SHINE in Secondaries

Evaluation report and Executive summary
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- Identifying promising educational innovations that address the needs of disadvantaged children in primary and secondary schools in England;
- Evaluating these innovations to extend and secure the evidence on what works and can be made to work at scale;
- Encouraging schools, government, charities, and others to apply evidence and adopt innovations found to be effective.

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About the evaluator

The project was independently evaluated by a team from the School of Education at Durham University and the Centre for Evaluation and Monitoring (CEM).

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Executive summary

The project

This is a report of a pilot programme of the SHINE in Secondaries Saturday school transition intervention. The programme aims to improve attainment by focusing on literacy and numeracy and revisiting areas where pupils are struggling through a creative curriculum approach and enrichment opportunities.

The Saturday programme is run by teachers from the school for 25 weeks throughout Year 7. Schools are responsible for developing their own curriculum of activities to suit the abilities and needs of their pupils following guiding principles specified by SHINE.

The programme is designed to run for approximately 60 pupils staffed by four qualified teachers, three teaching assistants and three peer mentors all recruited and employed by the host secondary school.

This evaluation was set up as a pilot study with four schools and 613 pupils participating. This report is one of two studies evaluating SHINE’s Saturday programmes. Hallé SHINE on Manchester evaluation is an EEF-funded randomised controlled trial of the impact of the Saturday school on primary school pupils’ literacy, numeracy and music outcomes.

This study had three aims:

1. To explore the impact of SHINE in Secondaries on literacy, numeracy and attitudes to school and learning outcomes
2. To explore the organisational implications and lessons for future wider roll-out
3. To explore the feasibility of using regression discontinuity design (RDD) as a pilot study

The study was funded by the Education Endowment Foundation as one of 24 projects in a themed round on literacy catch-up at the primary-secondary transition.

What did the pilot find?

This pilot was designed to explore the impact of a Saturday school for secondary pupils on literacy and numeracy, as well as the organisational and implementation issues of the intervention. The feasibility of using a non-randomised evaluation approach using a regression discontinuity design (RDD) to evaluate the impact was also tested in this pilot.

The evaluation showed a very small impact on literacy outcomes across all four schools using the Progress in English and Progress in Maths tests. These findings are limited evidence of promise of the intervention. A larger RDD study or randomised controlled trial would be required to investigate the impact of the intervention and the size of the effect (if any) with confidence. A subgroup analysis of children eligible for free school meals (FSM) was conducted.

This showed no evidence of the intervention differentially benefitting pupils eligible for free school meals in any of the schools. These findings should be treated with caution because, due to the small sample size, the study was unable to detect the small effects with confidence.

The pilot demonstrated that it was feasible to design, implement and analyse the RDD successfully; and the design could be used again to evaluate similar interventions where randomisation is not possible or desirable.
The process evaluation involved observations of activities, interviews and focus groups with pupils and teachers. However, due to the very small samples in the evaluation, all findings should be treated with caution.

All teachers interviewed agreed that pupils liked the familiarity and the relaxing atmosphere that SHINE in Secondaries encouraged and that they learnt while being engaged in an enjoyable way. An important outcome reported by the teachers in two schools observed was pupils’ improved social skills, better relationships at all levels and increased confidence through their participation in practical and team-building activities.

The five pupils who were interviewed spoke enthusiastically about their SHINE in Secondaries experiences. All pupils mentioned that they had made good progress in their learning while having fun.

The SHINE project managers, who were also teachers in the school, were considered to be integral to the successful running of the project. All eight teachers interviewed agreed that SHINE in Secondaries gave them the opportunity to think and plan ‘outside of the box’ and they enjoyed teaching around a particular theme, which helped reinforce links with ‘real life’.

It was also felt that the continuity with the school week that the SHINE in Secondaries programme provided for pupils in Year 7 was an excellent feature of the intervention. From our visits, it seemed that all SHINE in Secondaries teachers see all or at least some of the pupils during the week. This allowed the teaching content of the SHINE in Secondaries programme to better target pupil needs and also to build on the pupils’ familiarity with the teaching staff.

How was the pilot conducted?

This evaluation was a pilot using a regression discontinuity (RD) design. Unlike a randomised controlled trial, where pupils are randomly allocated to an intervention or control group, this approach assigns pupils to intervention and control groups according to their results on a pre-test. We began by looking at the range of pupil outcomes on a Progress in English test. Pupils were assigned to the intervention if they fell below a certain mark (the first ‘cut point’). Pupils were assigned to the control group if they fell above a second ‘cut point’ on the test. Pupils falling between the two cut points were randomly allocated to the intervention or control group, thereby creating a ‘mini’ randomised controlled trial (RCT) within the RDD.

Although a randomised controlled trial design is stronger for inferring causation, for this evaluation it was not deemed to be suitable. The RD design guaranteed all low-attaining pupils would be offered the opportunity to attend SHINE in Secondaries, which was a very important consideration for schools.

Uptake of places at the intervention was 73% of those who were assigned to the intervention group which means that 27% of those counted in the analysis did not attend the intervention. The intention-to-treat analysis provides average impacts of the intervention for those who were offered the intervention, whether or not they actually participated in the intervention. This created a ‘fuzzy’ regression discontinuity and reduces the robustness of the evaluation. However, average individual attendance of those children who accepted places was 68%. This includes any pupil that is considered as taking up their place by attending a minimum of one session. The average attendance is based on the numbers of sessions possible in each school.

How much does it cost?

The funding provided to each school to employ staff and run the programme was £52,000. If the intervention took place with 60 pupils as recommended, this is equivalent to around £870 per pupil.
per year. Although schools in the evaluation did not pay anything towards the intervention, they expended considerable time, resources and effort in running SHINE in Secondaries. SHINE’s ‘Making it Work’ handbook explains that projects are normally up to 100% funded for the first three years while for Years 4 to 6 schools would be expected to fund, or find funding for, at least 50% of the costs, with this rising to at least 70% of costs in Years 7 to 9.

Key conclusions

1. Impact of the intervention: Very small effect sizes on the primary and secondary outcomes of literacy and numeracy were detected. As this was an exploratory evaluation design and the number of schools involved in the project was small, this made it unlikely that any impact of SHINE could be detected, should the true estimate of effect be small.

2. Implementation and organisation issues: Feedback from the teachers and pupils suggested that the intervention was perceived to be valuable in providing an opportunity to consolidate literacy and numeracy skills.

3. Feasibility of evaluation design: The purpose in piloting this design was to explore the feasibility of using this approach when randomly allocating pupils to an intervention group was not possible or desirable. The regression discontinuity design is an appropriate evaluation method for education interventions. However, because it is less powerful than a randomised controlled trial, the number of pupils involved must be two and a half times greater if a small effect is to be detected.
Introduction

Background and rationale

SHINE in Secondaries (a Saturday school transition programme) targets disadvantaged and underachieving children in Year 7 to support literacy, numeracy, the development of good social networks, social skills and improved self-confidence in the transition between primary and secondary school. The intervention was developed from the most promising elements of the primary supplementary school intervention SHINE on Saturday, and is focused on children who did not achieve Level 4 at Key Stage 2.

The period of transition from primary school to secondary school can be difficult for many pupils, with a new location/building, new peers, new teachers and new expectations. There is a widely recognised academic ‘dip’ post transition to secondary school where progress often slows for pupils (McGee et al., 2003) and some make no progress at all in the first year of secondary school (Galton et al., 1999). Studies suggest that this dip may be linked to two separate issues. First, secondary teachers often underestimate the academic capabilities of Year 7 pupils and therefore do not provide enough challenge during the first year for pupils (Evangelou et al., 2008). Second, academic achievement in the first year of secondary school seems to be linked to a decreased interest in academic activities over the course of the year (McGee et al., 2003). The SHINE in Secondaries intervention aims to improve achievement of disadvantaged or underachieving pupils during their first year of secondary school through a programme designed to engage pupils with learning, run by teachers from the school. These teachers are paid by the schools to work the extra hours at the Saturday sessions.

The rationale for this independent evaluation is based on the significance of the widely implemented SHINE on Saturday intervention, which the developers (SHINE) claim has evidence of promise from implementation and their evaluations using a pre-experimental design. This independent evaluation of the SHINE in Secondaries intervention uses a pilot rigorous design and robust methods to establish whether or not it has evidence of promise. The evaluation focuses on establishing an unbiased estimate of effect of the intervention on the short-term academic outcomes (literacy and numeracy) and social outcomes using a regression discontinuity design (Shadish et al., 2002).

Intervention

The SHINE in Secondaries programme was developed by the SHINE Trust (commonly known as ‘SHINE’) which is designed to raise achievement in the core academic subjects through high-quality creative and practical learning.

Through a competitive process, schools are granted money by SHINE to run 25 weekly Saturday school sessions throughout the school year for underachieving Year 7 students. Schools are responsible for developing their own curriculum of activities around a termly theme, to suit the abilities and needs of their students following guiding principles specified by SHINE. These include:

- a core focus on literacy and numeracy;
- opportunities to revisit areas where students are struggling and to extend into areas outside the weekday subjects;
- project work which is defined as hands-on learning and opportunities for enrichment which enable students to apply their learning to real world contexts;
- flexibility of the curriculum to offer trips and visits which give opportunities for children who lack motivation or struggle with the learning to become more engaged; and
- an emphasis on investigative and collaborative learning and research projects which encourage problem solving and independent learning.
The programme is designed to run for around 60 pupils which ensures a high staff-to-student ratio with each project being staffed by four qualified teachers, three teaching assistants and three peer mentors, all recruited and employed by the host secondary school. The selected pupils who sign up to the programme are divided into three classes of up to 24 students in each ‘hub’. The Saturday sessions usually consist of three different lessons/activities over the day, with lunch or a snack provided by the project.

