	70	0.126 (-0.033, 0.281)	6	226	-0.007 (-0.480, 0.467)	-0.425 (-1.345, 0.486)
Response to Intervention	5	12	50	-0.165 (-0.367, 0.039)	42	167	-0.119 (-0.651, 0.440)	1.241 (0.075, 2.363)
Effective Feedback	6	12	94	0.032 (-0.091, 0.153)	13	559	0.106 (-0.132, 0.359)	0.231 (-0.8, 1.282)
Chatterbooks	10.1	7	32	-0.133 (-0.470, 0.210)	12	134	0.641 (0.027, 1.249)	1.536 (-0.719, 3.829)
Discover Summer School	11	10	30	0.153 (-1.035, 1.343)	12	42	-0.485 (-1.204, 0.283)	2.606 (-188.687, 195.295)
LIT Programme	12	31	900	-0.012 (-0.076, 0.052)	34	2,211	0.004 (-0.122, 0.123)	0.193 (-0.139, 0.537)
Rapid Phonics	13	10	16	0.172 (-0.397, 0.758)	19	111	0.330 (-0.820, 1.453)	-1.065 (-2.277, 0.181)
Butterfly Phonics	15	6	162	-0.065 (-0.172, 0.037)	6	209	0.004 (-0.460, 0.455)	0.271 (-0.367, 0.917)
Improving Writing Quality	16	9	66	-0.477 (-0.923, -0.039)	19	136	-0.373 (-1.233, 0.453)	1.367 (-0.638, 3.439)
Summer Active Reading Programme	17	15	30	-0.055 (-0.533, 0.420)	38	96	0.021 (-0.829, 0.907)	0.333 (-1.848, 2.522)
TextNow Transition Programme	18	10	16	-0.203 (-1.107, 0.685)	51	190	-0.031 (-0.956, 0.890)	-0.504 (-192.594, 190.434)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Hampshire Hundreds	20	16	36	-0.180 (-0.406, 0.047)	36	1,044	0.031 (-0.271, 0.340)	-0.397 (-136.598, 141.947)
Units of Sound	21	18	77	-0.062 (-0.161, 0.041)	33	306	-0.054 (-0.506, 0.382)	0.381 (-0.114, 0.889)
Vocabulary Enrichment Intervention Programme	22	8	49	-0.012 (-0.269, 0.247)	12	278	-0.193 (-0.651, 0.262)	-0.413 (-1.608, 0.799)
Increasing Pupil Motivation (1)	25.1	44	1,994	0.006 (-0.093, 0.104)	48	4,428	-0.036 (-0.153, 0.072)	-0.074 (-0.343, 0.195)
Increasing Pupil Motivation (2)	25.2	44	1,936	0.098 (-0.007, 0.203)	48	4,245	0.040 (-0.081, 0.161)	-0.151 (-0.456, 0.15)
Word and World Reading Programme (Curriculum Centre)	26	13	234	0.124 (-0.184, 0.423)	16	632	-0.085 (-0.353, 0.187)	-0.673 (-2.203, 0.922)
REACH (1)	28.1	7	15	-0.078 (-0.614, 0.457)	18	61	-0.087 (-0.910, 0.703)	-0.846 (-2.422, 0.766)
REACH (2)	28.2	7	13	0.063 (-0.277, 0.398)	18	61	0.395 (-0.653, 1.438)	-0.407 (-1.816, 0.966)
Catch Up Literacy	29	8	40	-0.007 (-0.276, 0.255)	15	169	-0.007 (-0.581, 0.567)	-0.203 (-2.132, 1.701)
Fresh Start – Pilot	31	7	16	0.010 (-0.499, 0.530)	10	181	-0.343 (-1.176, 0.476)	0.463 (-1.501, 2.504)
Talk for Literacy	32	3	77	0.026 (-0.210, 0.267)	3	119	0.789 (0.173, 1.385)	0.631 (-0.591, 1.834)
Quest	40	10	140	-0.061 (-0.242, 0.119)	19	833	-0.119 (-0.450, 0.219)	0.244 (-0.78, 1.267)
Improving Numeracy and Literacy in Key Stage 1	41	11	68	-0.315 (-2.009, 1.373)	31	277	0.111 (-0.278, 0.503)	0.301 (-198.166, 203.102)
Tutor Trust Secondary	44	209	7,638	-0.069 (-0.177, 0.042)	273	27,166	0.056 (-0.216, 0.326)	0.29 (-0.158, 0.726)
Lesson Study	45.2	69	361	0.221 (-0.146, 0.591)	169	2,221	0.096 (-0.110, 0.313)	-0.192 (-0.944, 0.557)
SHINE in Secondaries (Literacy)	46	4	164	-0.020 (-0.162, 0.129)	4	328	0.174 (-0.066, 0.427)	0.091 (-0.671, 0.822)
Talk of the Town	49	29	88	-0.133 (-0.316, 0.048)	63	1,403	-0.103 (-0.442, 0.231)	-0.184 (-1.338, 0.979)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Powerful Learning Conversations	65	4	<10	-0.072 (-13.621, 13.938)	15	397	-0.865 (-2.753, 0.947)	0.800 (-143.422, 141.497)
Texting Parents	67	20	558	-0.023 (-0.095, 0.051)	29	2,812	0.070 (-0.083, 0.222)	-0.229 (-0.784, 0.325)
Online Reading Programme (ABRA) (1)	68.1	17	57	0.560 (-85.766, 87.829)	41	335	-0.139 (-0.674, 0.391)	1.16 (-191.86, 188.354)
Online Reading Programme (ABRA) (2)	68.2	17	64	0.275 (-84.672, 86.275)	41	348	-0.186 (-0.732, 0.363)	0.89 (-197.288, 199.607)
Graduate (Perry Beeches) Coaching Programme	73	4	31	0.010 (-0.413, 0.420)	4	134	0.063 (-0.582, 0.681)	1.7 (-0.117, 3.565)
Paired Reading	75.2	7	>10	-0.235 (-0.725, 0.265)	10	472	-0.055 (-0.872, 0.767)	-0.808 (-195.951, 199.79)
Youth Social Action Trials: Youth United	82	34	215	0.019 (-0.101, 0.137)	64	1,149	0.421 (0.073, 0.776)	0.104 (-0.579, 0.793)
Parenting Academy (1)	90.1	13	321	-0.009 (-0.137, 0.114)	16	741	-0.076 (-0.309, 0.144)	-0.018 (-1.068, 1.026)
Parenting Academy (2)	90.2	14	358	-0.057 (-0.183, 0.069)	16	804	-0.201 (-0.402, 0.007)	-0.202 (-1.558, 1.102)
Learner Response System	97	67	508	-0.035 (-0.152, 0.083)	99	3,436	0.035 (-0.206, 0.282)	0.209 (-0.287, 0.713)
Teacher Observation	98	61	1,156	0.006 (-0.070, 0.080)	82	7,074	-0.087 (-0.211, 0.039)	0.169 (-0.523, 0.898)
Switch-On Effectiveness Trial	101	37	55	-0.153 (-0.807, 0.498)	153	381	-0.059 (-0.397, 0.282)	-0.507 (-135.875, 141.504)
Embedding Formative Assessment	110	101	1,436	0.016 (-0.037, 0.069)	140	6,506	-0.006 (-0.106, 0.090)	-0.829 (-1.462, -0.217)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	23	250	-0.148 (-0.268, -0.025)	39	1,759	0.031 (-0.273, 0.330)	0.83 (-0.397, 2.1)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	21	235	0.073 (-0.059, 0.202)	39	1,755	0.068 (-0.183, 0.329)	0.71 (-0.929, 2.376)
Grammar for Writing – Effectiveness Trial	131	77	562	-0.042 (-0.167, 0.084)	135	2,473	-0.023 (-0.207, 0.161)	0.1 (-0.535, 0.745)
Integrating English	151	73	574	-0.073 (-0.199, 0.048)	80	1,277	0.033 (-0.149, 0.223)	0.064 (-0.634, 0.752)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Accelerated Reader – Effectiveness Trial	152	59	528	-0.044 (-0.200, 0.118)	180	4,351	-0.040 (-0.226, 0.155)	-0.481 (-2.386, 1.418)
Speech Bubbles	161	23	109	-0.377 (-0.935, 0.183)	24	257	-0.207 (-0.614, 0.189)	0.745 (-1.503, 2.923)
PALS–UK	166	19	41	0.174 (-0.393, 0.718)	62	388	0.980 (0.311, 1.657)	1.709 (-0.464, 3.816)
ABRA (Effectiveness)	177.1	21	32	0.030 (-89.971, 89.840)	84	519	0.104 (-0.382, 0.613)	-0.417 (-205.611, 200.623)

<10=Indicates a value less than ten, suppressed to prevent small cell risk disclosure due to low counts.

>10=Represents a value greater than ten but is suppressed to avoid secondary disclosure, as they could enable the computation of values for cells marked with the '<10' symbol.

Table B 3.2: Pooled and individual trial effect size for EAL pupils (based on TSA) eligible to FSM as well as attainment gap of late arrivals vs earlier arrivals and late arrivals vs. non-EAL for mathematics outcomes.

