Amendments

The primary outcome measure originally selected for this trial was KS2 Writing. In 2016 the grading scale for KS2 Writing was replaced by a three level scheme. This was agreed to be unsuitable as an outcome measure. The primary outcome measure will now be a writing assessment using KS2 past papers. This will be administered by the evaluation team during Summer term 2017/8. The secondary measure, KS2 Spelling, Grammar and Punctuation, remains unchanged.

Specifically, amendments to the protocol have been made in the following places:

- Page 1 - Evaluation Summary updated to reflect change in outcome measure, and to include number of schools recruited to the trial.
- Page 4 - References to primary outcome measure updated as above.
- Page 5 - References to primary outcome measure updated as above. Dates of baseline testing and randomisation changed to state the precise dates when these activities took place.
- Page 7 - References to primary outcome measure updated as above.
- Page 13 - Additional line in timetable noting new outcome assessment
- Page 15 - Logic model updated to include updated primary outcome measure.

Evaluation Summary	
Age range	9-11 (Years 5 and 6)
Number of pupils	4000
Number of schools	91 (46 intervention, 45 control)
Design	Two-arm, school-level clustered randomised controlled trial
Primary Outcome	Writing assessment (from KS2 past paper) for 1) all pupils and 2) EAL pupils

Intervention - Integrating English

Rationale

Accurate and appropriate communication in English is recognised as a key performance indicator in education at primary and secondary level. This is evidenced by the introduction of policies creating targets for spelling and grammar tests at KS2 and GCSE English at KS4. Over the last 10 years debate over the role of grammar in the curriculum in UK schools has shifted from *if* it should be taught to *how* it should be taught (Locke, 2010; Myhill & Watson, 2014). EAL students who demonstrate proficiency in English can close the attainment gap typically associated with students from minority backgrounds and achieve higher-than-average results at school-leaving age (Demie & Strand, 2006). Similar discussions in Australia on minority students and grammar have prompted changes to the national curriculum, linking the teaching of grammar explicitly to social context and appropriateness (Derewianka, 2012). The resulting innovations in primary and secondary school grammar teaching have aimed to close the attainment gap for minority groups and significantly improve communication for all students (Rose and Martin, 2012; Macken-Horarik *et al*., 2015).

Integrating English is administered by the Enfield LA School Improvement Team and was initially developed with London Schools Excellence Fund (LSEF) support. The Enfield team ran a pilot study with ten schools, from 2014-5. 24 teachers were trained in the LiLAC (Language in Learning Across the Curriculum, a training programme developed in South Australia independently of Enfield, LSEF and the evaluation team, see *tailoring of intervention* section below) approach to support EAL learners in the classroom and in booster sessions by helping teachers recognise, talk about and teach critical language features of different subjects. The pilot evaluation report was submitted in March 2015. It highlighted numerous examples of the project's success, including the range of experienced teachers taking part, the resources to support preparing materials and schemes of work, and long-term guidance from mentors. This efficacy trial addresses the need for more robust evidence on how *Integrating English* works within the mainstream school system.

Recipients

The *Integrating English* programme is designed to improve the language pedagogy of Year 5 and 6 teachers. It is intended to improve the linguistic proficiency and communicative ability for all year 5 and 6 students, but is expected to have greatest impact on EAL students, which should in turn lead to better learning across all school subjects for all pupils. The intervention is at school level so all children will be taught using the LiLAC approach. All pupils will be involved in testing except those whose parents opt out.

What (materials, procedures, provider, format)?

The intervention is based on LiLAC, a training course developed by Australian linguistics experts, widely used in Australia and owned by the Government of South Australia. The LiLAC course enables non-specialist teachers to adopt a functional approach to linguistics and grammar, aiming to break down the process of teaching language to pupils. It treats communication in academic subjects as a matter of 'learning how to mean' using the semiotic resources available to that subject: that is to say students learn through language, thus language learning is central to learning in all subjects (Halliday, 1993). Social semiotic language programmes such as *Integrating English* encourage English language and literature teachers to focus on the grammatical features of verbal art and everyday rhetoric; science teachers to focus on the grammatical features of classification, experimentation and reporting; history teachers to focus on the grammatical features of recounts and causation; maths teachers to focus on the grammatical features of problems, explanations and proofs; and so on (Coffin, 2006; O'Halloran, 2004).