Background evidence

There have been very few research studies of the effects of Saturday school programmes specifically and fewer high-quality, robust studies of out-of-school programmes generally. The most relevant studies are of after-school or summer school programmes undertaken mainly in the United States.

The results have been quite mixed, possibly due to the variety of programmes, the quality of delivery and variations in the evaluation designs.

A meta-analysis of the effects of out-of-school-time programmes for at risk students in the US (Lauer et al., 2006) found small but significant positive effects on both reading and maths achievement (0.05-0.13 and 0.09-0.17). This review identified 35 studies (including quasi-experimental studies). However, only one of these included a Saturday school and this was in combination with a summer school; the others were after-school programmes that often involved one-to-one tutoring or summer schools.

A more recent review of 30 studies of interventions that increased learning time through group administered programmes (either after or before school, weekend or summer schools) in the US found no significant effects of the programmes overall on literacy or maths achievement or on social-emotional skills development and only a very small significant effect on academic motivation (Hedges’ g of 0.04) (Kidron and Lindsay, 2014). However, significant effects on literacy and maths achievement were found when programmes were delivered by certified instructors (as is the case in the SHINE intervention) and when a traditional teaching approach was used rather than pupils working independently. Evidence from two studies included also indicated that programmes that used an experiential pedagogical approach, as is advocated by the SHINE intervention, had a significant and moderate effect (Hedges’ g of 0.53).

The Sutton Trust/Education Endowment Foundation (EEF) Pupil Premium Toolkit (Higgins et al., 2013) has also reviewed the evidence for extending school time which included after-school programmes. Based on meta-analyses from the US and less rigorous UK evaluation designs, they concluded that there were low to moderate positive effects of after-school programmes, but, as with the study undertaken by Lauer et al. (2006), the effects varied between studies. This suggests that the quality of the programme and the focus are important.

The UK evidence from a longitudinal study by MacBeath et al. (2001) (included in the Toolkit) suggested that out-of-hours study support had a small positive impact on GCSE results (a third of a grade in maths and three-quarters of a grade in science). Those pupils who attended study support also had better school attendance and a more positive attitude.

A report by the NFER (Chamberlain et al., 2011) commissioned by SHINE (and using tracking data provided by schools to SHINE on the progress of pupils attending) found that students attending the original primary school programme, SHINE on Saturday, who were selected to take part due to experiencing a measure of disadvantage, made the expected progress at Key Stage 2. Confidence, self-esteem and attitudes to learning were also found to have improved. However, this evaluation used a design without a control or comparison group and was therefore unable to derive strong causal inference.
Evaluation objectives

1. What is the impact of SHINE in Secondaries on literacy, numeracy and attitudes to school and learning outcomes?
2. What are the organisational implications and lessons for future wider roll-out?
3. Is the use of regression discontinuity design (RDD) in a pilot study feasible?

Project team

The evaluation team

The evaluation team, comprising staff from Durham University and the University of York, was responsible for the design, conduct, analysis and reporting of the independent evaluation including data collection.

*Durham University, School of Education*

Professor Carole Torgerson—Principal Investigator

*Durham University, CEM*

Dr Andy Wiggins—CEM Project Manager
Dr Dimitra Kokotsaki—Process Evaluator
Victoria Menzies—Project Researcher
Kirsty Younger—Project Administrator
Clare Collyer—Project Administrator

*University of York, York Trials Unit*

Professor Catherine Hewitt—Senior Statistician

The implementation team

SHINE was responsible for recruiting schools and awarding grants to the schools involved to run the intervention. Schools were responsible for informing parents and pupils. SHINE was responsible for intervention development, training and support to staff running the programme in schools and for providing data on level of attendance of students at the intervention.

*SHINE*

Paul Carbury—SHINE Chief Executive
Fiona Spellman—SHINE Senior Programme Manager
Caroline Davies—SHINE Senior Programme Manager
Clare Gilhooly—SHINE Interim Programme Manager
Ethical review

Ethics approval was granted on 30 July 2013 by the Durham University School of Education Ethics committee.

School headteachers received an information sheet detailing the evaluation and signed a memorandum of understanding agreeing to the research requirements and use of pupil data. Copies of the information sheet and consent forms can be found in Appendices 2–5.

Schools involved were asked to send out a letter to all parents of children in Year 7 outlining the purpose of the study and allowing them to opt out of their child’s data being used in the research. Parents were required to contact either the research team or the school to opt out of the research. This did not affect whether the child could attend the intervention. For the process evaluation, opt-in parental consent was obtained for pupil focus groups.
Methodology

Design

The SHINE in Secondaries programme has been piloted in two schools in London; however, it has not previously been subject to a rigorous evaluation. The design for this research project is a pilot quasi-experiment using regression discontinuity design. This design was agreed owing to concerns by the developer that random allocation could mean that some underachieving pupils who could potentially benefit from the intervention would not be selected. Originally the EEF intended to fund a randomised controlled trial design (RCT) (the evaluators’ preferred design) and the project grant for delivery of the intervention to SHINE was allocated on this basis. After discussions between the evaluator and developer and EEF it was agreed that the RCT design would have meant that EEF would not be testing SHINE’s usual model. This was because, in using an RCT design, there would have been insufficient underachieving pupils within each school to have both a treatment and a comparison group, without raising considerably the threshold for being offered the intervention. Therefore EEF asked the evaluators to explore a variant of the RDD and it was agreed that an RD design would be piloted. EEF had never funded such a design before and it was agreed it would be useful to understand the advantages and disadvantages of using it, as well as estimating the effect of the intervention. As this was an exploratory evaluation design and the number of schools involved in the project was small, the study was established as a pilot, meaning that the minimum detectable effect size was relatively large (0.5), making it unlikely that the impact of SHINE could be detected, should the true estimate of effect be small. Despite the low power of the study it was considered to be worthwhile undertaking the evaluation as it would enable a point estimate of effect, with corresponding 95% confidence intervals, to be obtained which could be used to inform a decision as to whether or not the intervention should be widely implemented; or, if the pilot provided evidence for promise, then a larger study could be commissioned. This was approved by all in the protocol.

The choice of a regression discontinuity design allows the pupils who are most at need to attend the intervention. To the best of our knowledge this design has not been used previously for this type of evaluation. However, it should be noted that due to the small scale of the trial, with only four intervention projects, it was not sufficiently powered to detect a modest, but educationally significant, effect although it was able to provide an unbiased estimate of effect and it could have found a large statistically significant effect should one have existed. Unbiased estimates of effect are reliant on accurate model specification. In order to ensure this a number of different models were explored (see below).

This evaluation used the quasi-experimental design of regression discontinuity (RD) with two cut points (Shadish et al., 2002) and tie-breaker randomisation. Assignment of participants to the intervention (SHINE in Secondaries) was on the basis of falling below the first cut point on the pre-test (assignment variable); assignment to the control group was on the basis of falling above the second cut point on the pre-test (assignment variable). This meant that pupils below the first cut point were eligible to receive the intervention and pupils falling above the second cut point were not eligible to receive the intervention. Pupils falling between the two cut points were randomly allocated to the intervention or control group on a one-to-one allocation. In the original design in the protocol, those falling between the two cut points would have been allocated to a wait list in a random order. However, following advice from experts on this methodology we were advised that the design would be stronger if the random allocation between cut points was done on a one-to-one ratio instead of the unpredictable waiting list where none, some, or all participants might be assigned to the intervention group. The use of the tie-breaker randomisation RD design was utilised to enable normal practice in the implementation and delivery of the intervention to be retained as requested by SHINE and as agreed by all parties when the protocol was approved. In normal practice, if places are not filled due to lack of recruitment, additional children are offered the intervention to fill up the remaining places.
All children below the first cut point were eligible for the intervention and were immediately offered it. All children above the first cut point were not immediately eligible. Because of the element of chance due to the error value in the test the children scoring just above the first cut point formed a waitlist of children who could benefit from the intervention. Having the second cut point allowed a small number of children between both cut points to become eligible for the intervention should places become available, due to low recruitment. Because the children between the two cut points were not initially eligible there were no ethical concerns associated with only offering half of those in the waitlist the intervention.

The pre-test (assignment variable) was scores on Progress in English 11 literacy assessment. The cut points were decided after pupils completed the pre-test and were based on around 70 participants being allocated to the intervention below the first cut point and around an additional 10 pupils being randomly allocated from between the two cut points. This was in line with the capacity of the intervention and expected uptake so that between 60 and 70 pupils would attend the intervention in each school. This was a change to the original design where it was previously stated that we would pre-specify the cut points before the assessment. In practice this was not possible as it would have been too difficult to ensure that enough, but not too many, pupils in each school would be eligible for the intervention. Due to pragmatic considerations of the size of the schools and to strengthen the design it was necessary to have different cut points for the large and small schools. For the two larger schools the first cut point was set at a score of 17 and the second cut point at a score of 21. For the smaller schools the first cut point was a score of 22 and the second cut point was a score of 25. This had implications for the approach to the analysis which is discussed below.