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	25	1,101	24,508	-0.043 (-2.337, 2.327)	1,727	90,992	0.012 (-0.050, 0.077)	0.055 (-18.761, 19.32)
Future Foundations	1	24	99	0.018 (-0.247, 0.283)	32	204	-0.142 (-0.551, 0.272)	-0.449 (-1.595, 0.702)
Effective Feedback	6	12	95	0.071 (-0.077, 0.216)	13	561	-0.009 (-0.224, 0.208)	-0.475 (-1.381, 0.488)
Hampshire Hundreds	20	16	36	-0.033 (-0.308, 0.240)	36	1,045	0.064 (-0.217, 0.351)	-0.582 (-140.771, 131.865)
Increasing Pupil Motivation (1)	25.1	44	1,991	-0.017 (-0.117, 0.083)	48	4,443	0.036 (-0.065, 0.142)	-0.021 (-0.263, 0.243)
Increasing Pupil Motivation (2)	25.2	44	1,932	-0.065 (-0.171, 0.044)	48	4,259	0.002 (-0.114, 0.116)	0.193 (-0.104, 0.479)
Ark Mathematics Mastery: Secondary	38	41	1,132	0.010 (-0.048, 0.069)	44	2,704	0.069 (-0.064, 0.196)	0.162 (-0.176, 0.516)
Improving Numeracy and Literacy in Key Stage 1	41	9	50	-0.377 (-63.893, 64.044)	32	238	-0.408 (-0.941, 0.132)	1.75 (-184.746, 193.904)
Lesson Study	45.2	71	370	-0.031 (-0.419, 0.342)	169	2,255	0.068 (-0.158, 0.287)	0.291 (-0.413, 1.018)
SHINE in Secondaries (Literacy)	46	4	162	-0.113 (-0.319, 0.091)	4	330	0.104 (-0.161, 0.360)	0.393 (-0.573, 1.361)
Affordable Online Maths Tuition	66	30	99	-0.015 (-0.182, 0.150)	63	314	0.049 (-0.281, 0.396)	0.171 (-1.076, 1.388)
Texting Parents	67	22	567	-0.008 (-0.077, 0.062)	29	2,850	-0.057 (-0.185, 0.070)	-0.065 (-0.514, 0.403)
Youth Social Action Trials: Youth United	82	34	215	0.098 (-0.014, 0.210)	64	1,149	0.316 (-0.027, 0.655)	-0.344 (-1.013, 0.348)
Affordable Individual and Small Group Tuition: Secondary – Maths	88	251	12,361	-0.074 (-0.148, 0.006)	315	43,455	-0.046 (-0.193, 0.107)	0.006 (-0.254, 0.263)
Parenting Academy (1)	90.1	13	339	-0.052 (-0.180, 0.069)	16	759	-0.003 (-0.215, 0.206)	0.539 (-0.496, 1.58)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Parenting Academy (2)	90.2	14	372	-0.012 (-0.140, 0.115)	16	817	0.159 (-0.047, 0.357)	0.104 (-1.222, 1.411)
Dialogic Teaching	95	58	337	-0.042 (-0.386, 0.297)	69	662	-0.123 (-0.344, 0.101)	1.235 (-0.269, 2.739)
Learner Response System	97	67	527	-0.076 (-0.196, 0.040)	99	3,505	0.005 (-0.245, 0.248)	0.373 (-0.098, 0.848)
Teacher Observation	98	61	1,171	-0.052 (-0.122, 0.017)	82	7,048	-0.139 (-0.255, -0.029)	0.553 (-0.007, 1.114)
Embedding Formative Assessment	110	103	1,459	0.032 (-0.012, 0.076)	140	6,584	0.036 (-0.055, 0.128)	-0.264 (-0.723, 0.213)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	23	251	-0.045 (-0.178, 0.082)	39	1,777	0.086 (-0.177, 0.356)	0.321 (-0.628, 1.254)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	22	238	0.032 (-0.081, 0.148)	39	1,769	0.058 (-0.159, 0.277)	-0.889 (-2.005, 0.176)
Maths Count	128	7	21	-0.756 (-1.820, 0.396)	34	133	-0.444 (-1.267, 0.408)	0.246 (-195.9, 195.77)
Generation STEM	164	22	28	-0.103 (-0.422, 0.219)	102	499	0.361 (-0.217, 0.948)	0.903 (-0.57, 2.342)
Realistic Maths Education	174	46	191	0.075 (-0.058, 0.213)	77	1,133	0.228 (-0.008, 0.455)	-0.779 (-1.889, 0.287)
Mathematics in Context	184	63	465	0.027 (-0.072, 0.125)	117	2,499	-0.202 (-0.415, 0.013)	-0.441 (-1.389, 0.456)

B 4. Pooled effect size by Key Stages for EAL pupils (based on TSA groups) and attainment gaps

B 4.1 Key Stage 1

Table B 4.1.1: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for Key Stage 1 literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	5	182	1,432	-0.189 (-0.647, 0.271)	250	6,827	0.049 (-0.051, 0.147)	0.018 (-0.527, 0.600)
Improving Numeracy and Literacy in Key Stage 1	41	28	311	0.305 (-0.032, 0.624)	37	1,342	-0.007 (-0.177, 0.160)	-0.581 (-1.298, 0.153)
Online Reading Programme (ABRA) (1)	68.1	33	261	0.276 (-1.202, 1.763)	48	1,311	0.115 (-0.126, 0.364)	-0.358 (-1.964, 1.165)
Online Reading Programme (ABRA) (2)	68.2	35	270	-0.637 (-1.890, 0.552)	48	1,297	0.063 (-0.196, 0.313)	0.702 (-0.538, 1.944)
Speech Bubbles	161	24	382	-0.014 (-0.269, 0.251)	24	755	0.048 (-0.181, 0.284)	-0.352 (-1.804, 1.144)
ABRA (Effectiveness)	177.1	62	208	-1.229 (-2.880, 0.351)	93	2,122	0.069 (-0.164, 0.304)	1.048 (-0.42, 2.584)

B 4.2 Key Stage 2

Table B 4.2.1: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for Key Stage 2 literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	16	828	10,513	-0.013 (-0.055, 0.031)	1,204	49,254	-0.032 (-0.085, 0.020)	0.041 (-0.125, 0.207)
Future Foundations	1	24	142	0.039 (-0.129, 0.200)	33	304	-0.133 (-0.446, 0.176)	0.075 (-0.666, 0.815)
Grammar for Writing	3	45	629	-0.002 (-0.087, 0.085)	50	1,359	-0.039 (-0.214, 0.135)	0.006 (-0.418, 0.432)
Response to Intervention	5	20	97	-0.127 (-0.283, 0.048)	48	373	0.050 (-0.374, 0.475)	0.669 (-0.117, 1.438)
Effective Feedback	6	13	419	-0.005 (-0.065, 0.053)	13	2,782	0.033 (-0.072, 0.142)	0.215 (-0.233, 0.656)
Hampshire Hundreds	20	30	206	-0.017 (-0.085, 0.052)	36	2,818	-0.103 (-0.240, 0.031)	-0.106 (-0.355, 0.133)
Word and World Reading Programme (Curriculum Centre)	26	16	501	-0.169 (-0.352, 0.018)	16	1,213	0.027 (-0.161, 0.214)	0.657 (-0.124, 1.447)
Lesson Study	45.2	114	1,103	0.156 (-0.036, 0.347)	171	6,305	0.011 (-0.118, 0.137)	-0.089 (-0.494, 0.323)
Talk of the Town	49	47	275	-0.125 (-0.241, -0.013)	63	2,676	-0.069 (-0.265, 0.126)	0.226 (-0.413, 0.852)
Parenting Academy (1)	90.1	14	591	-0.046 (-0.141, 0.050)	16	1,284	-0.042 (-0.209, 0.125)	0.206 (-0.595, 0.996)
Parenting Academy (2)	90.2	15	654	-0.079 (-0.171, 0.012)	16	1,394	-0.049 (-0.200, 0.101)	-0.151 (-1.346, 0.994)
Learner Response System	97	80	1,060	-0.063 (-0.140, 0.014)	99	5,788	-0.041 (-0.219, 0.139)	0.202 (-0.137, 0.529)
Switch-On Effectiveness Trial	101	85	173	0.118 (-0.179, 0.421)	182	900	-0.088 (-0.300, 0.114)	-0.332 (-1.124, 0.457)
Grammar for Writing – Effectiveness Trial	131	103	1,336	-0.003 (-0.068, 0.061)	135	5,408	-0.071 (-0.202, 0.070)	0.022 (-0.296, 0.343)
Integrating English	151	80	1,830	-0.052 (-0.106, 0.000)	80	3,576	-0.045 (-0.160, 0.065)	0.126 (-0.136, 0.4)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Accelerated Reader – Effectiveness Trial	152	109	1,271	-0.043 (-0.147, 0.065)	180	11,627	0.016 (-0.104, 0.133)	-0.065 (-1.337, 1.283)
PALS–UK	166	33	226	0.125 (-0.079, 0.325)	66	1,447	0.161 (-0.107, 0.419)	-0.419 (-1.063, 0.19)