The LiLAC course is delivered by external trainers. There are four one-day accredited modules attended by teachers in person, with readings and practical homework tasks between each session. Training takes place off school site, in five regional centres. Teachers visit their nearest regional centre for the training.

LiLAC training is an integral part of the *Integrating English* programme, which also provides ongoing support via FRONTER[1], an online platform. During the latter stages of training, schemes of work are developed by trainees, mentors and *Integrating English* advisers, based on learning from the LiLAC programme. Teaching then takes place based on these schemes of work.

When and how much (dosage)

The intervention spans two school years, as detailed in Table 1.

Phase 1 starts for cohort 1 after the Christmas 2016/7 break and involves two teachers (in Y5 in the first instance) from each school undertaking LiLAC training. The entire LiLAC course including training, readings and tasks equates to approximately 50 hours of professional development for the teachers over the school term.

Phase 2 follows the training and again takes place over half a term. The Y5 teachers produce schemes of work informed by the LiLAC course, again supported by LiLAC trainers.

Phase 3 begins, for cohort 1, after Easter. During the summer term, Y5 pupils in the two classes

[1] For more information please see: http://www.itslearning.eu/about-fronter

taught by the participating teachers are taught using methods based on the scheme of work developed in the previous phase.

Concurrently with Phase 3 (cohort 1, Y5 teachers), Phase 4 entails LiLAC training for the teachers with Y6 classes in 2017/8. This starts at in June and is to be completed at the start of the 2017/8 Autumn term (see Table 1, below). Phase 5 sees schemes of work developed over the remainder of the first half term of the 2017/8 academic year. In Phase 6, Y6 pupils receive teaching based on the LiLAC training and subsequent scheme of work for the rest of the school year. The teaching will differ from normal practice in that the scheme of work and related teaching is shaped by the functional linguistics approach that underpins this intervention.

Table 1: Phasing of intervention delivery

<table>
<tr><th></th><th>Y5 teachers</th><th>Y6 teachers</th><th>Pupils (a single cohort starting in Y5 moving into Y6)</th></tr>
<tr><td>Spring term, 1st half term 2016/7</td><td>1. receive LiLAC training</td><td rowspan="2"></td><td rowspan="2"></td></tr>
<tr><td>Spring term, 2nd half term 2016/7</td><td>2. write scheme of work</td></tr>
<tr><td>Summer term, first half term 2016/7</td><td rowspan="2">3. implement scheme of work</td><td rowspan="2"></td><td rowspan="2">teaching experienced by pupils in Y5</td></tr>
<tr><td>Summer term, 2nd half term 2016/7</td><td>4. receive LiLAC training</td></tr>
<tr><td colspan="4"></td></tr>
<tr><td>Autumn term, first half term 2017/8</td><td rowspan="6"></td><td>4. (cont) receive LiLAC training, 5. write scheme of work</td><td></td></tr>
<tr><td>Autumn term, 2nd half term 2017/8</td><td rowspan="5">6. implement scheme of work</td><td rowspan="5">teaching experienced by pupils now in Y6</td></tr>
<tr><td>Spring term, 1st half term 2017/8</td></tr>
<tr><td>Spring term, 2nd half term 2017/8</td></tr>
<tr><td>Summer term, first half term 2017/8</td></tr>
<tr><td>Summer term, 2nd half term 2017/8</td></tr>
</table>

Tailoring of the intervention to this efficacy study

The Enfield pilot included both primary and secondary schools, with pupils at KS2 and KS4, while this intervention focusses only on KS2 students in primaries. The pilot took place over three school terms. In term 1, teachers took LiLAC training, in term 2 schemes of work were developed, and in term 3 teaching based on these schemes of work was delivered. The phasing of this programme

across Y5 and Y6 as described above is adapted to fit the school calendar with the project timeline. It should also be noted that the pilot used targeted booster sessions whereas this intervention seeks to embed functional linguistics into cross-curricular lessons.

Evaluation Methods

This evaluation is led by the Sheffield Institute for Education and funded by EEF, the Bell Foundation and Unbound Philanthropy. A randomised controlled trial design will determine whether the intervention improves attainment in schools that are outside London and have a significant proportion of EAL students. This is necessary to build on the findings of the pilot study into this intervention, using a robust RCT approach to strengthen the existing evidence base. Another important part of the evaluation is to verify that the programme is being properly implemented by teachers who have sufficient understanding of the model of language. The impact evaluation will assess the effect of *Integrating English* on the attainment of all pupils, with subgroup analysis on EAL pupils. Attainment will be measured through a writing test administered by the evaluators, using past KS2 Writing papers. The process evaluation will establish how the LiLAC training programme is implemented in schools, the views of teachers on the efficacy of the intervention, and a range of measures that identify changes in EAL student performance.