Although a randomised controlled trial design is stronger for inferring causation, for this evaluation it was not deemed suitable by the funder and the developer. The reasons for this are two-fold. First, the grant application process was complex: as schools that applied to host the intervention were selected on the basis of pupil eligibility and school capacity to successfully deliver the intervention, it was not possible to randomise at the school level. Second, randomisation within the school would not have been possible as the intervention was designed and resourced to support around 60 participants who were underachieving and there would not have been enough underachieving pupils in the school for this to work. The developer was very keen for the programme to be run at capacity to ensure that the grant money given to schools was benefiting the maximum possible number of children. If the intervention had been run for a smaller number of pupils the staffing ratios would have been higher and the intervention would have been different from the intervention that was intended, making it difficult to evaluate. The RD design was also thought to be more acceptable to the schools in that all low-attaining pupils would be offered the opportunity to attend. The RD design allows causation to be inferred, with the inferences strongest around the cut points. The randomisation between the two cut points strengthens the design by forming a mini randomised trial at the point where inference is strongest.

Although, unlike other non-randomised designs, the RD design allows strong causal inference to be derived, there are some limitations to the approach. First, it is less powerful than an RCT, as to get the same power we would need approximately 3–4 times more pupils than would an RCT (Schochet, 2008). Second, there needs to be a clean break at the two intervention cut-offs. If some pupils below the first cut point do not get the intervention, or some pupils above the second cut point do get it, then this introduces a ‘fuzzy’ RD design and inference and power are weakened (Shadish et al., 2002). RD design has rarely been used prospectively in education or other research. Usually the design is implemented retrospectively by researchers taking advantage of a natural experiment. To undertake the design prospectively, as described in this report, is both novel and more robust than the usual retrospective approach. This evaluation is therefore piloting the design in a small study of four schools.
Eligibility

Schools

Schools were eligible to participate if they were secondary schools in a targeted area awarded a grant by the SHINE Trust, to run the SHINE in Secondaries programme. London and Manchester were selected by SHINE as targeted areas where there was need and demand for the programme. The criteria to be awarded a grant was that schools were expecting to have at least 80 children coming into Year 7 who had not achieved a National Curriculum Level 4 in English and they served areas of disadvantage as measured by a higher than average proportion of children eligible for free school meals. They also had to have the ability, capacity and commitment to run the SHINE in Secondaries programme as judged by the SHINE Trust (information used in making this decision is described in the recruitment section). Two awards in each targeted area were made.

Pupils

All Year 7 pupils who completed the pre-test in each participating school were eligible to participate in the study unless parents chose to opt out of their child’s data being used or the school considered that a pupil had special educational needs so the intervention would not be accessible to them. If parents opted out, pupils could still participate in the intervention but they would not be included in the analysis. Assignment to the intervention or control group was done using a literacy test as described in the design section above: those scoring below a first cut point were invited to attend the intervention; those scoring above a second cut point were in the control group; and those scoring between the two cut points were randomly allocated to the intervention or control group.

Consent to take part in the research was obtained through head teachers in schools at the beginning of the project. Schools were asked to send opt-out consent forms for the use of pupil data in the research and the schools obtained opt-in consent from parents for the children to attend the intervention. (See appendices.)

Intervention

Schools were asked to invite all children who scored below the first cut point on the pre-test and those who were randomly allocated to the intervention (having scored between the first and second cut points) to attend the SHINE in Secondaries programme. The research design used intention-to-treat analysis and therefore any pupil who was eligible to attend the intervention was analysed as part of the intervention group whether they attended the programme or not.

The SHINE in Secondaries Programme

The SHINE in Secondaries programme is a grant-funded Saturday school programme, run by a secondary school for pupils in Year 7. In this research there were four SHINE in Secondaries projects running, each in a different school. The projects were designed to run with between 60 and 70 pupils who were underachieving (based on their pre-test literacy scores). For this research project the programme was co-funded by SHINE (Support and Help IN Education) and the EEF (Education Endowment Foundation).

Three of the four projects ran for 25 Saturday sessions for four hours each week while the other project ran for 21 Saturday sessions of five hours each. All projects ran from November 2013 to June/July 2014. Each school was provided with the SHINE in Secondaries ‘Making it Work’ handbook to guide them in setting up and running the intervention. This included guidance on the recruitment of staff required for the project, premises management, finance, selecting eligible students, encouraging attendance, SHINE’s monitoring and evaluation arrangements, and guidance...
on the curriculum. Staff in schools were also able to contact SHINE for advice on any issues with running the intervention.

A core part of the intervention was the high staff-to-pupil ratio. Minimum requirements were that each project was staffed by four qualified teachers—the project manager and three tutors, three qualified teaching assistants and three peer mentors (older pupils from the school who were compensated for their time in gift vouchers). All were recruited and employed by the host school, and all were paid additionally for their work on a Saturday. SHINE gave details of how much of the grant should be paid to staff (along with other expectations of how the grant was to be spent). Schools reported to SHINE with details on how the grant was being spent. One of the projects recruited two additional tutors to lead in English and maths and they were present each week.

Pupils in each project were divided into three classes of up to 24 students. The Saturday sessions usually consisted of three different lessons/activities over the day with lunch or a snack provided by the project, as well as break time and some time at the beginning and end of the day when the whole group was together.

Each project was responsible for developing their own curriculum to suit the needs of their students which was based on the guiding principles specified by SHINE and included (from the SHINE in Secondaries ‘Making it Work’ handbook):

- a core focus on literacy and numeracy, based on a termly theme chosen by the school;
- opportunities to revisit areas where students are struggling and to extend into areas outside of the weekday subjects;
- project work, hands-on learning and opportunities for enrichment which enable students to apply their learning to real world contexts;
- a thematic approach which offers opportunities to explore new areas beyond the national curriculum;
- flexibility of the curriculum to do project work, trips and visits which offer opportunities for children who are demotivated or struggling with learning to re-engage; and
- an emphasis on investigative and collaborative learning and research projects which encourage problem solving and independent learning.

Projects were expected to include appropriate educational visits and were given a budget to incorporate these. These were expected to offer students opportunities beyond their current experience and to connect to the termly theme and a specific subject area.

Each project manager was expected to complete a medium-term plan for each term which demonstrated how learning linked up between Saturdays and how enrichment opportunities could be integrated. This plan was shared with the SHINE programme manager and with the tutors at that project (an example plan can be found in Appendix 1). Tutors were then responsible for planning individual lessons. The project manager worked with tutors to ensure lessons were differentiated effectively and was responsible for quality assurance. The SHINE programme manager maintained regular contact with the project managers throughout the year and visited each project two or three times.

Originally there was funding for schools to run a summer school for the Year 8 mentors; however, due to grants being made in July there was no time to set this up. Schools were therefore free to spend the money allocated to this in other ways to support the intervention. This was spent on residential trips for the children involved (in two schools), for additional enrichment activities, or for additional staff (as above) or to pay staff slightly higher rates to attract and retain the best staff.
Control condition

Due to the regression discontinuity design, the control condition was students who had performed above the second cut point in the Progress in English 11 pre-test and children who performed between the first and second cut points and were randomised to the control condition. Schools were asked not to invite these pupils to attend the intervention and these pupils therefore received ‘business as usual’. However, based on attendance data provided by SHINE we note that four control pupils did attend the intervention (two pupils in one school and one pupil in each of two other schools). The data for these pupils were still included in analysis as part of the control group as per the intention to treat analysis. The ‘business as usual’ control condition was not being invited to attend SHINE on Secondaries.

Outcomes

Primary outcome measure

The total raw score on the Progress in English 12 (PIE 12) GL assessment was the primary outcome measure. This test is a general measure of literacy skill; the exercises included are divided between editing exercises and reading exercises. In the editing tasks pupils are asked to correct errors present in a text including spelling, grammatical and stylistic errors. The reading tasks assess text comprehension and understanding of language in context. This assessment was selected due to the intervention having a focus on core literacy and the Progress in English 12 being a valid and reliable assessment aimed at students in this age group and being on the EEF recommended list.

Secondary outcome measures

1. The total raw score on the Progress in Maths 12 (PIM 12) GL assessment was used as a secondary outcome as the intervention aims to improve numeracy achievement through a core focus on numeracy. This test is split into two sections, calculator and non-calculator, and lasts one hour in total. The questions addressed Levels 3 to 6 of the National Curriculum and covered number, algebra, shape and space, measures, data handling and probability. This test again provided a standardised measure of maths achievement appropriate to the age and curriculum stage of the students involved.

2. Engagement with school and learning was measured by an online survey developed by the research team from a review of the engagement literature. The development of this survey was still in its piloting phase with scale validation and reliability being gathered from this project as well as the pilot year of another project. The survey aimed to capture pupil engagement with school including:

- **identity with school** (16 items including: ‘I feel like part of the school’, ‘I make friends easily at school’, ‘Teachers in this school care about pupils’);
- **motivations at school** (13 items including: ‘I like work that makes me think’, ‘I enjoy learning new things’, ‘What I learn at school will be important in my future’);
- **beliefs about ability** (6 items including: ‘I am confident I will succeed in school’, ‘I think I’ll get good marks in English’);
- **active participation in learning** (15 items including: ‘I get involved in class discussions’, ‘I ask questions to help me learn’); and
- **behaviour in completing school work** (7 items including: ‘I plan my work before I start’, ‘I try to understand how different ideas fit together’).

To create the measure we started with reviewing the literature to identify how ‘engagement’ is conceptualised and to identify existing measures of engagement. Items from as many engagement self-report measures as could be sourced were collated into a database and categorised. The themes most relevant to the aims of the interventions being evaluated (which included improving
relationships with peers and teachers, increasing passion for learning, linking school with real life, and improving confidence and learning skills) were selected from the review. Items from these themes were adapted to suit the UK context and to be of appropriate age. Items were not specific to individual lessons but to school and classes generally. For most items, pupil responses were given on a four-point Likert scale response. All items were positively worded. Initial analysis of the data indicated that reliability was best for the whole scale (rather than looking at subscales) and it was decided therefore to use the total score as the outcome measure, where a more positive score indicated greater engagement with school. Engagement with school and with learning was expected to improve based on the theory of change model specified in the SHINE in Secondaries handbook, with pupils getting to know teachers and other pupils in school better and with the relevance to school work being highlighted through linking learning to ‘real life’.