Table B 4.2.2: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for Key Stage 2 mathematics outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	10	408	5,147	0.002 (-0.050, 0.054)	556	22,937	0.018 (-0.051, 0.085)	0.01 (-0.21, 0.256)
Future Foundations	1	24	137	-0.006 (-0.205, 0.192)	33	297	-0.037 (-0.420, 0.335)	-0.196 (-1.108, 0.724)
Effective Feedback	6	13	420	0.011 (-0.051, 0.072)	13	2,784	-0.120 (-0.224, -0.016)	-0.248 (-0.662, 0.153)
Hampshire Hundreds	20	30	196	0.018 (-0.071, 0.105)	36	2,788	0.144 (0.000, 0.282)	0.028 (-0.231, 0.287)
Lesson Study	45.2	115	1,116	-0.108 (-0.309, 0.101)	171	6,353	0.044 (-0.088, 0.180)	0.392 (-0.008, 0.8)
Affordable Online Maths Tuition	66	41	184	0.065 (-0.055, 0.184)	64	576	-0.011 (-0.258, 0.242)	-0.127 (-0.694, 0.44)
Parenting Academy (1)	90.1	14	611	-0.029 (-0.123, 0.065)	16	1,306	0.020 (-0.149, 0.190)	0.281 (-0.464, 1.024)
Parenting Academy (2)	90.2	15	673	-0.027 (-0.120, 0.069)	16	1,409	0.118 (-0.041, 0.271)	-0.16 (-1.255, 0.96)
Dialogic Teaching	95	60	666	0.003 (-0.246, 0.254)	69	1,245	0.040 (-0.142, 0.220)	1.138 (-0.469, 2.695)
Learner Response System	97	80	1,101	-0.048 (-0.124, 0.028)	99	5,888	-0.038 (-0.215, 0.137)	0.189 (-0.13, 0.5)
Maths Count	128	16	43	0.054 (-0.551, 0.657)	39	291	-0.170 (-0.776, 0.413)	-1.311 (-3.151, 0.672)

B 4.3 Key Stage 3

Table B 4.3.1: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for Key Stage 3 literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	23	341	6,043	-0.012 (-0.049, 0.023)	474	29,165	0.019 (-0.077, 0.120)	0.017 (-0.15, 0.185)
Rhythm for Reading	4	6	113	0.049 (-0.051, 0.151)	6	351	-0.114 (-0.493, 0.263)	-0.258 (-0.813, 0.302)
Chatterbooks	10.1	12	63	-0.047 (-0.212, 0.108)	12	302	0.213 (-0.250, 0.693)	0.568 (-0.381, 1.541)
Discover Summer School	11	12	54	-0.027 (-0.206, 0.145)	14	78	-0.759 (-1.438, -0.053)	-0.666 (-1.783, 0.498)
LIT Programme	12	32	1,676	0.000 (-0.033, 0.032)	34	4,389	-0.039 (-0.132, 0.053)	0.049 (-0.124, 0.217)
Rapid Phonics	13	12	36	-0.033 (-0.358, 0.292)	21	176	0.308 (-0.612, 1.207)	-0.003 (-0.76, 0.748)
Butterfly Phonics	15	6	241	-0.063 (-0.133, 0.005)	6	307	-0.155 (-0.535, 0.238)	0.187 (-0.267, 0.649)
Improving Writing Quality	16	12	135	-0.136 (-0.434, 0.169)	22	266	-0.242 (-0.909, 0.370)	0.038 (-1.386, 1.461)
Summer Active Reading Programme	17	26	72	0.087 (-0.121, 0.285)	48	182	-0.016 (-0.568, 0.542)	-0.657 (-1.743, 0.508)
TextNow Transition Programme	18	22	62	0.089 (-0.147, 0.328)	54	390	-0.112 (-0.571, 0.360)	-0.868 (-2.099, 0.397)
Units of Sound	21	20	129	-0.096 (-0.185, -0.002)	33	423	-0.071 (-0.415, 0.267)	0.483 (0.067, 0.884)
Vocabulary Enrichment Intervention Programme	22	11	126	0.037 (-0.137, 0.214)	12	569	0.010 (-0.291, 0.300)	-0.294 (-1.188, 0.604)
REACH (1)	28.1	11	29	-0.072 (-0.423, 0.261)	19	123	0.070 (-0.516, 0.667)	-0.251 (-1.356, 0.89)
REACH (2)	28.2	10	29	-0.087 (-0.365, 0.180)	19	117	0.298 (-0.376, 0.989)	0.173 (-0.845, 1.238)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Catch Up Literacy	29	13	98	0.007 (-0.151, 0.171)	15	513	0.014 (-0.338, 0.372)	-0.088 (-0.979, 0.822)
Fresh Start – Pilot	31	8	46	-0.035 (-0.195, 0.127)	10	418	-0.071 (-0.582, 0.445)	0.024 (-0.684, 0.722)
Talk for Literacy	32	3	149	0.036 (-0.099, 0.173)	3	213	0.621 (0.137, 1.119)	0.594 (-0.117, 1.338)
Quest	40	18	328	0.031 (-0.060, 0.122)	19	2,087	0.188 (-0.036, 0.408)	0.126 (-0.362, 0.609)
SHINE in Secondaries (Literacy)	46	4	302	-0.016 (-0.090, 0.058)	4	543	-0.048 (-0.251, 0.148)	0.003 (-0.368, 0.38)
Powerful Learning Conversations	65	13	48	-0.061 (-0.252, 0.131)	15	1,722	-0.263 (-0.770, 0.252)	0.257 (-0.829, 1.348)
Texting Parents	67	29	1,654	0.038 (-0.004, 0.078)	29	11,375	0.100 (0.009, 0.187)	-0.138 (-0.415, 0.131)
Graduate (Perry Beeches) Coaching Programme	73	4	60	-0.046 (-0.224, 0.122)	4	288	0.083 (-0.389, 0.541)	0.683 (-0.11, 1.461)
Paired Reading	75.2	8	46	0.014 (-0.220, 0.239)	10	1,273	-0.022 (-0.395, 0.353)	-0.214 (-1.276, 0.833)
Youth Social Action Trials: Youth United	82	49	547	0.011 (-0.053, 0.077)	65	3,060	0.127 (-0.091, 0.338)	0.103 (-0.272, 0.491)

Table B 4.3.2: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for Key Stage 3 mathematics outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	5	192	5,415	0.004 (-0.026, 0.033)	221	25,065	0.005 (-0.062, 0.074)	-0.032 (-0.188, 0.126)
Ark Mathematics Mastery: Secondary	38	44	2,218	0.045 (0.012, 0.080)	44	5,783	0.006 (-0.090, 0.107)	-0.202 (-0.379, -0.023)
SHINE in Secondaries (Literacy)	46	4	293	-0.011 (-0.105, 0.079)	4	537	0.049 (-0.163, 0.263)	0.073 (-0.367, 0.522)
Texting Parents	67	29	1,702	-0.015 (-0.049, 0.019)	29	11,548	-0.067 (-0.138, 0.004)	-0.01 (-0.229, 0.215)
Youth Social Action Trials: Youth United	82	49	547	0.071 (0.005, 0.136)	65	3,060	0.115 (-0.091, 0.322)	-0.29 (-0.662, 0.092)
Realistic Maths Education	174	66	655	-0.022 (-0.081, 0.037)	79	4,137	-0.005 (-0.137, 0.123)	0.068 (-0.303, 0.427)

B 4.4 Key Stage 4

Table B 4.4.1: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for Key Stage 4 literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	7	591	28,279	-0.007 (-0.035, 0.020)	674	133,833	-0.035 (-0.080, 0.010)	-0.035 (-0.221, 0.149)
Increasing Pupil Motivation (1)	25.1	45	3,105	-0.003 (-0.079, 0.072)	48	7,145	0.004 (-0.078, 0.090)	-0.039 (-0.239, 0.161)
Increasing Pupil Motivation (2)	25.2	45	2,995	0.034 (-0.048, 0.118)	48	6,928	0.018 (-0.074, 0.107)	-0.057 (-0.296, 0.178)
Tutor Trust Secondary	44	227	14,518	-0.061 (-0.154, 0.032)	278	62,889	-0.024 (-0.214, 0.172)	0.211 (-0.107, 0.535)
Teacher Observation	98	78	2,808	0.011 (-0.032, 0.052)	82	20,895	-0.038 (-0.113, 0.034)	-0.026 (-0.345, 0.313)
Embedding Formative Assessment	110	130	3,458	0.001 (-0.029, 0.031)	140	22,609	-0.031 (-0.089, 0.028)	-0.249 (-0.524, 0.029)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	33	722	-0.082 (-0.163, -0.006)	39	6,742	-0.116 (-0.260, 0.024)	0.238 (-0.685, 1.100)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	33	673	0.054 (-0.015, 0.124)	39	6,625	-0.067 (-0.210, 0.071)	-0.303 (-0.976, 0.396)