Impact evaluation

The Impact Evaluation will address the following questions:

1. What is the impact of the intervention on the language ability of Y6 pupils, as measured by a writing test (KS2 past paper) as primary outcome and KS2 SPaG as secondary outcome.
2. What is the impact of the intervention on EAL students, as measured by a writing test (KS2 past paper) as primary outcome and KS2 SPaG as secondary outcome.
3. What is the impact of the intervention on FSM students, as measured by a writing test (KS2 past paper) and KS2 SPaG as secondary outcome.
4. Where variations in implementation (from provision of training to delivery and final outcomes) occur, what effect does this have on the impact of the intervention?

Design

The research design is a two-arm, school-level clustered randomised controlled trial (CRCT) with a sample of 90 primary schools (46 intervention, 45 control). All schools will be allocated to one of five geographic hubs, which will be used in randomisation and also to organise the delivery of teacher CPD training in LiLAC. Control schools will receive £200 for taking part[2]. They will provide relevant data on school characteristics and their pupils will sit the baseline test, during the same timeframe as intervention schools. Apart from the obligation to deliver on these commitments, control schools will operate on a 'business as usual' basis throughout the duration of the study.

Randomisation

Randomisation will take place at the school level as this is more practical for recruitment and implementation. It also eliminates the risk of spill over, which is important for ensuring robustness. The MinimPy[3] program will be used to allocate schools to the intervention or control group using a minimisation approach. Five factors were used for minimisation: KS2 attainment, %EAL pupils,

[2] Payment to control schools will be given following the completion of the trial.
[3] See http://qminim.sourceforge.net/demo/index.php

mean EAL fluency score, number of Y5 classes and geographic hub. This approach will ensure balance between the intervention and control groups across these factors, which is not necessarily guaranteed through simple or stratified randomisation. Alternative methods of achieving balanced samples such as propensity score matching were considered yet minimisation was chosen as it is less resource intensive. The factors used in the minimisation will be included as school level covariates in additional models for the main analysis (see Table 4, below).

Baseline data collection entailed all pupils taking the Progress Test in English level 9. This was completed between October 31st and November 25th 2016. Randomisation took place in the week commencing 28th November 2016. Schools were informed of allocation on November 30th.

Participants

Recruitment for this trial is being overseen by the Enfield LA School Improvement Team and is taking place at the school level. Schools must have sufficient numbers of EAL pupils (absolute minimum of 8 in Y5 for 2016/7, identified using a binary EAL/not EAL measure) to enable sub-group analysis. The power calculations upon which these figures are based are presented below (see Table 2).

From October 2016/7 a statutory requirement compels schools to assess the fluency of EAL pupils using a five point scale. This information is used in the randomisation process and in the analysis, but it has not been used to define eligibility criteria, which only takes into account the number of pupils classified as EAL according to the binary measure.

There was no recruitment of individual pupils. Parents will have the opportunity to opt out of the trial on behalf of their children once schools have decided to take part. The deadline for schools to confirm their participation is October 10th 2016.

Outcome Measures

The baseline test, level 9 GL progress test in English, was taken between 31st October and 25th November 2016. Results were not used in randomisation but will be used in analysis.

The primary measure outcome is writing, to be assessed through a test administered by the evaluators (using KS2 past papers) for all pupils in the target year group (starting in Year 5, ending in Year 6). The secondary outcome will be attainment in KS2 Spelling and Grammar (SPaG), again for all pupils in the year group. It is envisaged that SPaG test results will be converted into raw scores for the main impact analyses.

KS2 Writing is most closely aligned to the intervention; however, changes to the marking scheme render it unsuitable for this evaluation, as a more finely graded measure is needed for the power calculations to hold true. Therefore, the decision has been made to administer an additional writing test in the summer of 2018, using past KS2 Writing papers to be marked by an organisation contracted by the evaluation team. It was agreed that this is the best solution in terms of using an outcome measure to capture pupil progress over the intervention period.