**Delivery of outcome measures**

All Year 7 pupils in the participating secondary schools undertook the Progress in English 12 and Progress in Maths 12 tests in the last week of June or first week of July 2014. The tests were delivered under exam conditions by a researcher from the project with invigilation support from teachers in the schools. A few pupils with special educational needs who teachers felt would not be able to sit the test in the exam hall completed the tests with a teacher or learning assistant in a classroom setting at the same time as the other pupils.

Tests were marked by temporary staff employed by the research team who were blind to allocation (i.e. markers did not know whether test papers were from intervention or control group participants).

The Engagement with School and Learning survey was delivered and marked automatically online. Schools were asked to get pupils to access a given link and complete the survey during June or July 2014.

**Sample size**

Ideally, the evaluators would decide what constituted an educationally important difference and then select a sample size with adequate power (either 80% or 90%) to detect such a difference. However, in this instance the evaluators could not determine an optimum sample size. The sample size was determined by the number of SHINE in Secondaries projects funded to run in the evaluation. The sample included all Year 7 pupils eligible in the four schools funded. This was a pilot evaluation owing to the untested nature of the research design, and a sample size of four schools including 613 children was considered adequate to pilot the procedural aspects of the design. The sample size of four schools was determined by the funder. The sample size for an RDD is determined by the desired minimum detectable effect size, significance level, power and RDD model R-squared (Lee and Munk, 2008). Given that the sample size in each school was between 127 and 176 and assuming 80% power, 5% significance level and RDD model R-squared of 0.5 then the MDES would be 0.5.

**Randomisation**

The random allocation to intervention or control for students who fell between the two cut points was done separately for each school using pre-test and gender as stratification factors in a permuted block randomisation scheme. This was carried out blind by the research team’s statistician.

**Analysis**

The primary analysis was by intention to treat, i.e. those children selected to be offered the intervention were analysed in the intervention group, whether or not they accepted the offer of the intervention and received the intervention. The median pre-test measure of the randomised group for each school was subtracted from all scores within the school (i.e. centred). By subtracting the median
of the randomised group, the regression discontinuity gap is shifted to the intercept reducing the analysis to a classical regression model.

Parametric estimation using all of the available data was used to model the outcome and different functional forms for the rating variable were explored using a regression framework. An alternative would have been to limit the analysis to data that lie within a window (bandwidth) but given the small sample size this was not deemed appropriate (Jacob et al., 2012). To ensure the correct functional form was being used, a number of different functional forms were explored and models were compared appropriately. For each school the following models were explored: linear models, quadratic models, cubic models, linear models with a treatment interaction, quadratic models with a treatment interaction and cubic models with a treatment interaction. Models were compared using the Akaike’s information criterion (lower values preferred) and likelihood ratio tests were undertaken to compare the models. Residuals of the model were inspected as well as the visual appropriateness of the fit of the model to the data. Sensitivity analyses were undertaken to explore the effect of fuzziness around cut points by excluding pupils on waitlist from the analyses; we note that this approach has less statistical power than the primary analysis (Trochim, 1984). The randomisation adds weight to any fuzziness that might occur due to movement around the cut point because it is random. Robustness checks were also conducted to add confidence to the choice of model. The outermost data points have substantial influence on the estimation of the model, therefore it is important to explore how sensitive the selected functional form is to the exclusion of these outermost points. Hence the same models were re-estimated after sequentially dropping the outermost 1%, 5% and 10% of data points with the highest and lowest rating values, which are the values recommended.

As different cut points were used for the two larger schools and the two smaller schools, the analyses were undertaken separately for each school and the results combined using a meta-analysis. Undertaking the analysis at the individual school level was appropriate here to ensure the clustering and the use of different cut points within schools was adequately captured in the analysis. All analyses were undertaken in Stata version 13. A pre-specified subgroup analysis was conducted. The effect of the intervention on pupils eligible for FSM was assessed through the repetition of the primary analysis for this subgroup and through inclusion of an interaction between FSM status and group for each school.

An analysis of the pupils who were on waitlist, those between the two cut-offs, was undertaken separately. Linear regression was used to compare the two groups with adjustments made for the potential clustering within schools using the Huber-White sandwich estimator (robust standard errors). The outcome modelled was the PIE 12 score and the model included the PIE 11 score (pre-test) and group allocation. This was an exploratory analysis due to the small sample size.

Process evaluation methodology

A 'light touch' process evaluation was conducted using a cross-sectional design with interviews, focus groups and site visits to assess the organisational and management issues with the primary aim of informing longer-term, wider roll-out plans. The process evaluation was light touch owing to resource constraints within the funding for the evaluation as part of the EEF transitions round, thus limiting the number of visits (observations, focus groups) that could be undertaken. The process evaluation was limited to a visit by an evaluation team researcher to a project in London and a project in Manchester. During these visits the researcher observed three lessons in each project, ran focus groups with teachers in both projects and ran a focus group with students in one project. SHINE was asked to suggest the two projects (one in each area) to be visited for the process evaluation in order that the evaluator could not be seen as visiting only projects that were not going well.

An interview with the SHINE programme manager and SHINE chief executive was also conducted by two members of the evaluation team during September 2014 to discuss impact and implementation.
Impact evaluation

Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>February to June 2013</td>
<td>Recruitment period for schools to apply to SHINE for funding</td>
</tr>
<tr>
<td>18 June 2013</td>
<td>SHINE awarded grants to schools</td>
</tr>
<tr>
<td>July 2013</td>
<td>Meetings with successful schools to explain evaluation and intervention requirements, and get consent</td>
</tr>
<tr>
<td>September 2013</td>
<td>Opt-out letters sent to parents of all pupils</td>
</tr>
<tr>
<td>September 2013</td>
<td>Pre-testing in all schools</td>
</tr>
<tr>
<td>October/November 2013 – June/July 2014</td>
<td>Intervention delivery</td>
</tr>
<tr>
<td>June/July 2014</td>
<td>Post-testing in all schools</td>
</tr>
<tr>
<td>August/September 2014</td>
<td>Marking of post-tests</td>
</tr>
<tr>
<td>October 2014</td>
<td>Data cleaning and application to NPD</td>
</tr>
<tr>
<td>November/December 2014</td>
<td>Report writing</td>
</tr>
</tbody>
</table>

Participants

SHINE was responsible for the recruitment of schools to the trial. Expression of interest forms were sent out to targeted schools in areas of economic deprivation in London and Manchester. Queries were received from ten schools and six of these schools were shortlisted to make full applications. Four grants were awarded based on the need and demand in the local community and the capacity of the host school to deliver the intervention. The decision process to award grants included a meeting with the headteacher during a visit to the school, a review of Ofsted reports, taking up references locally and the information included in the written application.

The four schools that were recruited to the project were urban schools in the Manchester or London area. One school was a boys’ school, three schools were academies and one was a community school. School characteristics are included in Table 1 below.

Table 1: School characteristics (N=4, figures from 2013 obtained from Ofsted Dashboard, accessed December 2014)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>% FSM in school</td>
<td>54–73</td>
</tr>
<tr>
<td>% SEN in school</td>
<td>7–17</td>
</tr>
<tr>
<td>Ofsted</td>
<td>2</td>
</tr>
<tr>
<td>Number of pupils in school</td>
<td>546–1029</td>
</tr>
<tr>
<td>% girls</td>
<td>0–47</td>
</tr>
</tbody>
</table>
Figure 1: Flow diagram of participants through the study

Schools recruited to trial (N=4 schools)

Completed pre-test (N=4 schools, n=613 pupils)
  School 1 (n=147)
  School 2 (n=163)
  School 3 (n=176)
  School 4 (n=127)

Excluded (n=2 pupils) Intervention not suitable

Scored between cut points (n=82)
  School 1 (n=22)
  School 2 (n=21)
  School 3 (n=21)
  School 4 (n=18)

Random allocation

Scored at or below first cut point – Intervention (n=284)
  School 1 (n=72)
  School 2 (n=65)
  School 3 (n=80)
  School 4 (n=67)

Received intervention (n=209)
Did not accept invitation to attend intervention (n=75)

Intervention (n=41)
  School 1 (n=11)
  School 2 (n=11)
  School 3 (n=10)
  School 4 (n=9)

Received intervention (n=28)
Did not accept invitation to attend intervention (n=13)

Control (n=41)
  School 1 (n=11)
  School 2 (n=10)
  School 3 (n=11)
  School 4 (n=9)

Received control (n=41)
Did not receive control (n=0)

Intervention Group
Lost to follow up (n=42)
  School 1 (n=8)
  School 2 (n=12)
  School 3 (n=12)
  School 4 (n=10)

Control Group
Lost to follow up (n=22)
  School 1 (n=1)
  School 2 (n=6)
  School 3 (n=8)
  School 4 (n=7)

Follow-up

Intervention Group
Analysed (n=283)
  School 1 (n=75)
  School 2 (n=64)
  School 3 (n=78)
  School 4 (n=66)

Excluded from analysis (n=0)

Control Group
Analysed (n=266)
  School 1 (n=63)
  School 2 (n=81)
  School 3 (n=78)
  School 4 (n=44)

Excluded from analysis (n=0)

Analysis
Pupil characteristics

Table 2: Baseline pupil characteristics for intervention and control groups

<table>
<thead>
<tr>
<th>Means (and standard deviations)</th>
<th>Intervention (N=325)</th>
<th>Control (N=288)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KS2 results</td>
<td>25.08 (4.23)</td>
<td>29.86 (2.91)</td>
</tr>
<tr>
<td>Missing</td>
<td>19</td>
<td>4</td>
</tr>
<tr>
<td>Pre-test PIE 11 raw score</td>
<td>14.05 (5.62)</td>
<td>27.88 (4.71)</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Age at pre-test in months</td>
<td>137.60 (3.62)</td>
<td>138.38 (3.64)</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IDACI (deprivation index)</td>
<td>0.51 (0.17)</td>
<td>0.53 (0.17)</td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Claimed Free School Meals at any point in last 6 years (percentage)</td>
<td>63%</td>
<td>61%</td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Percentage female</td>
<td>36%</td>
<td>49%</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Outcomes and analysis

Figure 2 graphically displays pre-test scores (assignment variable: Progress in English 11 literacy assessment) against post-test scores (Progress in English 12 literacy assessment) by school.