Table B 4.4.2: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for in Key Stage 4 mathematics outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	9	783	38,500	-0.029 (-0.054, -0.005)	942	183,095	-0.010 (-0.053, 0.035)	0.052 (-0.119, 0.217)
Increasing Pupil Motivation (1)	25.1	45	3,108	-0.034 (-0.108, 0.040)	48	7,161	0.061 (-0.015, 0.142)	0.001 (-0.181, 0.193)
Increasing Pupil Motivation (2)	25.2	45	2,995	-0.054 (-0.139, 0.030)	48	6,939	-0.024 (-0.111, 0.061)	0.12 (-0.101, 0.337)
Affordable Individual and Small Group Tuition: Secondary – Maths	88	269	23,305	-0.092 (-0.147, -0.039)	317	100,514	-0.094 (-0.206, 0.013)	0.105 (-0.07, 0.275)
Teacher Observation	98	79	2,858	-0.016 (-0.053, 0.020)	82	20,720	-0.062 (-0.123, 0.001)	0.168 (-0.079, 0.419)
Embedding Formative Assessment	110	130	3,539	0.020 (-0.007, 0.046)	140	22,914	0.036 (-0.018, 0.092)	-0.159 (-0.391, 0.067)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	33	727	-0.057 (-0.130, 0.012)	39	6,771	-0.046 (-0.174, 0.073)	0.117 (-0.558, 0.774)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	34	685	0.009 (-0.056, 0.075)	39	6,660	0.031 (-0.095, 0.151)	-0.273 (-0.784, 0.248)
Generation STEM	164	49	99	-0.033 (-0.180, 0.113)	111	1,522	0.064 (-0.207, 0.342)	0.529 (-0.455, 1.472)
Mathematics in Context	184	99	1,184	0.036 (-0.014, 0.089)	118	9,894	-0.085 (-0.204, 0.039)	-0.29 (-0.716, 0.153)

B 5. Pooled effect size by type of intervention on EAL pupils (based on TSA groups) and attainment gaps

B 5.1 One to one interventions

Table B 5.1: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for one to one interventions on literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	16	502	17,038	-0.018 (-0.068, 0.034)	769	71,794	-0.007 (-0.106, 0.093)	0.047 (-0.169, 0.257)
Rhythm for Reading	4	6	113	0.050 (-0.050, 0.154)	6	351	-0.116 (-0.512, 0.258)	-0.258 (-0.813, 0.295)
Response to Intervention	5	20	97	-0.128 (-0.287, 0.041)	48	373	0.051 (-0.349, 0.474)	0.698 (-0.065, 1.471)
Chatterbooks	10.1	12	63	-0.045 (-0.210, 0.106)	12	302	0.215 (-0.245, 0.694)	0.568 (-0.379, 1.539)
Summer Active Reading Programme	17	26	72	0.084 (-0.127, 0.287)	48	182	-0.009 (-0.549, 0.555)	-0.66 (-1.75, 0.469)
TextNow Transition Programme	18	22	62	0.086 (-0.157, 0.321)	54	390	-0.111 (-0.573, 0.342)	-0.867 (-2.054, 0.38)
Units of Sound	21	20	129	-0.097 (-0.186, -0.013)	33	423	-0.066 (-0.418, 0.278)	0.488(0.07, 0.897)
REACH (1)	28.1	11	29	-0.072 (-0.411, 0.262)	19	123	0.073 (-0.530, 0.659)	-0.277 (-1.37, 0.854)
REACH (2)	28.2	10	29	-0.080 (-0.354, 0.213)	19	117	0.298 (-0.376, 0.972)	0.176 (-0.911, 1.231)
Catch Up Literacy	29	13	98	0.005 (-0.156, 0.163)	15	513	0.017 (-0.344, 0.364)	-0.092 (-1.021, 0.792)
Tutor Trust Secondary	44	227	14,518	-0.059 (-0.152, 0.033)	278	62,889	-0.023 (-0.218, 0.175)	0.217 (-0.113, 0.544)
SHINE in Secondaries (Literacy)	46	4	302	-0.018 (-0.091, 0.058)	4	543	-0.052 (-0.257, 0.146)	0.005 (-0.379, 0.395)
Powerful Learning Conversations	65	13	48	-0.055 (-0.242, 0.132)	15	1,722	-0.261 (-0.768, 0.245)	0.272 (-0.819, 1.363)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Graduate (Perry Beeches) Coaching Programme	73	4	60	-0.047 (-0.230, 0.135)	4	288	0.086 (-0.369, 0.538)	0.685 (-0.119, 1.482)
Parenting Academy (1)	90.1	14	591	-0.046 (-0.142, 0.052)	16	1,284	-0.040 (-0.204, 0.128)	0.206 (-0.543, 0.949)
Parenting Academy (2)	90.2	15	654	-0.080 (-0.174, 0.014)	16	1,394	-0.049 (-0.209, 0.099)	-0.13 (-1.243, 0.985)
Switch-On Effectiveness Trial	101	85	173	0.117 (-0.179, 0.424)	182	900	-0.087 (-0.296, 0.121)	-0.325 (-1.087, 0.473)

B 5.2 Small group interventions

Table B 5.2.1: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for small group interventions on literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	14	378	4,867	-0.133 (-0.344, 0.084)	515	17,236	0.039 (-0.069, 0.148)	0.110 (-0.138, 0.358)
Future Foundations	1	24	142	0.040 (-0.125, 0.198)	33	304	-0.139 (-0.444, 0.165)	0.068 (-0.666, 0.802)
Grammar for Writing	3	45	629	-0.002 (-0.084, 0.084)	50	1,359	-0.036 (-0.215, 0.145)	0.011 (-0.414, 0.452)
Discover Summer School	11	12	54	-0.029 (-0.205, 0.150)	14	78	-0.761 (-1.446, -0.098)	-0.637 (-1.734, 0.484)
LIT Programme	12	32	1,676	0.000 (-0.034, 0.032)	34	4,389	-0.040 (-0.132, 0.052)	0.05 (-0.127, 0.225)
Rapid Phonics	13	12	36	-0.035 (-0.352, 0.289)	21	176	0.305 (-0.652, 1.250)	-0.002 (-0.765, 0.722)
Butterfly Phonics	15	6	241	-0.062 (-0.130, 0.007)	6	307	-0.167 (-0.558, 0.226)	0.175 (-0.314, 0.628)
Fresh Start – Pilot	31	8	46	-0.029 (-0.191, 0.131)	10	418	-0.086 (-0.602, 0.429)	0.032 (-0.665, 0.729)
Talk for Literacy	32	3	149	0.033 (-0.095, 0.167)	3	213	0.620 (0.152, 1.091)	0.583 (-0.141, 1.348)
Online Reading Programme (ABRA) (1)	68.1	33	261	0.263 (-1.262, 1.835)	48	1,311	0.116 (-0.131, 0.367)	-0.376 (-1.98, 1.2)
Online Reading Programme (ABRA) (2)	68.2	35	270	-0.679 (-1.867, 0.554)	48	1,297	0.062 (-0.187, 0.312)	0.732 (-0.472, 1.932)
Youth Social Action Trials: Youth United	82	49	547	0.010 (-0.060, 0.077)	65	3,060	0.127 (-0.081, 0.339)	0.102 (-0.284, 0.476)
Speech Bubbles	161	24	382	-0.020 (-0.295, 0.241)	24	755	0.046 (-0.196, 0.279)	-0.337 (-1.783, 1.184)
PALS–UK	166	33	226	0.129 (-0.067, 0.329)	66	1,447	0.163 (-0.107, 0.426)	-0.429 (-1.094, 0.24)
ABRA (Effectiveness)	177.1	62	208	-1.210 (-2.789, 0.375)	93	2,122	0.070 (-0.155, 0.300)	1.062 (-0.387, 2.544)