The secondary outcome measure is marked externally and may therefore be seen as more robust. All main, exploratory and sub-group analyses will be conducted using both outcomes (see Analysis section for details).

Sample size calculations

A power analysis was undertaken based on the Bloom (2007) formula and supported by the Optimal Design Software. The findings are presented in Table 1. The research design is a clustered randomised controlled trial incorporating two levels (pupils clustered into schools) with randomisation at the school level.

The power analysis presents the estimated Minimum Detectable Effect Sizes (MDES) for the primary outcome (writing assessment). For these MDES estimates, a statistical power of 0.8 is adopted, assuming that 100 schools will be recruited.

A statistical power of 0.8 means that there is an 80% chance of detecting an effect (or difference) between the intervention and control group samples if a true effect exists. The Minimum Detectable Effect Size (MDES) is the smallest effect size that the research design would be able to detect as being statistically significant with a statistical power of 0.8. For example, an MDES of 0.23 indicates that a difference in the outcome scores of the intervention and control group of 0.23 standard deviations (or greater) would be identified as statistically significant with a statistical power of 0.8.

From the EEF 'Master Test' spreadsheet, the (participant level) correlation between GL Progress in English (predecessor to PTE) and KS2 attainment is estimated to be 0.74 from the EEF[4]. We estimate the (school level) correlation between GL PTE and KS2 attainment more conservatively at 0.60 because the tests have recently been modified although they are expected to correlate with their predecessors.

Clustering at the school-level is estimated using a school level Intra Cluster Correlation Coefficient (ICC) of 0.14 based upon the KS2 ICC statistics also provided by the EEF. This means that we estimate that 14% of the variation in the primary outcome will lie at the school level and the remaining 86% will be at the individual pupil level.

Table 2 shows MDES estimates for an outcome only analysis and the analysis that includes the baseline GL PTE covariate (at the participant and school levels) and is based on the following estimates:

- **Number of schools** **100**
- **Number of pupils (40 per school)** **4,000**
- **School level ICC** **0.14**
- **Pupil-level correlation between PTE & primary outcome (r_i)** **0.74**
- **School-level correlation between PTE & primary outcome (r_s)** **0.60**

[4] Based on correlation between the GL PiE test (which the GL PTE test has since replaced) and the previous KS2. Taken from EEF 'Master Test Database', using NPD data 2013-2014.

Table 2: Estimated Minimum Detectable Effect Size (MDES) for planned analyses for the primary outcome of the Integrating English clustered RCT

Analyses including ALL pupils (regardless of EAL status) - estimated as 40 pupils per school			
	100 schools	**80 schools**	**60 schools**
Outcome Only	0.23 standard deviations	0.26	0.30
Including PTE baseline covariate (r_i=0.74; r_s=0.60)	0.18	0.20	0.23
Analyses of EAL pupils - estimated at 10 pupils per school			
	100 schools	**80 schools**	**60 schools**
Outcome Only	0.27 standard deviations	0.30	0.35
Including PTE baseline covariate (r_i=0.74; r_s=0.60)	0.20	0.23	0.26

The number of schools involved in the trial is a key factor that determines the MDES. Dropping from 100 to 60 schools reduces sensitivity for the 'all pupils' analyses from 0.18 to 0.23 standard deviations; for the EAL analyses the drop is from 0.20 to 0.26 standard deviations.

Increasing number of pupils per school makes little difference - for 100 schools, there is an asymptote for the MDES of 0.17 standard deviations. The MDES will not fall below this level regardless of pupil numbers; to make the trial more sensitive the number of schools would need to be increased. Our calculations are based on 40 pupils per school to allow for opt-outs and so on.

Table 3:MDES estimates for different numbers of schools and pupils

Comparing influence of number of pupils per school on MDES (model including the PTE covariate)			
Pupils per school	**100 schools**	**80 schools**	**60 schools**
20	0.19 standard deviations	0.21	0.24
40	0.18	0.20	0.23
60	0.18	0.20	0.23
100	0.17	0.19	0.23

Analysis plan

Table 4 below summarises the planned impact analyses for the *Integrating English* clustered RCT. The primary measure outcome is writing, to be assessed through a test administered by the evaluators (KS2 past papers), the secondary outcome measure is KS2 spelling and grammar (SPaG). The impact analyses will first include all pupils; estimated as 40 pupils per school. It will then focus solely on EAL pupils; estimated at 10 pupils per school. Within the main impact analyses, the current binary EAL measure will be used. The five point fluency scale introduced in autumn 2016 will be used in exploratory analyses as detailed below.