Figure 2: Summary of pre-test scores against primary outcome (PIE) by school
From the graphical displays of the data there does not appear to be any large discernible discontinuity in the outcome at the cut points and certainly no consistent pattern demonstrated across schools. From Figure 2, it may appear that school 2 has a different relationship between the pre- and post-test scores from the other three schools. However, when the regression lines are fitted to the data (see Figure 3) the selected model appears to be appropriate and is in line with the other three schools. There did not appear to be any evidence of jumps at other points across any school. While it is important to visually explore the data for any evidence of a discontinuity gap, it is also appropriate to explore the relationship statistically and we did this using a parametric approach with regression techniques. The results of the primary analysis are presented in Table 3 and Figure 2. To ensure the correct functional form was being used a number of different possibilities were explored and models were compared appropriately. The above graphs were also inspected to check that the specified functional form was intuitive. Figure 3 displays the best fitting models for each school.

**Figure 3: Summary of pre-test scores against primary outcome by school with fitted regression lines**

Pooled effect sizes for the primary analysis resulted in a very small effect size between the intervention and control at the discontinuity in the outcome at the cut point (pooled effect size 0.09, 95% CI -0.08 to 0.26). It is worth noting that three of the four schools had positive effect sizes (ranging from 0.10 to 0.19), while one school had a negative effect size (-0.12). The results of the sensitivity analyses of the primary outcome are also presented in Table 3.
Table 3: Results of the primary analysis and sensitivity analyses of the primary outcome

<table>
<thead>
<tr>
<th></th>
<th>School 1</th>
<th>School 2</th>
<th>School 3</th>
<th>School 4</th>
<th>Pooled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate (95% CI)</td>
<td>1.70 (-2.03 to 5.42)</td>
<td>1.32 (-2.68 to 5.33)</td>
<td>1.40 (-2.21 to 5.00)</td>
<td>-0.88 (-4.16 to 2.39)</td>
<td>0.75 (-1.06 to 2.57)</td>
</tr>
<tr>
<td>Effect size (95% CI)</td>
<td>0.19 (-0.15 to 0.52)</td>
<td>0.10 (-0.23 to 0.43)</td>
<td>0.15 (-0.16 to 0.47)</td>
<td>-0.12 (-0.50 to 0.26)</td>
<td>0.09 (-0.08 to 0.26)</td>
</tr>
<tr>
<td>Excluding randomised group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate (95% CI)</td>
<td>2.40 (-2.68 to 7.49)</td>
<td>6.48 (1.24 to 11.72)</td>
<td>0.59 (-3.88 to 5.06)</td>
<td>-0.90 (-5.12 to 3.32)</td>
<td>1.88 (-1.16 to 4.91)</td>
</tr>
<tr>
<td>Effect size (95% CI)</td>
<td>0.23 (-0.15 to 0.60)</td>
<td>0.57 (0.21 to 0.93)</td>
<td>0.06 (-0.28 to 0.39)</td>
<td>-0.11 (-0.52 to 0.30)</td>
<td>0.19 (-0.09 to 0.47)</td>
</tr>
<tr>
<td>Robustness checks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluding outmost 1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate (95% CI)</td>
<td>1.29 (-2.48 to 5.05)</td>
<td>1.21 (-2.89 to 5.31)</td>
<td>1.92 (-1.68 to 5.52)</td>
<td>-0.60 (-3.93 to 2.73)</td>
<td>0.86 (-0.97 to 2.70)</td>
</tr>
<tr>
<td>Effect size (95% CI)</td>
<td>0.14 (-0.20 to 0.48)</td>
<td>0.09 (-0.24 to 0.42)</td>
<td>0.21 (-0.11 to 0.52)</td>
<td>-0.09 (-0.47 to 0.30)</td>
<td>0.10 (-0.07 to 0.28)</td>
</tr>
<tr>
<td>Excluding outmost 5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate (95% CI)</td>
<td>1.28 (-2.63 to 5.19)</td>
<td>0.75 (-3.42 to 4.92)</td>
<td>1.65 (-2.09 to 5.38)</td>
<td>-0.43 (-3.77 to 2.92)</td>
<td>0.73 (-1.15 to 2.61)</td>
</tr>
<tr>
<td>Effect size (95% CI)</td>
<td>0.14 (-0.20 to 0.48)</td>
<td>0.06 (-0.27 to 0.39)</td>
<td>0.18 (-0.14 to 0.50)</td>
<td>-0.06 (-0.45 to 0.33)</td>
<td>0.09 (-0.08 to 0.26)</td>
</tr>
<tr>
<td>Excluding outmost 10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate (95% CI)</td>
<td>1.80 (-2.41 to 6.02)</td>
<td>0.16 (-3.97 to 4.29)</td>
<td>1.18 (-2.74 to 5.09)</td>
<td>0.48 (-2.97 to 3.93)</td>
<td>0.87 (-1.08 to 2.81)</td>
</tr>
<tr>
<td>Effect size (95% CI)</td>
<td>0.19 (-0.16 to 0.54)</td>
<td>0.02 (-0.32 to 0.36)</td>
<td>0.12 (-0.21 to 0.45)</td>
<td>0.07 (-0.34 to 0.48)</td>
<td>0.10 (-0.07 to 0.28)</td>
</tr>
</tbody>
</table>

The results of the sensitivity analysis demonstrate inconsistent results when excluding those randomised and also when the outmost 1%, 5% and 10% were excluded from the model highlighting concerns about the robustness of the findings and functional form selected. Nevertheless, pooled results all demonstrated effect sizes that were very small and in line with the magnitude found for the primary analysis. The results of the secondary analyses are presented in Table 4. One school did not complete the Engagement with School and Learning survey despite considerable prompting from the research team. Issues with access to the computer suite for the year group and other activities at the end of term were the reasons given. There was also a rather poor response rate from one of the other schools with only around 20% of their pupils completing the survey.
Table 4: Summary of the pooled results of the secondary analyses

<table>
<thead>
<tr>
<th>Summary</th>
<th>Estimate (95% CI)</th>
<th>Effect size (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Progress in maths</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main</td>
<td>0.82 (-1.42 to 3.06)</td>
<td>0.08 (-0.11 to 0.26)</td>
</tr>
<tr>
<td>Excluding randomised group</td>
<td>1.64 (-0.93 to 4.22)</td>
<td>0.13 (-0.06 to 0.31)</td>
</tr>
<tr>
<td><strong>Engagement score</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main</td>
<td>-1.22 (-28.09 to 25.66)</td>
<td>-0.003 (-0.73 to 0.73)</td>
</tr>
<tr>
<td>Excluding randomised group</td>
<td>0.63 (-24.01 to 25.27)</td>
<td>0.01 (-0.59 to 0.61)</td>
</tr>
</tbody>
</table>

Pooled effect sizes for the secondary analyses resulted in very small effect sizes between the intervention and control at the discontinuity in the outcome at the cut point (PIM12 pooled effect size 0.08, 95% CI -0.11 to 0.26; Engagement pooled effect size -0.003, 95% CI -0.73 to 0.73). The planned sensitivity analysis using mean Progress in English score (pre-test) was not undertaken as the means and medians were similar within each school (Table 5).

Table 5: Summary statistics of Progress in English scores by school

<table>
<thead>
<tr>
<th>School</th>
<th>Mean (SD)</th>
<th>Median (25th, 75th)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School 1</td>
<td>23.72 (0.83)</td>
<td>23.5 (23, 24)</td>
</tr>
<tr>
<td>School 2</td>
<td>19.48 (1.17)</td>
<td>20 (18, 20)</td>
</tr>
<tr>
<td>School 3</td>
<td>19.14 (1.01)</td>
<td>19 (18, 20)</td>
</tr>
<tr>
<td>School 4</td>
<td>23.72 (0.67)</td>
<td>24 (23, 24)</td>
</tr>
</tbody>
</table>

A pre-specified FSM subgroup analysis was conducted. The effect of the intervention on pupils eligible for FSM was assessed through the repetition of the primary analysis for this subgroup and through inclusion of an interaction between FSM status and group for each school. The subgroup analyses showed no evidence of the intervention differentially benefiting pupils eligible for free school meals in any of the schools. The pooled estimate for the subgroup analysis was 0.85 (-1.51 to 3.21) and effect size was 0.08 (-0.13 to 0.30).