Table B 5.2.2: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for small group interventions on mathematics outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	16	828	10,513	-0.013 (-0.055, 0.031)	1,204	49,254	-0.032 (-0.085, 0.020)	0.041 (-0.125, 0.207)
Future Foundations	1	24	142	0.039 (-0.129, 0.200)	33	304	-0.133 (-0.446, 0.176)	0.075 (-0.666, 0.815)
Grammar for Writing	3	45	629	-0.002 (-0.087, 0.085)	50	1,359	-0.039 (-0.214, 0.135)	0.006 (-0.418, 0.432)
Response to Intervention	5	20	97	-0.127 (-0.283, 0.048)	48	373	0.050 (-0.374, 0.475)	0.669 (-0.117, 1.438)
Effective Feedback	6	13	419	-0.005 (-0.065, 0.053)	13	2,782	0.033 (-0.072, 0.142)	0.215 (-0.233, 0.656)
Hampshire Hundreds	20	30	206	-0.017 (-0.085, 0.052)	36	2,818	-0.103 (-0.240, 0.031)	-0.106 (-0.355, 0.133)
Word and World Reading Programme (Curriculum Centre)	26	16	501	-0.169 (-0.352, 0.018)	16	1,213	0.027 (-0.161, 0.214)	0.657 (-0.124, 1.447)
Lesson Study	45.2	114	1,103	0.156 (-0.036, 0.347)	171	6,305	0.011 (-0.118, 0.137)	-0.089 (-0.494, 0.323)
Talk of the Town	49	47	275	-0.125 (-0.241, -0.013)	63	2,676	-0.069 (-0.265, 0.126)	0.226 (-0.413, 0.852)
Parenting Academy (1)	90.1	14	591	-0.046 (-0.141, 0.050)	16	1,284	-0.042 (-0.209, 0.125)	0.206 (-0.595, 0.996)
Parenting Academy (2)	90.2	15	654	-0.079 (-0.171, 0.012)	16	1,394	-0.049 (-0.200, 0.101)	-0.151 (-1.346, 0.994)
Learner Response System	97	80	1,060	-0.063 (-0.140, 0.014)	99	5,788	-0.041 (-0.219, 0.139)	0.202 (-0.137, 0.529)
Switch-On Effectiveness Trial	101	85	173	0.118 (-0.179, 0.421)	182	900	-0.088 (-0.300, 0.114)	-0.332 (-1.124, 0.457)
Grammar for Writing – Effectiveness Trial	131	103	1,336	-0.003 (-0.068, 0.061)	135	5,408	-0.071 (-0.202, 0.070)	0.022 (-0.296, 0.343)
Integrating English	151	80	1,830	-0.052 (-0.106, 0.000)	80	3,576	-0.045 (-0.160, 0.065)	0.126 (-0.136, 0.4)
Accelerated Reader – Effectiveness Trial	152	109	1,271	-0.043 (-0.147, 0.065)	180	11,627	0.016 (-0.104, 0.133)	-0.065 (-1.337, 1.283)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
PALS–UK	166	33	226	0.125 (-0.079, 0.325)	66	1,447	0.161 (-0.107, 0.419)	-0.419 (-1.063, 0.19)

B 5.3 Whole-class interventions

Table B 5.3.1: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for whole-class interventions on literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	14	646	16,271	0.015 (-0.033, 0.063)	801	70,899	-0.002 (-0.067, 0.064)	-0.03 (-0.225, 0.171)
Effective Feedback	6	13	419	-0.005 (-0.066, 0.051)	13	2,782	0.033 (-0.083, 0.143)	0.214 (-0.218, 0.655)
Improving Writing Quality	16	12	135	-0.137 (-0.437, 0.150)	22	266	-0.237 (-0.909, 0.395)	0.032 (-1.409, 1.475)
Vocabulary Enrichment Intervention Programme	22	11	126	0.037 (-0.130, 0.210)	12	569	0.008 (-0.286, 0.288)	-0.3 (-1.201, 0.611)
Increasing Pupil Motivation (1)	25.1	45	3,105	-0.003 (-0.078, 0.071)	48	7,145	0.006 (-0.079, 0.089)	-0.04 (-0.24, 0.154)
Increasing Pupil Motivation (2)	25.2	45	2,995	0.034 (-0.050, 0.120)	48	6,928	0.020 (-0.071, 0.110)	-0.054 (-0.282, 0.191)
Word and World Reading Programme (Curriculum Centre)	26	16	501	-0.171 (-0.355, 0.020)	16	1,213	0.026 (-0.160, 0.211)	0.649 (-0.103, 1.436)
Quest	40	18	328	0.029 (-0.065, 0.120)	19	2,087	0.185 (-0.045, 0.408)	0.129 (-0.34, 0.606)
Improving Numeracy and Literacy in Key Stage 1	41	28	311	0.301 (-0.017, 0.620)	37	1,342	-0.008 (-0.170, 0.162)	-0.591 (-1.325, 0.145)
Paired Reading	75.2	8	46	0.014 (-0.217, 0.244)	10	1,273	-0.022 (-0.411, 0.354)	-0.221 (-1.323, 0.844)
Learner Response System	97	80	1,060	-0.061 (-0.133, 0.011)	99	5,788	-0.040 (-0.218, 0.136)	0.2 (-0.134, 0.526)
Teacher Observation	98	78	2,808	0.010 (-0.031, 0.053)	82	20,895	-0.037 (-0.107, 0.032)	-0.018 (-0.35, 0.31)
Grammar for Writing – Effectiveness Trial	131	103	1,336	-0.006 (-0.071, 0.060)	135	5,408	-0.070 (-0.199, 0.065)	0.023 (-0.298, 0.344)
Integrating English	151	80	1,830	-0.051 (-0.103, 0.005)	80	3,576	-0.043 (-0.153, 0.068)	0.122 (-0.154, 0.396)
Accelerated Reader – Effectiveness Trial	152	109	1,271	-0.042 (-0.142, 0.058)	180	11,627	0.019 (-0.100, 0.140)	-0.072 (-1.396, 1.219)

Table B 5.3.2: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for whole-class interventions on mathematics outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	8	444	12,566	-0.012 (-0.070, 0.048)	512	55,907	-0.042 (-0.091, 0.006)	-0.007 (-0.242, 0.233)
Effective Feedback	6	13	420	0.012 (-0.052, 0.075)	13	2,784	-0.121 (-0.225, -0.016)	-0.251 (-0.655, 0.155)
Increasing Pupil Motivation (1)	25.1	45	3,108	-0.034 (-0.110, 0.040)	48	7,161	0.061 (-0.018, 0.143)	0.000 (-0.189, 0.191)
Increasing Pupil Motivation (2)	25.2	45	2,995	-0.053 (-0.134, 0.028)	48	6,939	-0.022 (-0.107, 0.061)	0.121 (-0.094, 0.33)
Improving Numeracy and Literacy in Key Stage 1	41	23	234	-0.003 (-0.410, 0.401)	35	1,276	-0.040 (-0.263, 0.176)	-0.728 (-1.592, 0.121)
Dialogic Teaching	95	60	666	0.002 (-0.244, 0.247)	69	1,245	0.040 (-0.141, 0.222)	1.098 (-0.469, 2.67)
Learner Response System	97	80	1,101	-0.049 (-0.123, 0.026)	99	5,888	-0.037 (-0.207, 0.136)	0.192 (-0.119, 0.52)
Teacher Observation	98	79	2,858	-0.015 (-0.051, 0.020)	82	20,720	-0.062 (-0.125, 0.002)	0.169 (-0.092, 0.424)
Mathematics in Context	184	99	1,184	0.035 (-0.016, 0.091)	118	9,894	-0.086 (-0.208, 0.037)	-0.288 (-0.742, 0.158)

B 5.4 Whole-school interventions

Table B 5.4.1: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for whole-school interventions on literacy outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs. Non-EAL	Late vs. Non-EAL
Overall	7	416	8,091	-0.006 (-0.039, 0.028)	517	59,150	-0.055 (-0.116, 0.005)	-0.069 (-0.242, 0.107)
Hampshire Hundreds	20	30	206	-0.019 (-0.088, 0.050)	36	2,818	-0.104 (-0.241, 0.036)	-0.107 (-0.352, 0.147)
Lesson Study	45.2	114	1,103	0.160 (-0.030, 0.350)	171	6,305	0.010 (-0.119, 0.139)	-0.094 (-0.498, 0.286)
Talk of the Town	49	47	275	-0.125 (-0.241, -0.009)	63	2,676	-0.066 (-0.266, 0.133)	0.223 (-0.389, 0.859)
Texting Parents	67	29	1,654	0.037 (-0.002, 0.076)	29	11,375	0.099 (0.009, 0.180)	-0.133 (-0.41, 0.143)
Embedding Formative Assessment	110	130	3,458	0.002 (-0.027, 0.031)	140	22,609	-0.032 (-0.095, 0.028)	-0.247 (-0.523, 0.039)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	33	722	-0.081 (-0.160, -0.003)	39	6,742	-0.116 (-0.255, 0.023)	0.229 (-0.648, 1.106)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	33	673	0.054 (-0.019, 0.127)	39	6,625	-0.068 (-0.213, 0.084)	-0.299 (-0.973, 0.393)

Table B 5.4.2: Pooled and individual trial effect size for EAL pupils (based on TSA) as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for whole-school interventions on mathematics outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	8	481	10,838	-0.009 (-0.038, 0.019)	577	66,954	0.037 (-0.013, 0.086)	-0.01 (-0.142, 0.122)
Hampshire Hundreds	20	30	196	0.017 (-0.068, 0.106)	36	2,788	0.145 (-0.002, 0.284)	0.031 (-0.222, 0.281)
Ark Mathematics Mastery: Secondary	38	44	2,218	0.046 (0.012, 0.078)	44	5,783	0.008 (-0.091, 0.103)	-0.201 (-0.376, -0.021)
Lesson Study	45.2	115	1,116	-0.107 (-0.311, 0.106)	171	6,353	0.045 (-0.091, 0.180)	0.396 (-0.022, 0.816)
Texting Parents	67	29	1,702	-0.015 (-0.048, 0.019)	29	11,548	-0.067 (-0.137, 0.001)	-0.012 (-0.232, 0.209)
Embedding Formative Assessment	110	130	3,539	0.019 (-0.008, 0.047)	140	22,914	0.036 (-0.019, 0.091)	-0.16 (-0.395, 0.065)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	33	727	-0.058 (-0.132, 0.016)	39	6,771	-0.045 (-0.170, 0.079)	0.129 (-0.533, 0.785)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	34	685	0.009 (-0.056, 0.071)	39	6,660	0.034 (-0.088, 0.162)	-0.276 (-0.776, 0.225)
Realistic Maths Education	174	66	655	-0.022 (-0.080, 0.038)	79	4,137	-0.008 (-0.132, 0.114)	0.062 (-0.315, 0.426)