A multilevel approach will be taken, with pupils clustered into schools. Multilevel linear regression models will be constructed for the primary and secondary outcome measures. The first model will include no covariates and simply determine the difference between intervention and control schools. This will be based on the full sample with complete data. We are undertaking a baseline test (GL PTE level 9) rather than using pupil level KS1 data given the higher level of missing KS1 data

for EAL pupils[5]. Recognising the EEF requirement to control for prior attainment, a second model will include the GL PTE baseline as a covariate at the pupil level and mean KS1 attainment as a covariate at the school level. The second model will be presented as the main analysis. A third model will include the full set of school level covariates used to perform minimisation. A sensitivity analysis will be undertaken to assess the potential impact of missing data. All of the main impact analyses will adopt an 'intention to treat' approach.

Further exploratory analyses will ascertain the impact of the *Integrating English* programme on pupils classified as FSM[6] and explore the intersection of FSM and EAL in relation to the two outcome measures. The new five-point EAL language fluency measure will also be used within these exploratory analyses as a pupil level covariate. Finally, drawing on the process evaluation, measures of 'fidelity' to the *Integrating English* programme will be incorporated into an 'on treatment' analysis. Specific fidelity measures will be agreed with the Enfield delivery team prior to randomisation.

For each model, the coefficient of the dummy variable used to distinguish 'intervention group' pupils within the 50 schools who will receive the Integrating English programme from 'control group' pupils will be converted into Hedges' *g* effect size statistics with 95% confidence intervals.

[5] https://v1.educationendowmentfoundation.org.uk/uploads/pdf/EAL_and_educational_achievement2.pdf
[6] FSM is a measure to identify pupils claiming Free School Meals. The NPD 'FSMEver' variable, indicating pupils who have ever been eligible for FSM at any time, will be used for these analyses.

Table 4: Summary of analysis plan. Multilevel linear regression with two levels (pupils clustered into schools)

Main Analysis			
Sample	***Approach***	***Level 1 (pupil) covariates***	***Level 2 (school) covariates***
Complete Sample	Intention to treat	None	Dummy (1=intervention; 0=control)
		GL PTE level 9 score	Dummy (1=intervention; 0=control) Mean KS1 attainment for KS2 cohort[1]
		GL PTE level 9 score	Mean KS2 attainment, % EAL pupils, mean EAL fluency scale score, Number of Y5 classes, geographical hub
EAL Pupils only[2]	Intention to treat	None	Dummy (1=intervention; 0=control)
		GL PTE level 9 score	Dummy (1=intervention; 0=control) Mean KS1 attainment for KS2 cohort[1]
		GL PTE level 9 score	Mean KS2 attainment, % EAL pupils, mean EAL fluency scale score, Number of Y5 classes, geographical hub
Exploratory Analysis			
Sample	***Approach***	***Level 1 (pupil) covariates***	***Level 2 (school) covariates***
Complete Sample	Intention to treat	GL PTE level 9 score EAL fluency status[3]	Dummy (1=intervention; 0=control)
FSM pupils only	Intention to treat	GL PTE level 9 score	Dummy (1=intervention; 0=control) Mean KS1 attainment for KS2 cohort[1].
		GL PTE level 9 score EAL fluency status[3]	Dummy (1=intervention; 0=control) Mean KS1 attainment for KS2 cohort[1].
Complete Sample	On Treatment	GL PTE level 9 score	Dummy (1=intervention; 0=control) Mean KS1 attainment for KS2 cohort[1].
EAL Pupils only[2]	On Treatment	GL PTE level 9 score	Dummy (1=intervention; 0=control) Mean KS1 attainment for KS2 cohort[1].

Notes on analysis plan:

[1]Mean KS1 attainment for KS2 cohort: this is a school level covariate capturing average attainment at KS1 for the entire KS2 school cohort. This is preferred to aggregating the pupil level GL PTE score because it represents the school more widely.

[2]As only the binary EAL measure was available during the trial recruitment period, this will be used in randomisation and for the subgroup analysis.

[3]Within the exploratory analyses we will use the new five point EAL language proficiency measure introduced in 2016/17.