The exploratory analysis of the pupils in the mini RCT (between the cut points) was conducted. The mean PIM 12 score for the pupils in the intervention was 25.6 (SD 7.7) and for control pupils was 24.3 (SD 6.5). The effect size was very small (0.02 95% CI -0.43 to 0.47) and there was little or no evidence of a difference between the two groups (0.19 95% CI -3.56 to 3.94, p=0.88).

Cost

The funding provided to each school to employ staff and run the programme was £52,000. If the intervention took place with 60 pupils as recommended, this is equivalent to around £870 per pupil per year.

Schools in the evaluation did not pay anything towards the intervention. The ‘Making it Work’ handbook states that projects are normally up to 100% funded for the first three years while for Years 4 to 6 schools would be expected to fund or find funding for at least 50% of the costs with this rising to at least 70% of costs in Years 7 to 9.
Process evaluation

This report presents a cross-sectional snapshot of two site visits to *SHINE on Secondaries* schools (School 1 and School 3), conducted near the end of the year. It discusses positive features of the delivery of the intervention and some barriers to its successful implementation. The analysis is based on data collected through teacher interviews in School 1 (one interview with the project manager and one interview with the head of maths) and School 3 (one focus group interview with the two project managers, four teachers and two peer mentors), a focus group interview with five pupils in School 1 and lesson observations in both schools (six lessons observed overall) carried out by the process evaluator. Quality assurance of the observations for this evaluation was done during an observation of the Hallé *SHINE on Manchester* intervention where the same researcher conducted a joint visit with the principal investigator conducting similar observations. They reached high agreement in their observations during this first visit.

An interview with the *SHINE* programme manager and the *SHINE* chief executive conducted by two project researchers at the end of the programme also detailed their thoughts on implementation, what went well and future directions.

Excellent features of the delivery

Teacher perceptions

There was consensus among the teaching staff in School 3 that one of the most important factors for the successful delivery of the intervention was the good work of the two *SHINE* project managers who were also teachers in the school. This included the organisation of Friday school assemblies preparing pupils for their *SHINE* day and regular parent events which celebrated the work that was produced. The Friday school assemblies, in particular, seemed to have been initiated by this particular school as this event was not mentioned by School 1. All eight teachers interviewed in the two schools agreed that *SHINE in Secondaries* gave them the opportunity to think and plan ‘outside of the box’ and they enjoyed teaching around a particular theme, which helped reinforce links with ‘real life’.

It was also felt that the continuity with the school week that the *SHINE in Secondaries* programme provided for pupils in Year 7 was an excellent feature of the intervention. From our visits, it seemed that all *SHINE in Secondaries* teachers see all or at least some of the pupils during the week. This allowed the teaching content of the *SHINE in Secondaries* programme to better target pupil needs and also to build on the pupils’ familiarity with the teaching staff. In School 3, for example, the *SHINE* teaching content was decided following a consultation with the literacy and maths school teachers about what particular knowledge and skills they would need to target next. The English teacher, in particular, identified pupil needs during the week and targeted those areas on Saturdays. In School 1, the head of maths mentioned that the relationships between the pupils and the teachers were stronger because of the good continuity between the children’s school week and *SHINE*. The pupils felt more comfortable to approach and interact with the teachers in school. She also felt that there was an enhanced sense of identity among the pupils, a sense of belonging and better relationships at all levels. Pupils were given the space and the time for more individual guidance and support which was not often possible to provide in school. The head of maths also mentioned that some pupils had achieved or exceeded their targets in school because of this extra support in *SHINE*.

All teachers interviewed agreed that pupils liked the familiarity and the relaxing atmosphere that *SHINE in Secondaries* encouraged and that they learned while being engaged in an enjoyable way. An important outcome of the intervention reported by the teachers in both schools was pupils’
improved social skills, better relationships at all levels and increased confidence through their participation in practical and team-building activities.

Pupil perceptions

The five pupils who were interviewed (in School 1) spoke enthusiastically about their SHINE in Secondaries experiences. All pupils mentioned that they had made good progress in their learning while having fun. Some pupils provided specific examples to illustrate their learning in maths or English, as the following examples illustrate:

‘It makes it easier to get high levels in maths. …We have learnt about fractions.’ (boy)

‘In English we have done colons and semi-colons, punctuation, spellings.’ (boy)

‘In English we learnt about Shakespeare, when he was born and when he died, what plays he wrote, the people he met etc.’ (boy)

Pupils also talked with enthusiasm about some of the trips they had been to as part of SHINE in Secondaries, not least because of the learning and the links with subjects such as English and science that they could make. Furthermore, these pupils enjoyed making new friends. Some of them were in the process of applying to be a student mentor the following year as they felt they would enjoy taking on a more senior role with the new cohort of SHINE in Secondaries pupils.

Lesson observations

The six lessons observed in the two schools demonstrated a number of creative teaching ideas that were used effectively to provide variety, interest and engagement. All lessons observed were planned thoroughly and delivered engagingly. Questioning was often used effectively and teacher guidance and feedback during group work was ongoing. Overall, pupils were encouraged and helped to exercise initiative, as well as an element of choice and independent thinking, in the lessons observed. These teaching and learning approaches are well aligned to the guiding principles for the SHINE in Secondaries curriculum as outlined in the ‘Making it Work’ handbook. Teaching assistants and peer mentors were used effectively in all of the lessons we observed. For example, in the literacy lesson observed in School 3, the teaching assistant and a Year 10 peer mentor offered support to pupils during their small group work. The peer mentor worked mainly with one group whereas the teaching assistant moved from group to group offering pupils advice with their work.

All pupils appeared attentive and on task, thus demonstrating positive and constructive relationships with the teacher and each other. In School 3, for example, all pupils were engaged and on task throughout the literacy session observed. Through a series of practical tasks and effective questioning, the pupils were reminded of important grammatical rules which they were then encouraged to use in their own writing. Pupils' behaviour was excellent and the learning environment was comfortable, enjoyable but appropriately challenging. The teacher was encouraging but did not readily accept pupils' answers. Instead, she encouraged deeper thinking and more elaborate answers. Similarly, in the numeracy lesson observed in School 3, the teacher explained engagingly the value of designing a questionnaire, guided pupils through the process of designing good questions using a series of interactive activities and provided constructive feedback to pupils throughout the session. Pupils were encouraged to think for themselves and were given opportunities to receive feedback and improve their work. The learning environment was particularly comfortable mainly due to the warm and engaging personality of the teacher.
Barriers to successful implementation—suggestions for future development

Most lessons adhered to the guiding principles of the *SHINE in Secondaries* curriculum. However, in a small number of the six lessons observed, we found that pupils could have been more cognitively challenged.

Both schools identified pupil attendance and the initial pupil recruitment process as the two biggest barriers to the successful implementation of the intervention. Pupil attendance was a continuing concern but both schools were particularly proactive, offering instant rewards, certificates for participation and liaising with the parents on a regular basis. The challenge in terms of time required to attend *SHINE in Secondaries* on a Saturday was also identified by some pupils interviewed. Finally, teachers in School 3 expressed their concern that the initial recruitment process excluded a number of pupils who would have been particularly keen to attend.

When *SHINE* is run without the evaluation/trial aspect, schools would be given guidance from *SHINE* on how to select pupils. The selection criteria are that pupils experience an indicator of disadvantage (e.g. FSM, EAL, SEN or other indicator as known by the school) or that they are underachieving (this can be broadly defined—low achievers as well as those in the middle of the field who teachers think are capable of more could be included). The schools select the pupils but do need to report to *SHINE* on why pupils are deemed eligible to attend. The evaluation lessened the scope for the pupils who could attend and limited the school from inviting additional pupils through the year if spaces became available. It is anticipated that if this intervention was rolled out there would be more scope for teachers to select a wider variety of eligible pupils but that the issues with attendance during the evaluation would not be eliminated.

Feedback from the developer

The developer felt that the implementation of the *SHINE in Secondaries* programme had gone well in schools and that schools were following the model with fidelity. Schools had reported to them that the programme had had a positive effect on pupils’ confidence and self-esteem at a particularly vulnerable time of transition to a new school. It also gave the teachers in the school the opportunity to get to know the pupils better in a safe environment and this also helped them teach better during the week. Teachers felt that the key to the programme being successful was that it was something different from school during the week and that it wasn’t just individual subject catch-up. The programme was seen by the teachers as an opportunity to instil a ‘love for learning’ in pupils through the extra-curricular and ‘real-life’ experiences.

The *SHINE* team did mention some difficulties that had been faced during the year. The first challenge was with continuity of the programme when leadership staff involved in planning moved on to different roles or schools. The second was with maintaining good attendance from pupils through the course of the school year, particularly with the evaluation restricting who could be invited to attend (as described above). Reasons for not being able to attend the programme were other Saturday commitments, for example sporting commitments, religious school, or difficult family circumstances (e.g. single parent families, or living with extended family). There seemed to be good parental engagement in both schools observed. In School 3, for example, the children’s work was celebrated in regular parent evenings. Both schools contacted the parents every week, if needed, to encourage pupil attendance. Going forward, *SHINE* would be keen to try and increase the amount of parental engagement with the programme and look at ways to encourage better attendance. Examples of good practice in schools had been when the school had incorporated the *SHINE in Secondaries* programme into the normal school week with pupils who attended wearing badges, a good launch event for all eligible pupils and teachers following up on *SHINE* work with pupils during the week. All of these things were thought to promote attendance on a Saturday.
Conclusion

Key conclusions

1. Impact of the intervention: Very small effect sizes on the primary and secondary outcomes of literacy and numeracy were detected. As this was an exploratory evaluation design and the number of schools involved in the project was small. This made it unlikely that any impact of SHINE could be detected, should the true estimate of effect be small.