Appendix C: Sensitivity analysis with estimates of pooled and individual trial effect size in the EEF trials

C 1. Alternative TSA categorisation (two years as cut-off)

Table C 1.1: Pooled and individual trial effect size for EAL pupils (based on TSA), as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL, for literacy outcomes when TSA is categorised as late arrivals for those with TSA <=2 and earlier arrivals otherwise

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	42	1,612	34,102	-0.019 (-0.070, 0.035)	2,178	142,636	-0.001 (-0.046, 0.043)	0.073 (-0.052, 0.194)
Future Foundations	1	24	142	0.037 (-0.131, 0.196)	33	304	-0.130 (-0.447, 0.179)	-0.066 (-0.858, 0.693)
Grammar for Writing	3	45	629	-0.002 (-0.088, 0.083)	50	1,359	-0.036 (-0.202, 0.141)	0.008 (-0.496, 0.512)
Rhythm for Reading	4	6	113	0.048 (-0.050, 0.144)	6	351	-0.186 (-0.550, 0.167)	-0.066 (-0.713, 0.579)
Response to Intervention	5	20	97	-0.127 (-0.287, 0.042)	48	373	0.108 (-0.294, 0.529)	-0.006 (-1.121, 1.158)
Effective Feedback	6	13	419	-0.005 (-0.064, 0.054)	13	2,782	0.039 (-0.073, 0.155)	0.025 (-0.352, 0.39)
Chatterbooks	10.1	12	63	-0.046 (-0.210, 0.112)	12	302	0.186 (-0.261, 0.624)	0.967 (-0.295, 2.23)
Discover Summer School	11	12	54	-0.031 (-0.206, 0.143)	14	78	-0.762 (-1.447, -0.073)	-0.546 (-1.982, 0.906)
LIT Programme	12	32	1,676	-0.001 (-0.034, 0.030)	34	4,389	-0.028 (-0.115, 0.061)	-0.021 (-0.258, 0.22)
Rapid Phonics	13	12	36	-0.037 (-0.368, 0.296)	21	176	-0.004 (-0.789, 0.820)	0.311 (-0.502, 1.125)
Butterfly Phonics	15	6	241	-0.062 (-0.132, 0.006)	6	307	-0.125 (-0.508, 0.256)	0.243 (-0.301, 0.788)
Summer Active Reading Programme	17	26	72	0.084 (-0.130, 0.292)	48	182	-0.021 (-0.560, 0.523)	-0.628 (-1.813, 0.641)
TextNow Transition Programme	18	22	62	0.086 (-0.147, 0.320)	54	390	-0.135 (-0.599, 0.306)	-0.804 (-2.091, 0.498)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Hampshire Hundreds	20	30	206	-0.018 (-0.087, 0.048)	36	2,818	-0.113 (-0.236, 0.015)	-0.035 (-0.369, 0.277)
Units of Sound	21	20	129	-0.096 (-0.184, -0.004)	33	423	-0.047 (-0.363, 0.270)	0.58 (0.137, 1.032)
Word and World Reading Programme (Curriculum Centre)	26	16	501	-0.173 (-0.363, 0.027)	16	1,213	0.027 (-0.150, 0.199)	0.659 (-0.069, 1.415)
Catch Up Literacy	29	13	98	0.004 (-0.152, 0.160)	15	513	-0.006 (-0.352, 0.345)	0.095 (-1.217, 1.36)
Fresh Start – Pilot	31	8	46	-0.029 (-0.185, 0.129)	10	418	-0.126 (-0.590, 0.341)	0.429 (-0.582, 1.421)
Talk for Literacy	32	3	149	0.032 (-0.106, 0.171)	3	213	0.674 (0.203, 1.146)	-0.273 (-1.329, 0.772)
Act, Sing, Play	35	12	233	0.532 (0.028, 0.991)	19	809	0.200 (-0.011, 0.402)	-0.579 (-1.184, -0.005)
Quest	40	18	328	0.029 (-0.064, 0.121)	19	2,087	0.165 (-0.040, 0.377)	0.388 (-0.359, 1.104)
Improving Numeracy and Literacy in Key Stage 1	41	28	311	0.297 (-0.026, 0.615)	37	1,342	0.008 (-0.162, 0.177)	-0.4 (-0.88, 0.086)
Tutor Trust Secondary	44	227	14,518	-0.062 (-0.154, 0.032)	278	62,889	0.032 (-0.143, 0.203)	0.582 (-0.724, 1.882)
Lesson Study	45.2	114	1,103	0.158 (-0.034, 0.349)	171	6,305	0.011 (-0.116, 0.141)	-0.089 (-0.487, 0.317)
SHINE in Secondaries (Literacy)	46	4	302	-0.017 (-0.091, 0.059)	4	543	-0.066 (-0.266, 0.134)	0.013 (-0.871, 0.843)
Talk of the Town	49	47	275	-0.125 (-0.239, -0.010)	63	2,676	-0.085 (-0.278, 0.109)	1.152 (0.181, 2.08)
Texting Parents	67	29	1,654	0.036 (-0.005, 0.077)	29	11,375	0.092 (0.012, 0.174)	-0.459 (-1.033, 0.122)
Graduate (Perry Beeches) Coaching Programme	73	4	60	-0.045 (-0.228, 0.133)	4	288	0.196 (-0.251, 0.620)	0.374 (-0.668, 1.404)
Youth Social Action Trials: Youth United	82	49	547	0.012 (-0.054, 0.077)	65	3,060	0.124 (-0.084, 0.327)	0.081 (-0.616, 0.755)
Magic Breakfast	87.1	86	1,571	-0.829 (-1.243, -0.421)	102	4,334	-0.109 (-0.224, 0.004)	0.734 (0.34, 1.144)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Parenting Academy (1)	90.1	14	591	-0.047 (-0.145, 0.045)	16	1,284	-0.048 (-0.214, 0.120)	0.477 (-0.322, 1.281)
Parenting Academy (2)	90.2	15	654	-0.079 (-0.173, 0.010)	16	1,394	-0.052 (-0.209, 0.099)	-0.133 (-1.254, 1.013)
Learner Response System	97	80	1,060	-0.062 (-0.138, 0.011)	99	5,788	-0.026 (-0.196, 0.143)	0.204 (-0.209, 0.613)
Switch-On Effectiveness Trial	101	85	173	0.115 (-0.200, 0.414)	182	900	-0.086 (-0.295, 0.121)	-0.339 (-1.117, 0.445)
Online Reading Programme (ABRA) (1)	107.1	32	251	-0.272 (-1.820, 1.283)	49	1,279	-0.010 (-0.283, 0.263)	-0.13 (-1.858, 1.551)
GraphoGame Rime	109	10	90	0.182 (-0.467, 0.852)	14	360	0.151 (-0.351, 0.659)	0.05 (-0.485, 0.589)
Zippys Friends	121	60	558	0.025 (-0.405, 0.454)	81	3,258	-0.003 (-0.135, 0.132)	0.122 (-0.333, 0.585)
Grammar for Writing – Effectiveness Trial	131	103	1,336	-0.005 (-0.069, 0.056)	135	5,408	-0.086 (-0.224, 0.046)	0.078 (-0.322, 0.48)
Families and Schools Together (FAST)	141	102	1,196	-0.856 (-1.539, -0.171)	116	4,270	-0.001 (-0.130, 0.134)	0.715 (-0.017, 1.427)
Integrating English	151	80	1,830	-0.052 (-0.106, 0.002)	80	3,576	-0.042 (-0.154, 0.072)	0.264 (-0.149, 0.679)
Speech Bubbles	161	24	382	-0.017 (-0.281, 0.229)	24	755	0.065 (-0.212, 0.339)	0.088 (-0.191, 0.358)
Lexia Reading	165	36	120	-0.028 (-0.701, 0.693)	57	618	-0.010 (-0.288, 0.262)	0.137 (-0.473, 0.762)
PALS–UK	166	33	226	0.131 (-0.071, 0.331)	66	1,447	0.133 (-0.122, 0.401)	-0.35 (-1.225, 0.54)

Table C 1.2: Pooled and individual trial effect size for EAL pupils (based on TSA), as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL, for mathematics outcomes when TSA is categorised as late arrivals for those with TSA <=2 and earlier arrivals otherwise