Implementation and process evaluation methods

The key questions are:

1. How effective is the *Integrating English* programme in developing teachers' knowledge and understanding of language, based on systemic functional linguistics, in different subjects?
2. What evidence is there that this knowledge and understanding leads to improved classroom practice?
3. What evidence is there that this knowledge and understanding leads to improved pupils' language performance in the classroom?
4. What issues of fidelity occur during the trial?
5. What does the trial indicate about scalability?
6. What are the intervention costs?

The data collection will be framed by a logic model, detailing the programme theory and indicating the intermediate outcomes, processes and influencing factors underlying the intervention. The logic model, agreed with the delivery team, is included in the Appendix. Working with the delivery team to develop a theory of change-based logic model [see Appendix 1] influenced the design of data collection instruments. We address these in more detail below.

a) A pre- and post-intervention survey of all 100 schools. The pre-survey will be conducted at two different times to allow for participation of both Y5 and Y6 teachers. The post-survey will be issued to all teachers during the final half term of Summer 2017/8. This will include questions on current teacher practice and changes over the previous months. Specific content to be agreed with EEF and Enfield as soon as possible with protocol updated accordingly.

b) Observation of six training events by SHU fieldwork team to examine the programme delivery in practice, and analysis of schemes of work.

c) Case study visits to 15 schools, each of which will include interviews with teachers and leaders, observation of practice and gathering of other data. The sampling for these case studies will be confirmed once recruitment is completed, yet a balance of geographical location and school characteristics will be sought.

d) Analysis of monitoring data on attendance at events, completion of the training, and creation and implementation of schemes of work and shared teaching materials.

All indicators to be used in the fieldwork were negotiated between Sheffield Hallam University evaluators and the Enfield delivery team prior to the first training programme. An initial outline of how the methods used will address the RQs above is as follows:

RQ1: A pre- and post-intervention questionnaire will cover teacher outcomes as outlined in the logic model [beliefs; attitudes; practices] drawing on prior research and discussion with stakeholders. Case studies will take place in a selection of schools, with lesson observations, interviews, and a review of schemes of work, lesson plans and shared materials. Training observations will examine the role of training in informing practice changes.

RQ2: As with RQ1, practice changes will be measured via survey questions and observation of classroom practice [looking for - in particular - integration of language learning in subject teaching other than English], supplemented by teacher interviews and documentary evidence in the form of schemes of work, lesson plans and classroom materials.

RQ3: Observation of classroom practice and teacher reporting via survey will focus on pupil outcomes.

RQ4: Trial fidelity will utilise monitoring data to examine teacher engagement in training and production and use of schemes of work. Training observation will check adherence to expected training delivery. Second phase survey data from intervention participants will check teacher engagement with the programme and experience, and case studies will provide a more in-depth understanding of any disparities found via other sources.

RQ5: Fidelity and dosage measures identified in RQ4 will be used alongside trial outcomes, cost data plus pupil and teacher engagement and outcomes [via survey and case studies] to indicate the promise for scaling up, as well as potential changes to the programme if scaled up.

RQ6: Monitoring data will be used to estimate overall and per-participant costs in line with EEF guidance.

Table 5: Methods to be used for addressing each research question

RQ	Method			
	a) Survey	b) Training observation	c) Case Studies	d) Monitoring data analysis
1	✓	✓	✓	
2	✓		✓	
3	✓		✓	
4	✓	✓	✓	✓
5	✓	✓	✓	✓
6				✓

Ethics and registration

The study design will be subject to approval from SHU's ethics committee.

We will collect EAL/fluency data directly from schools. As this is sensitive data, we will assure schools of data security. We can collect FSM and attainment details from NPD.

An International Standard Randomised Controlled Trial Number (ISRCTN) will be assigned following trial registration at www.controlled-trials.com.