2. Implementation and organisation issues: Feedback from the teachers and pupils suggested that the intervention was perceived to be valuable in providing an opportunity to consolidate literacy and numeracy skills.

3. Feasibility of evaluation design: The purpose in piloting this design was to explore the feasibility of using this approach when randomly allocating pupils to an intervention group was not possible or desirable. The regression discontinuity design is an appropriate evaluation method for education interventions. However, because it is less powerful than a randomised controlled trial, the number of pupils involved must be two and a half times greater if a small effect is to be detected.

In this evaluation we have undertaken a prospective RD evaluation. We have also successfully demonstrated the feasibility of nesting a tie-breaker RCT within a RD study. We are unaware of any study conducted in the UK that has used this novel approach. Because we have demonstrated its feasibility we can recommend its use in other evaluation situations where randomisation is either not possible or not feasible. Note, however, that a ‘standard’ RCT will be the superior design in most instances.

The impact evaluation using RD design did not find evidence of a statistically significant impact of the intervention on any of the outcomes. However, this finding should be treated with extreme caution, given that this was a pilot evaluation and underpowered to detect significant small effects (should they exist).

Given the funder provided only four schools as the sample size at the outset, we only had the power (80%) to detect (as statistically significant) relatively large effects (0.5).

When an RCT is not possible the RD design is the strongest quasi-experimental design providing a robust estimate of effect as long as the sample size is large enough (at least 2.75 times the size for a RCT). This pilot evaluation is an important step in establishing evidence of promise of the impact of SHINE in Secondaries, and equally important for exploring the feasibility of using the RD design.

In this evaluation the observed effect size was not statistically significant; however, this does not invalidate the use of the design. A key disadvantage of the RDD is that it is heavily dependent on specifying the correct functional form and if this is incorrect then it can lead to biased estimates—this highlights the importance of undertaking extensive sensitivity checks which are sufficient to check the robustness of the findings. In this analysis we chose to undertake a parametric approach rather than a non-parametric approach. The parametric approach uses all of the data to model the outcome and uses different functional forms for the rating variable. The non-parametric approach limits the analysis to data that lie within a window (bandwidth) where the functional form is more likely to be linear. The main difficulty with this approach is the selection of the optimum bandwidth. Given the relatively small sample size and need to analyse the schools individually in this pilot, the parametric approach seemed to be the most appropriate. In this analysis a regression framework was used. It is possible that other analytical approaches may have led to different estimates of the treatment effect, for example using risk-based allocation methods (Finkelstein et al., 1996), non-parametric regression (Hahn et al., 2001) or local linear regression (Imbens and Lemieux, 2007).
Different cut points were used in the two larger and two smaller schools and this had an impact on the analysis. In order to adequately capture the clustered nature of the data the analysis was undertaken for each school and then pooled in a random effects meta-analysis. If there were a larger number of schools in the study, with two different cut points, then it might have been possible to analyse the schools together using the same cut point and account for the clustered nature of the data as a random effect, and then pool the two estimates in a meta-analysis. This would obviously increase the available data and might lead to better specification of the functional form. In this analysis we could have combined the two larger schools and two smaller schools and undertaken the analysis on each set, but the only way to account for the clustering would have been as a fixed effect which might not have been adequate.

The process evaluation was ‘light touch’ and therefore any findings should be treated with extreme caution. The process evaluation found many positive features and perceptions of the intervention from the perspective of the various stakeholders, including pupils.

The RD experimental design meant that pupils were selected to attend the intervention based on a score on an English assessment. Teachers would normally have more discretion regarding who to invite and which pupils would benefit (as long as they met one of the SHINE-specified criteria). Some pupils who were eligible for the intervention already had other Saturday commitments such as religious school or sports programmes and therefore would not have been able to attend had they been invited.

Loss to follow-up was higher for the intervention group than for the control group which may reflect attendance rates at school, with those who performed better at the beginning of the year having higher attendance generally.

Uptake of places at the intervention was 74% of those who were assigned to the intervention group, which means that 26% of those counted in the ITT analysis did not attend the intervention. The ITT analysis provides average impacts of the intervention for those who were offered the intervention, whether or not they actually participated in the intervention. This created a ‘fuzzy’ regression discontinuity and reduces the robustness of the evaluation. The attendance also meant that the ratio of staff to pupil was higher than it would normally be. However, the dilution effect of the ITT estimate in the presence of non-attendance is similar for the RDD as for an RCT. However, average individual attendance of those children who accepted places was 68%. This includes any pupil that is considered as taking up their place by attending a minimum of one session. The average attendance is based on the numbers of sessions possible in each school.

Nevertheless, this pilot demonstrated that designing and implementing an impact evaluation using RD design is feasible, and this was a successful outcome of the evaluation.
References


### Appendix 1: Example of a medium-term *SHINE in Secondaries* planning document

**OVERALL FOCUS:** What makes a healthy child? (Exploring healthy lifestyles)

<table>
<thead>
<tr>
<th>Date</th>
<th>Numeracy focuses</th>
<th>Literacy focuses</th>
<th>Basic breakdown of the day</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.1.14</td>
<td>Ingredients and budgets –</td>
<td>Communication skills – using a shopping list, trip to supermarket</td>
<td>Creating the sandwich</td>
</tr>
<tr>
<td></td>
<td>- Calculating costs (using rounding to estimate costs and the use of repeated addition vs multiplication)</td>
<td>Persuasive skills – pitching your product</td>
<td>– awareness of food hygiene and cleanliness</td>
</tr>
<tr>
<td></td>
<td>- Using a budget (tracking expenditures by creating formulae on excel)</td>
<td>Persuasive skills – Dragon’s Den style presentation</td>
<td>Visit to supermarket</td>
</tr>
<tr>
<td></td>
<td>- Best Buy options (discussion using ratio to determine best value, i.e. multi-packs vs singles)</td>
<td></td>
<td>Making the sandwich</td>
</tr>
<tr>
<td></td>
<td>- Understanding nutritional information</td>
<td></td>
<td>Dragon’s Den</td>
</tr>
<tr>
<td>25.1.14</td>
<td>Route planning –</td>
<td>Communication skills – geographical language, new vocabulary for nature</td>
<td>Visitor centre</td>
</tr>
<tr>
<td></td>
<td>- Grid reference (understanding coordinate and other map referencing systems)</td>
<td>(etymology/Latin?)</td>
<td>Botanical gardens</td>
</tr>
<tr>
<td></td>
<td>- Map reading (discussing keys/symbols and scale notations such as 1:500)</td>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td></td>
<td>- Journey statistics (calculating speed/distance/time and representing movement on a distance/time graph)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Calories burnt, steps per minute required.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.14</td>
<td>Managing budgets – working out a weekly budget for their family (money often being a cause of stress)</td>
<td>Speaking and listening: discussion activities – what are healthy friendships? How do good/bad friendships make you feel?</td>
<td>Freedom to express opinions</td>
</tr>
<tr>
<td></td>
<td>- Calculating costs (using rounding to estimate costs and the use of repeated addition vs multiplication)</td>
<td>Presentational features – create posters advising young people about where to find help and support</td>
<td>Peer pressure</td>
</tr>
<tr>
<td></td>
<td>- Use of ICT (tracking expenditures by creating formulae on excel)</td>
<td></td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Staying safe</td>
</tr>
<tr>
<td>Date</td>
<td>Theme</td>
<td>Activities</td>
<td>Skills</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>8.2.14</td>
<td>Winter Olympics</td>
<td>Speaking and listening skills - following the plot of the film, understanding how it relates to current news</td>
<td>Cinema experience</td>
</tr>
<tr>
<td>8.3.14</td>
<td>Celebrating different cultures</td>
<td>- Info graphics (where do different foods come from, most popular, most healthy)</td>
<td>Communication skills – creating stalls including the different cultures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Costs of different food</td>
<td>Understanding the power of advertising</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Calorie counting (making comparisons between the DRA for men/women)</td>
<td>Menu writing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- An introduction to low/high GI foods (base 100) vs calorie counting</td>
<td>Communication skills – creating stalls including the different cultures</td>
</tr>
<tr>
<td>15.3.14</td>
<td>Experience sport</td>
<td>Using numeracy in sports –</td>
<td>Speaking and listening skills – turn-taking and listening to instructions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Averages (mean, median and mode. The advantages of choosing the right average)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Range (a measure of consistency of performance)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Info graphics (representing results/ winners etc)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Calculating calories burnt from exercise</td>
<td></td>
</tr>
<tr>
<td>22.3.14</td>
<td>SHINE Sports Day</td>
<td>Competitive maths –</td>
<td>Sports reporting – understanding what you need in terms of stats, good questions to ask competitors etc</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Calculating lap times (minutes/seconds/milliseconds)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Averages (mean, median and mode. The advantages of choosing the right average)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Range (a measure of consistency of performance)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Comparisons (speed, comparing personal times with Olympic/World records and peers)</td>
<td></td>
</tr>
<tr>
<td>29.3.14</td>
<td>Awards session</td>
<td>Developing an understanding of health advice through statistics.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Using a range of statistical diagrams to back evidence/arguments (including Info graphics)</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2: Schools information sheet

SHINE in Secondaries

Evaluation Information Sheet

The Education Endowment Foundation has commissioned Durham University to evaluate the SHINE in Secondaries programme. This evaluation aims to find out how well the programme works in improving educational outcomes for the children involved. The research team, led by Professor Carole Torgerson, have designed a study that will assess gains in literacy, numeracy and attitudes towards learning for the children who take part in the programme compared to the children who do not. The evaluation will involve schools assessing all Year 7 pupils at the beginning and end of the school year. The assessment at the beginning of the school year will be used to determine which pupils are eligible to attend the SHINE in Secondaries programme.