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	20	1,112	36,780	-0.078 (-0.150, -0.005)	1,506	160,619	-0.007 (-0.053, 0.037)	-0.016 (-0.195, 0.16)
Future Foundations	1	24	137	-0.006 (-0.202, 0.194)	33	297	-0.055 (-0.421, 0.328)	-0.075 (-1.029, 0.874)
Effective Feedback	6	13	420	0.011 (-0.052, 0.074)	13	2,784	-0.121 (-0.231, -0.012)	-0.177 (-0.525, 0.182)
Hampshire Hundreds	20	30	196	0.017 (-0.070, 0.105)	36	2,788	0.119 (-0.017, 0.252)	0.107 (-0.231, 0.443)
Act, Sing, Play	35	12	234	-0.265 (-0.826, 0.306)	19	811	-0.058 (-0.277, 0.153)	0.274 (-0.281, 0.829)
Ark Mathematics Mastery: Secondary	38	44	2,218	0.046 (0.012, 0.079)	44	5,783	0.004 (-0.093, 0.096)	-0.396 (-0.65, -0.134)
Improving Numeracy and Literacy in Key Stage 1	41	23	234	-0.016 (-0.410, 0.391)	35	1,276	-0.094 (-0.333, 0.127)	0.185 (-0.308, 0.672)
Lesson Study	45.2	115	1,116	-0.109 (-0.308, 0.100)	171	6,353	0.044 (-0.088, 0.179)	0.395 (-0.031, 0.806)
SHINE in Secondaries (Literacy)	46	4	293	-0.012 (-0.103, 0.082)	4	537	0.042 (-0.161, 0.254)	-0.564 (-1.796, 0.643)
Affordable Online Maths Tuition	66	41	184	0.066 (-0.055, 0.187)	64	576	-0.010 (-0.248, 0.239)	-0.327 (-1.165, 0.51)
Texting Parents	67	29	1,702	-0.014 (-0.048, 0.020)	29	11,548	-0.059 (-0.128, 0.011)	-0.218 (-0.706, 0.268)
Youth Social Action Trials: Youth United	82	49	547	0.072 (0.008, 0.137)	65	3,060	0.085 (-0.113, 0.282)	-0.717 (-1.438, -0.003)
Magic Breakfast	87.1	86	1,571	-0.600 (-1.054, -0.148)	102	4,334	-0.014 (-0.134, 0.103)	0.625 (0.201, 1.061)
Affordable Individual and Small Group Tuition: Secondary – Maths	88	269	23,305	-0.093 (-0.145, -0.041)	317	100,514	-0.042 (-0.136, 0.055)	0.558 (-0.567, 1.711)
Parenting Academy (1)	90.1	14	611	-0.030 (-0.124, 0.068)	16	1,306	0.025 (-0.139, 0.188)	0.225 (-0.584, 1.039)
Parenting Academy (2)	90.2	15	673	-0.027 (-0.118, 0.060)	16	1,409	0.116 (-0.033, 0.266)	-0.166 (-1.28, 0.924)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Learner Response System	97	80	1,101	-0.050 (-0.123, 0.025)	99	5,888	-0.034 (-0.203, 0.138)	0.221 (-0.163, 0.6)
1stClass@Number	122	36	67	-0.814 (-2.286, 0.634)	129	466	-0.112 (-0.658, 0.432)	0.797 (-0.622, 2.127)
Maths Count	128	16	43	0.043 (-0.561, 0.645)	39	291	-0.175 (-0.760, 0.434)	-1.341 (-3.21, 0.56)
Mathematical Reasoning	134	111	932	-0.034 (-0.610, 0.518)	160	6,311	0.079 (-0.070, 0.231)	0.041 (-0.474, 0.559)
Families and Schools Together (FAST)	141	101	1,196	-0.311 (-1.059, 0.494)	115	4,287	-0.013 (-0.146, 0.122)	0.271 (-0.481, 0.999)

C 2. Trials with security padlock rating of 3 or more

Table C 2.1: Pooled and individual trial effect size from high-evidence security rating trials (padlock rating ≥3) for EAL pupils, as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for literacy outcomes

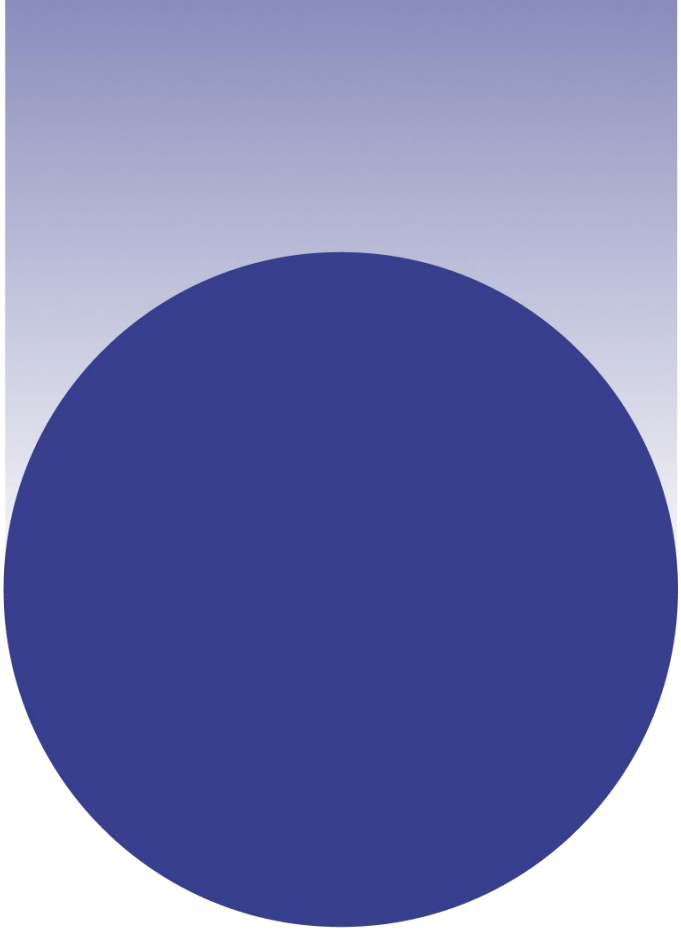
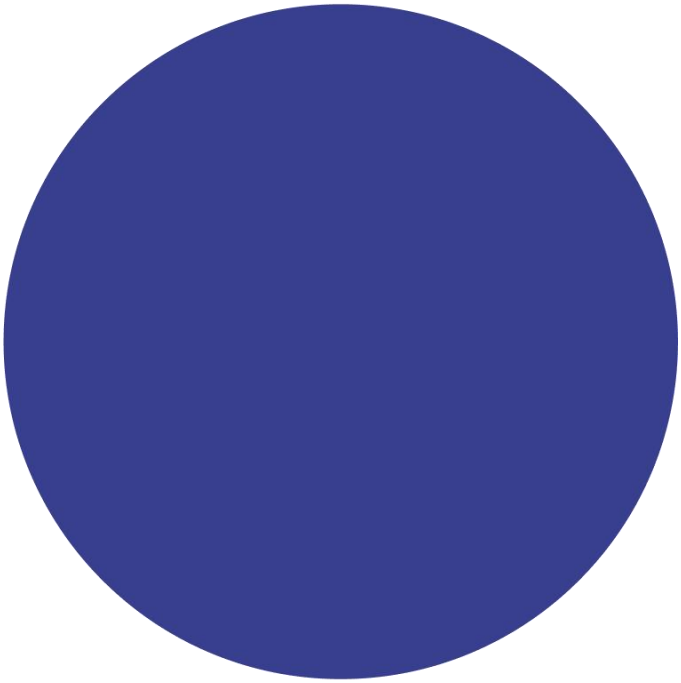
Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	28	980	13,171	-0.038 (-0.132, 0.058)	1,373	70,256	0.019 (-0.045, 0.084)	-0.022 (-0.194, 0.156)
Grammar for Writing	3	45	629	-0.004 (-0.087, 0.083)	50	1,359	-0.035 (-0.208, 0.140)	0.01 (-0.432, 0.442)
Rhythm for Reading	4	6	113	0.051 (-0.053, 0.147)	6	351	-0.117 (-0.491, 0.267)	-0.261 (-0.827, 0.321)
Chatterbooks	10.1	12	63	-0.043 (-0.202, 0.120)	12	302	0.214 (-0.246, 0.668)	0.566 (-0.434, 1.515)
Rapid Phonics	13	12	36	-0.029 (-0.351, 0.297)	21	176	0.308 (-0.604, 1.254)	0.015 (-0.729, 0.73)
Summer Active Reading Programme	17	26	72	0.084 (-0.135, 0.292)	48	182	-0.016 (-0.569, 0.534)	-0.646 (-1.752, 0.46)
TextNow Transition Programme	18	22	62	0.084 (-0.143, 0.316)	54	390	-0.109 (-0.556, 0.353)	-0.878 (-2.136, 0.389)
Vocabulary Enrichment Intervention Programme	22	11	126	0.039 (-0.133, 0.211)	12	569	0.005 (-0.294, 0.301)	-0.284 (-1.182, 0.616)
Catch Up Literacy	29	13	98	0.006 (-0.152, 0.169)	15	513	0.018 (-0.345, 0.365)	-0.088 (-0.957, 0.809)
Fresh Start – Pilot	31	8	46	-0.030 (-0.189, 0.135)	10	418	-0.073 (-0.607, 0.452)	0.027 (-0.643, 0.722)
Talk for Literacy	32	3	149	0.037 (-0.099, 0.177)	3	213	0.624 (0.120, 1.116)	0.587 (-0.176, 1.32)
Improving Numeracy and Literacy in Key Stage 1	41	28	311	0.301 (-0.034, 0.624)	37	1,342	-0.008 (-0.177, 0.158)	-0.581 (-1.321, 0.149)
Talk of the Town	49	47	275	-0.126 (-0.236, -0.010)	63	2,676	-0.068 (-0.265, 0.133)	0.229 (-0.421, 0.878)
Texting Parents	67	29	1,654	0.037 (-0.006, 0.076)	29	11,375	0.099 (0.014, 0.183)	-0.135 (-0.404, 0.14)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Online Reading Programme (ABRA) (1)	68.1	33	261	0.270 (-1.247, 1.749)	48	1,311	0.117 (-0.125, 0.362)	-0.384 (-1.941, 1.223)
Online Reading Programme (ABRA) (2)	68.2	35	270	-0.655 (-1.848, 0.533)	48	1,297	0.065 (-0.184, 0.317)	0.723 (-0.479, 1.95)
Graduate (Perry Beeches) Coaching Programme	73	4	60	-0.043 (-0.223, 0.135)	4	288	0.098 (-0.390, 0.583)	0.682 (-0.125, 1.479)
Paired Reading	75.2	8	46	0.016 (-0.208, 0.240)	10	1,273	-0.018 (-0.401, 0.366)	-0.217 (-1.333, 0.871)
Parenting Academy (1)	90.1	14	591	-0.046 (-0.143, 0.046)	16	1,284	-0.043 (-0.205, 0.122)	0.208 (-0.568, 0.985)
Parenting Academy (2)	90.2	15	654	-0.079 (-0.174, 0.016)	16	1,394	-0.050 (-0.198, 0.099)	-0.136 (-1.26, 1.021)
Learner Response System	97	80	1,060	-0.063 (-0.136, 0.008)	99	5,788	-0.040 (-0.214, 0.127)	0.205 (-0.126, 0.529)
Switch-On Effectiveness Trial	101	85	173	0.117 (-0.178, 0.424)	182	900	-0.084 (-0.299, 0.118)	-0.352 (-1.109, 0.415)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	33	722	-0.081 (-0.158, -0.003)	39	6,742	-0.116 (-0.253, 0.026)	0.242 (-0.652, 1.111)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	33	673	0.054 (-0.015, 0.126)	39	6,625	-0.067 (-0.219, 0.086)	-0.307 (-1.01, 0.397)
Grammar for Writing – Effectiveness Trial	131	103	1,336	-0.005 (-0.072, 0.061)	135	5,408	-0.070 (-0.201, 0.063)	0.028 (-0.292, 0.354)
Integrating English	151	80	1,830	-0.052 (-0.105, 0.002)	80	3,576	-0.044 (-0.152, 0.068)	0.117 (-0.157, 0.39)
Accelerated Reader – Effectiveness Trial	152	109	1,271	-0.042 (-0.145, 0.060)	180	11,627	0.019 (-0.100, 0.144)	-0.077 (-1.352, 1.221)
Speech Bubbles	161	24	382	-0.014 (-0.286, 0.253)	24	755	0.048 (-0.186, 0.292)	-0.339 (-1.819, 1.122)
ABRA (Effectiveness)	177.1	62	208	-1.257 (-2.845, 0.355)	93	2,122	0.072 (-0.167, 0.302)	1.063 (-0.44, 2.543)