Personnel

Evaluation team

- **Project manager: *Dr. Martin Culliney***, *Research Fellow*
- **Lead Director**: ***Mike Coldwell,*** *Director of the Centre for Research and Knowledge Exchange*
- **Statistical consultant: *Sean Demack,*** *Principal Research Fellow*
- **Quantitative data analyst: *Anna Stevens,*** *Research Fellow*
- **Systemic functional linguistic expert and process evaluation fieldwork lead**: ***Dr. Nick Moore,*** *Senior Lecturer*
- **Process evaluation fieldworkers: *Dr. Marion Engin,*** *Senior Lecturer;* ***Dr. Diana Ridley,*** *Senior Lecturer*; ***Dr. Ester Ehiyazaryan-White,*** *Lecturer*

Delivery team

- **Project manager: *Sharon Davies,*** Community Learning and Schools Programme Leader, Skills for Work Service, Enfield Council
- **Project lead and LiLAC tutor: *Michelle Stanley,*** Senior Teaching & Learning Consultant, School Improvement Service, Education Services – Schools & Children's Services, Enfield Council
- **LiLAC tutor: *Marc Thompson,*** EMA teaching and learning consultant, School Improvement Service, Education Services – Schools & Children's Services, Enfield Council
- **LiLAC tutor: *Linda Stone,*** EMA teaching and learning consultant, School Improvement Service, Education Services – Schools & Children's Services, Enfield Council
- **LiLAC tutor: *Lynne Davies,*** English teaching and learning consultant, School Improvement Service, Education Services – Schools & Children's Services, Enfield Council

Risks

The impact and implementation and process evaluations have been approved by the ethics committee at Sheffield Hallam University. Data storage, sharing and reporting processes will conform to all legal requirements and protect participant confidentiality.

Table 6: Assessment of risks to the intervention and evaluation

Risk	Solutions	Perceived level of risk
Problems with compliance or recruitment	Incentives should ensure participation, previous trials have had good retention rates	Low
Teachers do not complete full LiLAC training	Fidelity will be measured during process evaluation	Low
Teachers do not apply LiLAC principles in lessons	Fidelity will be measured during process evaluation	Low
Problems with NPD access	SHU highly experienced with the application process, delays accounted for in timetable	Low
Staff departures	SHU has three experienced statisticians and four specialists in language teaching working on the evaluation	Low
Changes to KS2 testing	SHU agree alternative outcomes with EEF and Enfield.	Moderate

Timeline

Table 7: Schedule of intervention and evaluation activities

Date	Activity	Who?
August 2016	Develop logic model	SHU
Sept 2016	Design teacher survey	SHU
By October 21st 2016	Recruitment deadline - schools must complete MOU and provide pupils' UPN to SHU	Schools (Enfield to contact schools and manage recruitment)
Oct 31st - Nov 25th 2016	Baseline testing in all schools administered and marked by SHU	SHU/schools
Oct 31st - Nov 25th 2016	Conduct pre-intervention survey for Y5 teachers	SHU/schools
30th November 2016	Randomisation of schools to intervention/control group	SHU
Spring term 2016/7	LiLAC training for Y5 teachers	Enfield
Spring term 2016/7	Observations of teacher CPD training	SHU
Summer term 2016/7	Y5 pupils taught using LiLAC, Y6 teachers receive training	Enfield/schools
Summer term 2016/7	Assess schemes of work in all schools. Review and analysis of evaluation data generated by development team. Case studies in 5 schools comprising school visits, evaluation of schemes of work and classroom materials; observations of delivery; and interviews with two teachers and one mentor in each school as a minimum.	SHU, with support from schools and Enfield
Summer holidays 2017	Y6 teachers complete outstanding LiLAC training where necessary (must be finished by Autumn half term)	Enfield/schools
Autumn 2017/8, first half term	Conduct pre-intervention survey forY6 teachers	SHU/schools
Autumn half term to Summer 2017/8	Y6 pupils taught using LiLAC	Schools
Spring term 2017/8	Case studies in 10 schools comprising school visits, evaluation of schemes of work and classroom materials; observations of delivery; and interviews with two teachers and one mentor in each school as a minimum. Additional telephone survey of leads in non-case study schools. Review and analysis of evaluation data generated by development team	SHU/schools
February 2018	Statistical Analysis Plan submission	SHU
Summer 2018, second half term	Conduct post-intervention survey for all teachers	SHU/schools
Summer 2018	Key Stage 2 testing	Schools
Summer 2018	Outcome assessment administration and marking	SHU (with contractors)
Summer 2018	Submit NPD request in advance of KS2 release (due Aug 2018)	SHU
Summer 2018	Telephone interviews with developers	SHU
Autumn 2018	Analysis and report writing	SHU
November 2018	Draft report submission	SHU
Spring 2019	Report publication	SHU

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Appendix: Theory of change-based Logic model for Integrating English, July 2016