Assessment in September 2013

At the beginning of the school year, we ask that all Year 7 pupils complete the Progress in English assessment which will be administered and marked by Durham University. We will arrange a suitable time with schools for this to take place in the first half of September. This test should be conducted under exam conditions and should take around an hour. Durham University will mark the assessments and then provide schools with a list of eligible pupils to invite to attend the SHINE in Secondaries programme at the end of September. We will also provide schools with additional pupils to invite if there are still places available before the programme starts. Schools will also receive the data from the assessment.

How Durham decide on eligible pupils

All pupils who score below a pre-determined cut-off point in the test (set by Durham University) will be eligible to attend the intervention. Durham University will provide a list to schools of pupils that they should invite to attend SHINE in Secondaries. It is important that all of these pupils are invited, even if you strongly believe they will not attend. Those pupils that score above the cut-off point are not automatically eligible for the SHINE programme. Durham University will try to ensure that the cut-off point is set so that around 60 pupils will end up attending the programme. Pupils that score just above the cut-off point (and below a second higher cut-off point) will make up a random ordered waitlist of pupils. We will ask schools to let us know how many pupils have accepted their place on 16th October. If there are still spaces available before the programme starts, Durham University will issue you with a list of additional pupils to invite from the waiting list.

Durham University’s involvement through the year

Schools will run the SHINE in Secondaries programme from November 2013 to July 2014. During this time the Durham University researchers will observe some sessions and talk to stakeholders including children, parents and staff regarding the programme to learn about how the programme is perceived and whether any improvements could be made.

Outcome assessment in June/July 2014

At the end of the school year we ask that all Year 7 pupils sit the Progress in English assessment again as well as the Progress in Maths assessment. We will also ask pupils to complete a short questionnaire looking at attitudes to school and to learning. As before,
these assessments will be administered by a researcher from Durham University on a
suitable date arranged with the school, and will take approximately 2 hours. These will
again be done under exam conditions.
The assessments will be marked by Durham University and the results will be used to
assess the impact of the programme on literacy and numeracy. We will provide schools with
your individual pupils marks in both the English and Maths assessments at the end of July
2014, which we hope will be of use to you.

Use of data
All pupil data will be treated with the strictest confidence. No individual school or child will
be identified in any report arising from the research. Named data will be matched with the
National Pupil Database to enable longer term follow-up and we will also share the data
with SHINE, with EEF data managers and with the UK Data Archive for research purposes.
Durham University will provide documentation for schools to inform parents about the
assessments in September and June/July. Parents will be able to opt out of their child’s data
being used in the evaluation by informing the school who will pass this on to the project.

Summary
To meet the requirements of the evaluation we would like schools to agree to:
• Durham University researchers coming into the school to assess all the Year 7 pupils in
  September 2013 and in June/July 2014 on dates agreed mutually.
• Invite all eligible pupils (as identified by Durham) to attend the SHINE in Secondaries
  programme. Pupils on the waitlist can only be invited if there are spaces and should be
  invited as directed by Durham University.
• Allow Durham University researchers to visit the SHINE programme at agreed points
  through the year.
• Provide Durham University researchers with unique pupil numbers (UPNs) for all Year
  7 pupils.

<table>
<thead>
<tr>
<th>Timeline What happens</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress in English assessment completed by all pupils</td>
<td>September 2013</td>
</tr>
<tr>
<td>Schools given list of eligible pupils to invite to SHINE in Secondaries</td>
<td>30th September 2013</td>
</tr>
<tr>
<td>Schools report on number of pupils who have accepted place</td>
<td>16th October 2013</td>
</tr>
<tr>
<td>Durham issue list of additional pupils to invite if necessary</td>
<td>21st October 2013</td>
</tr>
<tr>
<td>SHINE in Secondaries runs</td>
<td>November 2013 – June 2014</td>
</tr>
<tr>
<td>Progress in English and Progress in Maths assessments completed by all pupils</td>
<td>June/July 2014</td>
</tr>
</tbody>
</table>
Appendix 3: Schools consent form

Independent Evaluation of SHINE in Secondaries

School consent and registration form

Please complete the details below and return the form to Kirsty Younger (contact details overleaf). This will allow us to register your school for the evaluation and to contact you by email or post about the evaluation.

Name of Headteacher ............................................................................................................................................
School ...................................................................................................................................................................
Address .................................................................................................................................................................
............................................................................................................................................................................
Tel No .................................................................................................................................................................
Headteacher email ..............................................................................................................................................
SHINE Project Manager .....................................................................................................................................
Tel No (if different from above) ..........................................................................................................................
Email .................................................................................................................................................................

Please give details of anyone else at the school that should be on our circulation list

Additional contact person .................................................................................................................................
Role ...................................................................................................................................................................
Email .................................................................................................................................................................

Number of pupils for 2013/14 in Year 7: .......................
Please read the information below carefully. It is important that you understand the requirements of the evaluation. Please ask us if you have any questions.

- I confirm that I have read and understood the information sheet for the SHINE in Secondaries evaluation and have had the opportunity to ask questions.

- I understand that pupil assessment data will be collected using Progress in English and Progress in Maths assessments; the assessments will be administered and marked by the evaluators at Durham University. I understand that named data will be matched with the National Pupil Database and shared with EEF and the UK Data Archive for research purposes.

- I understand that all pupil data will be kept confidential and that no material which could identify individual children or the school will be used in any reports of this evaluation.

- I agree to Durham University researchers coming into the school to assess all the Year 7 pupils in September 2013 and in June or July 2014 on dates agreed mutually.

- I understand that all eligible pupils (as specified by Durham) should be invited to attend the SHINE in Secondaries programme as directed by Durham University and that pupils who are not eligible should not be invited to attend the programme.

- I consent on behalf of the school to take part in the above study.

Signature of headteacher .................................................................

Date ............................................

Thank you for agreeing to take part in this important research.

Please return this consent form by post, or scan and email to:
Kirsty Younger, Research Assistant
kirsty.younger@cem.dur.ac.uk
0191 334 4176
CEM, Rowan House, Mountjoy Research Centre, Durham University, Stockton Road, Durham DH1 3UZ
Appendix 4: Parent opt-out letter

Dear Parent or Guardian

Evaluation of SHINE in Secondaries Saturday School programme
I am writing to let you know about a study which will be taking place in your child’s school this year (2013/2014). The Education Endowment Foundation (EEF) is funding the study to find out how much the SHINE in Secondaries programme improves the maths and English skills of pupils in Year 7. The study is being carried out by Durham University.

The headteacher of your child’s school has given permission for the school to take part, and the study will involve all pupils in Year 7. In September, pupils will complete a literacy assessment. The results of this will be used to establish which pupils might benefit most from attending the SHINE in Secondaries programme. These pupils will be invited by the school to attend the programme. At the end of the school year, all Year 7 pupils will complete a maths and literacy assessment. The school will receive the results from all the assessments to inform teaching. We will also ask pupils to complete a questionnaire about their attitudes to school and learning. We will use the results of the assessments to see how much the SHINE in Secondaries programme helps improve educational outcomes.

The school will also pass on some background information about pupils (date of birth, gender, and Unique Pupil Number) to Durham University to help evaluate the programme. All data collected will be treated confidentially and will only be used for research purposes. The data for your child’s school will be analysed anonymously, together with data from other schools, and no individual pupils or schools will be named in any report. Pupil assessment data will be matched with the National Pupil Database for longer term follow-up and also shared with EEF data managers, and the UK Data Archive for research purposes only.

I do hope that we have your support for this important study and that you are happy for your child’s data to be used in this way. If you would prefer we did not use your child’s data in this research study please contact the school to opt out at any time during the project.

If you have any questions about the study please contact Kirsty Younger, Research Assistant on 0191 334 4176, or email kirsty.younger@cem.dur.ac.uk.

Yours faithfully

Carole Torgerson
Principal Investigator
Appendix 5: Opt-in parental consent form for focus group

SHINE in Secondaries Evaluation by Durham University

Dear Parent/Carer

We are writing to the parents/carers of all pupils attending the SHINE in Secondaries Saturday School at __________. Durham University has been funded by the Education Endowment Foundation to evaluate the SHINE programme and to look at any improvements that could be made in the future. As part of our evaluation, researchers from the university will be visiting the project between now and July to observe a session and talk to the children attending and the staff running the programme.

We would like to hold a focus group with some of the participating pupils and would like your consent for your child to be included. The focus group will involve one or two researchers from the university meeting with a small group of pupils (4-5 children) and member of staff from the project. We will ask the children questions about their experience of attending SHINE. Participation in the focus group is voluntary and no individuals will be named in any report about the project. We expect the focus group to last for about 25 minutes and to take place during the SHINE session on 5th July.

If you are happy for your child to be involved in a focus group please complete the tear-off sheet below and return it to the SHINE in Secondaries project next Saturday.

If you need further information about the evaluation or have any questions please contact the Evaluation Team through Clare Collyer, Project Administrator: clare.collyer@cem.dur.ac.uk; 0191 334 4682.

Yours faithfully

[Signature]

Professor Carole Torgerson

Principal Investigator

☐ I give consent for my child to be included in a focus group for the SHINE in Secondaries evaluation to find out about the pupils’ experiences.

Signed ………………………………………………………………………………………... Date……………………………

Child’s name ………………………………………………………………………………………...