Table C 2.2: Pooled and individual trial effect size from high-evidence security rating trials (padlock rating ≥3) for EAL pupils, as well as attainment gap of late arrivals versus earlier arrivals and late arrivals versus non-EAL for mathematics outcomes

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Overall	28	980	13,171	-0.038 (-0.132, 0.058)	1,373	70,256	0.019 (-0.045, 0.084)	-0.022 (-0.194, 0.156)
Grammar for Writing	3	45	629	-0.004 (-0.087, 0.083)	50	1,359	-0.035 (-0.208, 0.140)	0.01 (-0.432, 0.442)
Rhythm for Reading	4	6	113	0.051 (-0.053, 0.147)	6	351	-0.117 (-0.491, 0.267)	-0.261 (-0.827, 0.321)
Chatterbooks	10.1	12	63	-0.043 (-0.202, 0.120)	12	302	0.214 (-0.246, 0.668)	0.566 (-0.434, 1.515)
Rapid Phonics	13	12	36	-0.029 (-0.351, 0.297)	21	176	0.308 (-0.604, 1.254)	0.015 (-0.729, 0.73)
Summer Active Reading Programme	17	26	72	0.084 (-0.135, 0.292)	48	182	-0.016 (-0.569, 0.534)	-0.646 (-1.752, 0.46)
TextNow Transition Programme	18	22	62	0.084 (-0.143, 0.316)	54	390	-0.109 (-0.556, 0.353)	-0.878 (-2.136, 0.389)
Vocabulary Enrichment Intervention Programme	22	11	126	0.039 (-0.133, 0.211)	12	569	0.005 (-0.294, 0.301)	-0.284 (-1.182, 0.616)
Catch Up Literacy	29	13	98	0.006 (-0.152, 0.169)	15	513	0.018 (-0.345, 0.365)	-0.088 (-0.957, 0.809)
Fresh Start – Pilot	31	8	46	-0.030 (-0.189, 0.135)	10	418	-0.073 (-0.607, 0.452)	0.027 (-0.643, 0.722)
Talk for Literacy	32	3	149	0.037 (-0.099, 0.177)	3	213	0.624 (0.120, 1.116)	0.587 (-0.176, 1.32)
Improving Numeracy and Literacy in Key Stage 1	41	28	311	0.301 (-0.034, 0.624)	37	1,342	-0.008 (-0.177, 0.158)	-0.581 (-1.321, 0.149)
Talk of the Town	49	47	275	-0.126 (-0.236, -0.010)	63	2,676	-0.068 (-0.265, 0.133)	0.229 (-0.421, 0.878)
Texting Parents	67	29	1,654	0.037 (-0.006, 0.076)	29	11,375	0.099 (0.014, 0.183)	-0.135 (-0.404, 0.14)
Online Reading Programme (ABRA) (1)	68.1	33	261	0.270 (-1.247, 1.749)	48	1,311	0.117 (-0.125, 0.362)	-0.384 (-1.941, 1.223)
Online Reading Programme (ABRA) (2)	68.2	35	270	-0.655 (-1.848, 0.533)	48	1,297	0.065 (-0.184, 0.317)	0.723 (-0.479, 1.95)

Project name	Number of			Pooled effect size (95% CI) subgroup	Number of		Pooled effect size (95% CI) attainment gap	
	Trials	Schools	EAL pupils		Schools	All pupils	Earlier vs non-EAL	Late vs non-EAL
Graduate (Perry Beeches) Coaching Programme	73	4	60	-0.043 (-0.223, 0.135)	4	288	0.098 (-0.390, 0.583)	0.682 (-0.125, 1.479)
Paired Reading	75.2	8	46	0.016 (-0.208, 0.240)	10	1,273	-0.018 (-0.401, 0.366)	-0.217 (-1.333, 0.871)
Parenting Academy (1)	90.1	14	591	-0.046 (-0.143, 0.046)	16	1,284	-0.043 (-0.205, 0.122)	0.208 (-0.568, 0.985)
Parenting Academy (2)	90.2	15	654	-0.079 (-0.174, 0.016)	16	1,394	-0.050 (-0.198, 0.099)	-0.136 (-1.26, 1.021)
Learner Response System	97	80	1,060	-0.063 (-0.136, 0.008)	99	5,788	-0.040 (-0.214, 0.127)	0.205 (-0.126, 0.529)
Switch-On Effectiveness Trial	101	85	173	0.117 (-0.178, 0.424)	182	900	-0.084 (-0.299, 0.118)	-0.352 (-1.109, 0.415)
The RISE Project: Evidence-Informed School Improvement (1 year)	127.1	33	722	-0.081 (-0.158, -0.003)	39	6,742	-0.116 (-0.253, 0.026)	0.242 (-0.652, 1.111)
The RISE Project: Evidence-Informed School Improvement (2 years)	127.2	33	673	0.054 (-0.015, 0.126)	39	6,625	-0.067 (-0.219, 0.086)	-0.307 (-1.01, 0.397)
Grammar for Writing – Effectiveness Trial	131	103	1,336	-0.005 (-0.072, 0.061)	135	5,408	-0.070 (-0.201, 0.063)	0.028 (-0.292, 0.354)
Integrating English	151	80	1,830	-0.052 (-0.105, 0.002)	80	3,576	-0.044 (-0.152, 0.068)	0.117 (-0.157, 0.39)
Accelerated Reader – Effectiveness Trial	152	109	1,271	-0.042 (-0.145, 0.060)	180	11,627	0.019 (-0.100, 0.144)	-0.077 (-1.352, 1.221)
Speech Bubbles	161	24	382	-0.014 (-0.286, 0.253)	24	755	0.048 (-0.186, 0.292)	-0.339 (-1.819, 1.122)
ABRA (Effectiveness)	177.1	62	208	-1.257 (-2.845, 0.355)	93	2,122	0.072 (-0.167, 0.302)	1.063 (-0.44, 2.543)

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