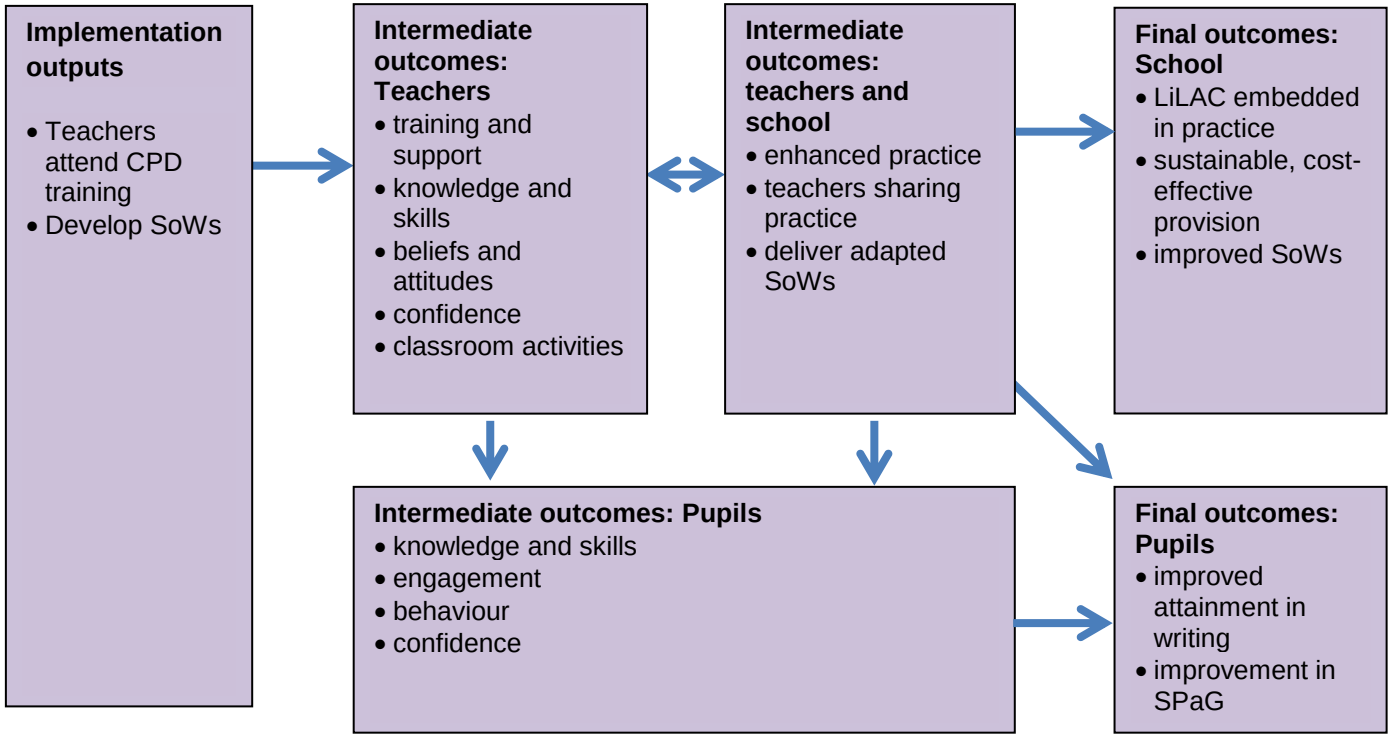
Potential enabling characteristics of intervention:
Content, structured support, networking, teacher and professional learning communities, mutual support between paired teachers in each school, evidence for effectiveness of strategy, access to external experts through CPD training, increasing teachers' engagement with effective practices, supported implementation through SoW and LiLAC materials, FRONTER online platform

Inputs:

Infrastructure
- Teachers
- School leads (from SLT)
- Enfield LiLAC team

Programme activities
- Identify school leads
- Select teachers, provide with full information and timetable
- Four full days of CPD (50 hours equivalence)
- Teaching takes place over two and a half full terms
- KS2 past papers (writing) as primary outcome measure

Programme resources
- Training manual and materials
- CPD course



Contextual characteristics:
Senior leadership team support; attitude, prior beliefs and experiences of participants; role of MAT leaders where relevant; external pressures on school such as Ofsted; impinging on wider school priorities; organisational and wider environment; participants volunteered or selected (or one of each)